ENTEGRIS INC
Form 424B3
March 20, 2019
**Table of Contents**

**Filed Pursuant to Rule 424(b)(3)**
**Registration No. 333-229931**

**MERGER PROPOSAL YOUR VOTE IS VERY IMPORTANT**

Dear Stockholder:

On January 27, 2019, Entegris, Inc., which is referred to as Entegris, and Versum Materials, Inc., which is referred to as Versum, entered into an Agreement and Plan of Merger, as it may be amended from time to time, which is referred to as the merger agreement, pursuant to which they agreed to combine their respective businesses in a merger of equals. The combined company will be a premier specialty materials company for the semiconductor and other high-tech industries. Pursuant to the terms of the merger agreement, Versum will merge with and into Entegris, which transaction is referred to as the merger, with Entegris as the surviving corporation. Following the merger, the combined company will retain the Entegris name.

Upon successful completion of the merger, each issued and outstanding share of Versum common stock will be converted into the right to receive 1.120 shares of Entegris common stock, which number is referred to as the exchange ratio. This exchange ratio is fixed and will not be adjusted for changes in the market price of either Entegris common stock or Versum common stock between the dates of signing of the merger agreement and completion of the merger. Entegris stockholders will continue to own their existing Entegris shares. Based on the fully-vested shares outstanding of each of Entegris and Versum, including exercisable options only, Entegris stockholders will own approximately 52.5% and Versum stockholders will own approximately 47.5% of the issued and outstanding shares of the combined company (based on fully diluted shares outstanding of the combined company including exercisable options only) immediately following the completion of the merger. Entegris common stock is traded on the NASDAQ Global Select Market under the symbol ENTG. Versum common stock is traded on the NYSE under the symbol VSM. The common stock of the combined company is expected to be listed on NASDAQ or the NYSE under the symbol ENTG. Stockholders will be informed in conjunction with the closing on which exchange the shares will trade. We encourage you to obtain updated quotes for the common stock of both Entegris and Versum.

Entegris and Versum will each hold special meetings of their respective stockholders in connection with the proposed merger, which are referred to as the Entegris special meeting and the Versum special meeting, respectively.

At the Entegris special meeting, Entegris stockholders will be asked to consider and vote on (1) the proposal to adopt the merger agreement (including the issuance of shares of Entegris common stock to Versum stockholders pursuant to the merger agreement), which proposal is referred to as the Entegris merger agreement proposal, (2) the proposal to adopt the amended and restated certificate of incorporation of Entegris, (3) the proposal to approve, on a non-binding advisory basis, specific compensatory arrangements between Entegris and its named executive officers relating to the merger and (4) the proposal to adjourn the Entegris special meeting to solicit additional proxies if there are not sufficient votes to approve the Entegris merger agreement proposal or the Entegris charter proposal or to ensure that any supplement or amendment to the accompanying joint proxy statement/prospectus is timely provided to Entegris stockholders. **The board of directors of Entegris unanimously recommends that Entegris stockholders vote FOR**

**each of the proposals to be considered at the Entegris special meeting.**

At the Versum special meeting, Versum stockholders will be asked to consider and vote on (1) the proposal to adopt the merger agreement, which is referred to as the Versum merger agreement proposal, (2) the proposal to approve, on a non-binding advisory basis, specific compensatory arrangements between Versum and its named executive officers relating to the merger and (3) the proposal to adjourn the Versum special meeting to solicit additional proxies if there are not sufficient votes to approve the Versum merger agreement proposal or to ensure that any supplement or amendment to the accompanying joint proxy statement/prospectus is timely provided to Versum stockholders. **The board of directors of Versum unanimously recommends that Versum stockholders vote FOR each of the proposals to be considered at the Versum special meeting.**

We cannot complete the merger unless Entegris stockholders approve the Entegris merger agreement proposal and Versum stockholders approve the Versum merger agreement proposal. **Your vote on these matters is very important, regardless of the number of shares you own. Whether or not you plan to attend your respective special meeting in person, please promptly mark, sign and date the accompanying proxy and return it in the enclosed postage-paid envelope or authorize the individuals named on your WHITE proxy card to vote your shares by calling the toll-free telephone number or by using the Internet as described in the instructions included with your WHITE proxy card.**

The accompanying joint proxy statement/prospectus provides you with important information about the special meetings, the merger, and each of the proposals. **We encourage you to read the entire document carefully, in particular the Risk Factors section beginning on page 43 for a discussion of risks relevant to the merger.**

We look forward to the successful completion of the merger.

Sincerely,

| | |
|---|---|
| Bertrand Loy | Guillermo Novo |
| President and Chief Executive Officer | President and Chief Executive Officer |
| Entegris, Inc. | Versum Materials, Inc. |

**Neither the U.S. Securities and Exchange Commission nor any state securities commission has approved or disapproved of the merger or the Entegris common stock to be issued in the merger or determined if this joint proxy statement/prospectus is accurate or complete. Any representation to the contrary is a criminal offense.**

This joint proxy statement/prospectus is dated March 20, 2019 and is first being mailed to the stockholders of Entegris and Versum with the WHITE proxy card on or about March 22, 2019.

Table of Contents

**Entegris, Inc.**

**129 Concord Road**

**Billerica, Massachusetts 01821**

**(978) 436-6500**

**NOTICE OF SPECIAL MEETING OF STOCKHOLDERS**

**TO BE HELD ON APRIL 26, 2019**

To the Stockholders of Entegris, Inc.:

Notice is hereby given that Entegris, Inc., which is referred to as Entegris, will hold a special meeting of its stockholders, which is referred to as the Entegris special meeting, at Entegris headquarters at 129 Concord Road, Billerica, Massachusetts, on April 26, 2019, beginning at 12:00 p.m., Eastern Time, for the purpose of considering and voting on the following proposals:

1. to adopt the Agreement and Plan of Merger, dated as of January 27, 2019 (as it may be amended from time to time), which is referred to as the merger agreement, by and between Versum Materials, Inc., which is referred to as Versum, and Entegris, pursuant to which Versum will merge with and into Entegris, with Entegris surviving the merger, which proposal is referred to as the Entegris merger agreement proposal;

2. to adopt the amended and restated certificate of incorporation of Entegris, which proposal is referred to as the Entegris charter proposal;

3. to approve, on an advisory (non-binding) basis, the executive officer compensation that will or may be paid to Entegris named executive officers in connection with the transactions contemplated by the merger agreement, which proposal is referred to as the Entegris compensation proposal; and

4. to approve the adjournment of the Entegris special meeting to solicit additional proxies if there are not sufficient votes at the time of the Entegris special meeting to approve the Entegris merger agreement proposal and the Entegris charter proposal or to ensure that any supplement or amendment to the accompanying joint proxy statement/prospectus is timely provided to Entegris stockholders, which proposal is referred to as the Entegris adjournment proposal.

Entegris will transact no other business at the Entegris special meeting except such business as may properly be brought before the Entegris special meeting or any adjournment or postponement thereof. The accompanying joint proxy statement/prospectus, including the merger agreement attached thereto as Annex A, contains further information with respect to these matters.

Only holders of record of Entegris common stock at the close of business on April 2, 2019, the record date for voting at the Entegris special meeting, which is referred to as the Entegris record date, are entitled to notice of and to vote at the Entegris special meeting and any adjournments or postponements thereof.

The board of directors of Entegris, which is referred to as the Entegris board of directors, has unanimously approved and declared advisable the merger agreement and the transactions contemplated by the merger agreement on the terms and subject to the conditions set forth in the merger agreement. **The Entegris board of directors unanimously recommends that Entegris stockholders vote FOR the Entegris merger agreement proposal, FOR the Entegris charter proposal, FOR the Entegris compensation proposal and FOR the Entegris adjournment proposal.**

**Your vote is very important, regardless of the number of shares of Entegris common stock you own.** Entegris cannot complete the transactions contemplated by the merger agreement without approval of the Entegris merger agreement proposal. Assuming a quorum is present, the approval of the Entegris merger

Table of Contents

agreement proposal requires the affirmative vote of a majority of the outstanding shares of Entegris common stock entitled to vote on the proposal.

Whether or not you plan to attend the Entegris special meeting in person, Entegris urges you to please promptly mark, sign and date the accompanying proxy and return it in the enclosed postage-paid envelope, call the toll-free telephone number or use the Internet as described in the instructions included with the WHITE proxy card, so that your shares may be represented and voted at the Entegris special meeting. If you hold your shares through a broker, bank or other nominee in street name (instead of as a registered holder) and you wish to vote in person at the Entegris special meeting, you must obtain a legal proxy from your bank, broker or other nominee and bring the legal proxy to the meeting in order to vote in person at the Entegris special meeting. You will need to bring identification along with either your notice of special meeting or proof of stock ownership to enter the Entegris special meeting. The use of video, still photography or audio recording at the Entegris special meeting is not permitted. For the safety of attendees, all bags, packages and briefcases are subject to inspection.

If you have any questions about the merger, please contact Entegris at (978) 436-6500 or write to Entegris, Inc., Attn: Corporate Secretary, 129 Concord Road, Billerica, Massachusetts 01821.

If you have any questions about how to vote or direct a vote in respect of your shares of Entegris common stock, you may contact our proxy solicitor, MacKenzie Partners, Inc., at (800) 322-2885.

**By Order of the Board of Directors,**

*Bertrand Loy*

*President and Chief Executive Officer*

Billerica, Massachusetts

Dated: March 20, 2019

**Your vote is important. Entegris stockholders are requested to complete, date, sign and return the enclosed WHITE proxy card in the envelope provided, which requires no postage if mailed in the United States, or to submit their votes electronically through the Internet or by telephone.**

Table of Contents

**Versum Materials, Inc.**

**8555 South River Parkway**

**Tempe, Arizona 85284**

**(602) 282-1000**

**NOTICE OF SPECIAL MEETING OF STOCKHOLDERS**

**TO BE HELD ON APRIL 26, 2019**

To the Stockholders of Versum Materials, Inc.:

Notice is hereby given that Versum Materials, Inc., which is referred to as Versum, will hold a special meeting of its stockholders, which is referred to as the Versum special meeting, at 8555 South River Parkway, Tempe, Arizona 85284, on April 26, 2019, beginning at 9:00 a.m., Mountain Standard Time, for the purpose of considering and voting on the following proposals:

1. to adopt the Agreement and Plan of Merger, dated as of January 27, 2019 (as it may be amended from time to time), which is referred to as the merger agreement, by and between Entegris, Inc., which is referred to as Entegris, and Versum, pursuant to which Versum will merge with and into Entegris, with Entegris surviving the merger, which proposal is referred to as the Versum merger agreement proposal;

2. to approve, on a non-binding, advisory basis, the compensation that will or may be paid to Versum s named executive officers in connection with the transactions contemplated by the merger agreement, which proposal is referred to as the Versum compensation proposal; and

3. to approve the adjournment of the Versum special meeting to solicit additional proxies if there are not sufficient votes at the time of the Versum special meeting to approve the Versum merger agreement proposal or to ensure that any supplement or amendment to the accompanying joint proxy statement/prospectus is timely provided to Versum stockholders, which proposal is referred to as the Versum adjournment proposal.

Versum will transact no other business at the Versum special meeting except such business as may properly be brought before the Versum special meeting or any adjournment or postponement thereof. The accompanying joint proxy statement/prospectus, including the merger agreement attached thereto as Annex A, contains further information with respect to these matters.

Only holders of record of Versum common stock at the close of business on April 2, 2019, the record date for voting at the Versum special meeting, which is referred to as the Versum record date, are entitled to notice of and to vote at the Versum special meeting and any adjournments or postponements thereof.

The board of directors of Versum, which is referred to as the Versum board of directors, has unanimously approved and declared advisable the merger agreement and the transactions contemplated by the merger agreement, including

the merger, on the terms and subject to the conditions set forth in the merger agreement. **The Versum board of directors unanimously recommends that Versum stockholders vote FOR the Versum merger agreement proposal, FOR the Versum compensation proposal and FOR the Versum adjournment proposal.**

**Your vote is very important, regardless of the number of shares of Versum common stock you own.** Versum cannot complete the transactions contemplated by the merger agreement, including the merger, without approval of the Versum merger agreement proposal. Assuming a quorum is present, the approval of the Versum merger agreement proposal requires the affirmative vote of a majority of the outstanding shares of Versum common stock entitled to vote on the Versum merger agreement proposal.

Table of Contents

Whether or not you plan to attend the Versum special meeting in person, Versum urges you to please promptly mark, sign and date the accompanying proxy and return it in the enclosed postage-paid envelope, call the toll-free telephone number or use the Internet as described in the instructions included with the WHITE proxy card, so that your shares may be represented and voted at the Versum special meeting. If you hold your shares through a broker, bank or other nominee in street name (instead of as a registered holder) and you wish to vote in person at the Versum special meeting, you must obtain a legal proxy from your bank, broker or other nominee and bring the legal proxy to the meeting in order to vote in person at the Versum special meeting. You will need to bring identification along with either your notice of special meeting or proof of stock ownership to enter the Versum special meeting. The use of video, still photography or audio recording at the Versum special meeting is not permitted. For the safety of attendees, all bags, packages and briefcases are subject to inspection.

We urge you to discard any green proxy cards, which may have been sent to you by Merck KGaA, Darmstadt, Germany, who is soliciting proxies from Versum stockholders in opposition to the merger. If you previously submitted a green proxy card, we urge you to cast your vote as instructed on your WHITE proxy card, which will revoke any earlier dated proxy card that you may have submitted, including any green proxy card. Only the latest validly executed proxy that you submit will be counted.

If you have any questions about the merger, please contact Versum at (602) 282-1000 or write to Versum Materials, Inc., Attn: Corporate Secretary, 8555 South River Parkway, Tempe, Arizona 85284.

If you have any questions about how to vote or direct a vote in respect of your shares of Versum common stock, you may contact Versum s proxy solicitor, Innisfree M&A Incorporated, toll-free at (877) 456-3463 or call collect at (212) 750-5833.

**By Order of the Board of Directors,**

*Michael W. Valente*

*Senior Vice President, General Counsel and Secretary*

Tempe, Arizona

Dated: March 20, 2019

**Your vote is important. Versum stockholders are requested to complete, date, sign and return the enclosed WHITE proxy card in the envelope provided, which requires no postage if mailed in the United States, or to submit their votes electronically through the Internet or by telephone.**

Table of Contents

## REFERENCES TO ADDITIONAL INFORMATION

This joint proxy statement/prospectus incorporates important business and financial information about Entegris and Versum from other documents that Entegris and Versum have filed with the U.S. Securities and Exchange Commission, which is referred to as the SEC, and that are contained in or incorporated by reference into this joint proxy statement/prospectus. For a listing of documents incorporated by reference into this joint proxy statement/prospectus, please see the section entitled **Where You Can Find More Information** beginning on page 213. This information is available for you free of charge to review through the SEC s website at www.sec.gov.

Any person may request a copy of this joint proxy statement/prospectus and any of the documents incorporated by reference into this joint proxy statement/prospectus or other information concerning Entegris or Versum, without charge, by written or telephonic request directed to the appropriate company or its proxy solicitor at the following contacts:

| For Entegris stockholders: | For Versum stockholders: |
|---|---|
| Entegris, Inc. | Versum Materials, Inc. |
| 129 Concord Road | 8555 South River Parkway |
| Billerica, Massachusetts 01821 | Tempe, Arizona 85284 |
| (978) 436-6500 | (602) 282-1000 |
| Attention: Corporate Secretary | Attention: Corporate Secretary |
| MacKenzie Partners, Inc. | Innisfree M&A Incorporated |
| 1407 Broadway, 27th Floor | 501 Madison Avenue, 20th Floor |
| New York, New York 10018 | New York, New York 10022 |
| Toll-Free: (800) 322-2885 | Toll-Free: (877) 456-3463 |
| Call Collect: (212) 929-5500 | Call Collect: (212) 750-5833 |

**In order for you to receive timely delivery of the documents in advance of the special meeting of Entegris stockholders to be held on April 26, 2019, which is referred to as the Entegris special meeting, or the special meeting of Versum stockholders to be held on April 26, 2019, which is referred to as the Versum special meeting, as applicable, you must request the information no later than April 19, 2019.**

The contents of the websites of the SEC, Entegris, Versum or any other entity are not being incorporated into this joint proxy statement/prospectus. The information about how you can obtain certain documents that are incorporated by reference into this joint proxy statement/prospectus at these websites is being provided only for your convenience.

Table of Contents

## ABOUT THIS JOINT PROXY STATEMENT/PROSPECTUS

This document, which forms part of a registration statement on Form S-4 filed with the SEC by Entegris, constitutes a prospectus of Entegris under Section 5 of the Securities Act of 1933, as amended, which is referred to as the Securities Act, with respect to the shares of common stock of Entegris to be issued to Versum stockholders pursuant to the Agreement and Plan of Merger, dated as of January 27, 2019, by and between Entegris and Versum, as it may be amended from time to time, which is referred to as the merger agreement. This document also constitutes a joint proxy statement of Entegris and Versum under Section 14(a) of the Securities Exchange Act of 1934, as amended, which is referred to as the Exchange Act. It also constitutes a notice of meeting with respect to the Entegris special meeting and a notice of meeting with respect to the Versum special meeting.

Entegris has supplied all information contained or incorporated by reference into this joint proxy statement/prospectus relating to Entegris, and Versum has supplied all such information relating to Versum. Entegris and Versum have both contributed to the information related to the merger contained in this joint proxy statement/prospectus.

You should rely only on the information contained in or incorporated by reference into this joint proxy statement/prospectus. Entegris and Versum have not authorized anyone to provide you with information that is different from that contained in or incorporated by reference into this joint proxy statement/prospectus. This joint proxy statement/prospectus is dated March 20, 2019, and you should not assume that the information contained in this joint proxy statement/prospectus is accurate as of any date other than such date unless otherwise specifically provided herein.

Further, you should not assume that the information incorporated by reference into this joint proxy statement/prospectus is accurate as of any date other than the date of the incorporated document. Neither the mailing of this joint proxy statement/prospectus to Entegris stockholders or Versum stockholders nor the issuance by Entegris of shares of its common stock pursuant to the merger agreement will create any implication to the contrary.

**This joint proxy statement/prospectus does not constitute an offer to sell, or a solicitation of an offer to buy, any securities, or the solicitation of a proxy, in any jurisdiction to or from any person to whom it is unlawful to make any such offer or solicitation in such jurisdiction.**

All references in this joint proxy statement/prospectus to Entegris refer to Entegris, Inc., a Delaware corporation. All references in this joint proxy statement/prospectus to Versum refer to Versum Materials, Inc., a Delaware corporation. All references in this joint proxy statement/prospectus to the combined company refer to Entegris immediately following completion of the merger and the other transactions contemplated by the merger agreement. All references in this joint proxy statement/prospectus to Entegris common stock refer to the common stock of Entegris, par value $0.01 per share, and all references in this joint proxy statement/prospectus to Versum common stock refer to the common stock of Versum, par value $1.00 per share.

Table of Contents

**TABLE OF CONTENTS**


| | Page |
|---|---|
| QUESTIONS AND ANSWERS | 1 |
| SUMMARY | 17 |
| The Parties to the Merger | 17 |
| The Merger and the Merger Agreement | 17 |
| Exchange Ratio | 17 |
| Treatment of Existing Entegris Equity Awards | 18 |
| Treatment of Existing Versum Equity Awards | 18 |
| Entegris s Recommendation and Reasons for the Merger | 19 |
| Versum s Recommendation and Reasons for the Merger | 19 |
| Opinion of Entegris s Financial Advisor | 20 |
| Opinion of Versum s Financial Advisor | 21 |
| The Entegris Special Meeting | 21 |
| The Versum Special Meeting | 22 |
| Interests of Entegris s Directors and Executive Officers in the Merger | 23 |
| Interests of Versum s Directors and Executive Officers in the Merger | 24 |
| Governance of the Combined Company | 24 |
| Certain Beneficial Owners of Entegris Common Stock | 26 |
| Certain Beneficial Owners of Versum Common Stock | 26 |
| Regulatory Approvals | 26 |
| Ownership of the Combined Company after the Merger | 27 |
| No Appraisal Rights | 27 |
| Conditions to the Completion of the Merger | 27 |
| No Solicitation of Acquisition Proposals | 28 |
| No Change of Recommendation | 29 |
| Termination of the Merger Agreement | 30 |
| Termination Fees | 31 |
| Accounting Treatment | 32 |
| Material U.S. Federal Income Tax Consequences | 32 |
| Comparison of Stockholders Rights | 33 |
| Listing of Entegris Common Stock; Delisting and Deregistration of Versum Common Stock | 33 |
| Litigation Related to the Merger | 33 |
| Risk Factors | 33 |
| SELECTED HISTORICAL CONSOLIDATED FINANCIAL DATA OF ENTEGRIS | 34 |
| SELECTED HISTORICAL CONSOLIDATED FINANCIAL DATA OF VERSUM | 35 |
| SELECTED UNAUDITED PRO FORMA CONDENSED COMBINED FINANCIAL INFORMATION | 37 |
| COMPARATIVE HISTORICAL AND UNAUDITED PRO FORMA PER SHARE DATA | 39 |
| COMPARISON OF ENTEGRIS AND VERSUM MARKET PRICES AND IMPLIED VALUE OF MERGER CONSIDERATION | 40 |
| CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS | 41 |
| RISK FACTORS | 43 |
| Risks Relating to the Merger | 43 |
| Risks Relating to the Combined Company | 52 |
| Risks Relating to Entegris Business | 57 |

Risks Relating to Versum s Business 57
THE PARTIES TO THE MERGER 58
THE ENTEGRIS SPECIAL MEETING 59
Date, Time and Place of the Entegris Special Meeting 59
Matters to be Considered at the Entegris Special Meeting 59
Recommendation of the Entegris Board of Directors 59

**Table of Contents**


| | |
|---|---|
| Record Date for the Entegris Special Meeting and Voting Rights | 60 |
| Quorum; Abstentions and Broker Non-Votes | 60 |
| Required Votes; Vote of Entegris Directors and Executive Officers | 61 |
| Methods of Voting | 62 |
| Revocability of Proxies | 63 |
| Proxy Solicitation Costs | 63 |
| Attending the Entegris Special Meeting | 63 |
| Householding | 64 |
| Tabulation of Votes | 64 |
| Adjournments | 64 |
| Assistance | 65 |
| ENTEGRIS PROPOSAL 1: ADOPTION OF THE MERGER AGREEMENT | 66 |
| ENTEGRIS PROPOSAL 2: ADOPTION OF THE AMENDED AND RESTATED CERTIFICATE OF INCORPORATION OF ENTEGRIS | 67 |
| ENTEGRIS PROPOSAL 3: ADVISORY (NON-BINDING) VOTE ON MERGER-RELATED COMPENSATION FOR NAMED EXECUTIVE OFFICERS | 68 |
| ENTEGRIS PROPOSAL 4: ADJOURNMENT OF THE ENTEGRIS SPECIAL MEETING | 69 |
| THE VERSUM SPECIAL MEETING | 70 |
| Date, Time and Place of the Versum Special Meeting | 70 |
| Matters to Be Considered at the Versum Special Meeting | 70 |
| Recommendation of the Versum Board of Directors | 70 |
| Record Date for the Versum Special Meeting and Voting Rights | 70 |
| Quorum; Abstentions and Broker Non-Votes | 71 |
| Required Votes; Vote of Versum s Directors and Executive Officers | 71 |
| Methods of Voting | 72 |
| Revocability of Proxies | 73 |
| Proxy Solicitation Costs | 74 |
| Attending the Versum Special Meeting | 74 |
| Householding | 75 |
| Tabulation of Votes | 75 |
| Adjournments | 75 |
| Assistance | 76 |
| VERSUM PROPOSAL 1: ADOPTION OF THE MERGER AGREEMENT | 77 |
| VERSUM PROPOSAL 2: ADVISORY (NON-BINDING) VOTE ON MERGER-RELATED COMPENSATION FOR NAMED EXECUTIVE OFFICERS | 78 |
| VERSUM PROPOSAL 3: ADJOURNMENT OF THE VERSUM SPECIAL MEETING | 79 |
| THE MERGER | 80 |
| General | 80 |
| Exchange Ratio | 80 |
| Background of the Merger | 80 |
| Recommendation of the Entegris Board of Directors; Entegris Reasons for the Merger | 87 |
| Recommendation of the Versum Board of Directors; Versum s Reasons for the Merger | 91 |
| Opinion of Entegris Financial Advisor | 96 |
| Opinion of Versum s Financial Advisor | 107 |
| Entegris Unaudited Financial Projections | 115 |
| Versum Unaudited Financial Projections | 118 |
| Certain Estimated Synergies | 121 |
| Closing and Effective Time of the Merger | 122 |

Regulatory Approvals 122
Ownership of the Combined Company After the Merger 123
Governance of the Combined Company 124
U.S. Federal Securities Law Consequences 125

**Table of Contents**


| | |
|---|---|
| Accounting Treatment | 125 |
| Exchange of Shares | 125 |
| Market Listing | 126 |
| Delisting and Deregistration of Versum Common Stock | 126 |
| Litigation Related to the Merger | 126 |
| THE MERGER AGREEMENT | 127 |
| Explanatory Note Regarding the Merger Agreement | 127 |
| Structure of the Merger | 127 |
| Completion and Effectiveness of the Merger | 127 |
| Merger Consideration | 128 |
| Treatment of Equity Awards | 128 |
| Exchange of Shares | 129 |
| Dividends and Distributions with Respect to Unexchanged Shares of Versum Common Stock | 131 |
| Treatment of Fractional Shares | 131 |
| Termination of the Exchange Fund | 131 |
| Lost, Stolen or Destroyed Share Certificates | 132 |
| Withholding Rights | 132 |
| Adjustments to Prevent Dilution | 132 |
| Combined Company Governance Matters | 132 |
| Representations and Warranties | 133 |
| Conduct of Business Prior to the Effective Time | 136 |
| No Solicitation of Acquisition Proposals | 140 |
| Notice Regarding Acquisition Proposals | 142 |
| No Change of Recommendation | 142 |
| Existing Discussions and Standstill Provisions | 144 |
| Registration Statement | 145 |
| Special Meetings | 145 |
| Cooperation; Efforts to Consummate | 145 |
| Status and Notifications | 148 |
| Financing and Indebtedness | 148 |
| Access to Information | 148 |
| NASDAQ or NYSE Listing; NYSE Delisting | 148 |
| Publicity | 148 |
| Employee Benefits Matters | 149 |
| Expenses | 150 |
| Indemnification; Directors and Officers Insurance | 150 |
| Dividends | 151 |
| Litigation | 152 |
| Conditions to the Completion of the Merger | 152 |
| Termination of the Merger Agreement | 153 |
| Termination Fees | 155 |
| Amendment | 156 |
| Waiver | 156 |
| Specific Performance | 156 |
| Third-Party Beneficiaries | 157 |
| UNAUDITED PRO FORMA CONDENSED COMBINED FINANCIAL STATEMENTS | 158 |
| INTERESTS OF ENTEGRIS DIRECTORS AND EXECUTIVE OFFICERS IN THE MERGER | 170 |
| INTERESTS OF VERSUM S DIRECTORS AND EXECUTIVE OFFICERS IN THE MERGER | 176 |

MATERIAL U.S. FEDERAL INCOME TAX CONSEQUENCES 183
U.S. Holders 184
Non-U.S. Holders 185
FATCA Withholding 186
Backup Withholding and Information Reporting 187

**Table of Contents**


| | |
|---|---|
| COMPARISON OF STOCKHOLDERS RIGHTS | 188 |
| NO APPRAISAL RIGHTS | 204 |
| LEGAL MATTERS | 205 |
| EXPERTS | 206 |
| CERTAIN BENEFICIAL OWNERS OF ENTEGRIS COMMON STOCK | 207 |
| Security Ownership of Entegris Directors and Executive Officers | 207 |
| Security Ownership of Other Beneficial Owners | 208 |
| CERTAIN BENEFICIAL OWNERS OF VERSUM COMMON STOCK | 209 |
| Security Ownership of Versum Directors and Executive Officers | 209 |
| Security Ownership of Other Beneficial Owners | 210 |
| STOCKHOLDER PROPOSALS | 211 |
| Entegris | 211 |
| Versum | 211 |
| HOUSEHOLDING OF PROXY MATERIALS | 212 |
| WHERE YOU CAN FIND MORE INFORMATION | 213 |
| ANNEX A - AGREEMENT AND PLAN OF MERGER | A-1 |
| ANNEX B - FORM OF AMENDED AND RESTATED CERTIFICATE OF INCORPORATION OF ENTEGRIS | B-1 |
| ANNEX C - OPINION OF MORGAN STANLEY & CO. LLC | C-1 |
| ANNEX D - OPINION OF LAZARD FRÈRES & CO. LLC | D-1 |

Table of Contents

## QUESTIONS AND ANSWERS

*The following are some questions that you, as a stockholder of Entegris or a stockholder of Versum, may have regarding the merger and the other matters being considered at the special meetings of each company s stockholders, and brief answers to those questions. You are urged to carefully read this joint proxy statement/prospectus and the other documents referred to in this joint proxy statement/prospectus in their entirety because this section may not provide all the information that is important to you regarding these matters. Additional important information is contained in the annexes to, and the documents incorporated by reference into, this joint proxy statement/prospectus. You may obtain the information incorporated by reference in this joint proxy statement/prospectus, without charge, by following the instructions under the section entitled* ***Where You Can Find More Information*** *beginning on page 213.*

**Q: Why am I receiving this joint proxy statement/prospectus?**

A: You are receiving this joint proxy statement/prospectus because Entegris and Versum have agreed to combine their companies in a merger of equals structured through a merger of Versum with and into Entegris, with Entegris as the surviving corporation. The merger agreement governs the terms of the business combination and merger of Entegris and Versum, which is referred to as the merger, and is attached to this joint proxy statement/prospectus as Annex A.

In order to complete the merger, among other things:

Entegris stockholders must adopt the merger agreement in accordance with the Delaware General Corporation Law, which is referred to as the DGCL, which proposal is referred to as the Entegris merger agreement proposal; and

Versum stockholders must adopt the merger agreement in accordance with the DGCL, which proposal is referred to as the Versum merger agreement proposal.

Entegris is holding a special meeting of its stockholders, which is referred to as the Entegris special meeting, to obtain approval of the Entegris merger agreement proposal. Entegris stockholders will also be asked to adopt Entegris amended and restated certificate of incorporation, which proposal is referred to as the Entegris charter proposal, to approve, on an advisory (non-binding) basis, the merger-related executive officer compensation payments that will or may be paid by Entegris to its named executive officers in connection with the merger, which proposal is referred to as the Entegris compensation proposal, and to approve the proposal to adjourn the Entegris special meeting to solicit additional proxies if there are not sufficient votes at the time of the Entegris special meeting to approve the Entegris merger agreement proposal and the Entegris charter proposal or to ensure that any supplement or amendment to this joint proxy statement/prospectus is timely provided to Entegris stockholders, which proposal is referred to as the Entegris adjournment proposal.

Versum is holding a special meeting of its stockholders, which is referred to as the Versum special meeting, to obtain approval of the Versum merger agreement proposal. Versum stockholders will also be asked to approve, on an advisory (non-binding) basis, the merger-related executive officer compensation payments that will or may be paid by Versum to its named executive officers in connection with the merger, which proposal is referred to as the Versum

compensation proposal, and to approve the proposal to adjourn the Versum special meeting to solicit additional proxies if there are not sufficient votes at the time of the Versum special meeting to approve the Versum merger agreement proposal or to ensure that any supplement or amendment to this joint proxy statement/prospectus is timely provided to Versum stockholders, which proposal is referred to as the Versum adjournment proposal.

Your vote is very important, regardless of the number of shares that you own. The approval of the Entegris merger agreement proposal and the approval of the Versum merger agreement proposal are conditions to the

Table of Contents

obligations of Versum and Entegris to complete the merger. None of the approvals of the Entegris charter proposal, the Entegris compensation proposal, the Versum compensation proposal, the Entegris adjournment proposal or the Versum adjournment proposal are conditions to the obligations of Versum or Entegris to complete the merger.

**Q: When and where will each of the special meetings take place?**

A: The Entegris special meeting will be held at Entegris headquarters at 129 Concord Road, Billerica, Massachusetts, on April 26, 2019, at 12:00 p.m., Eastern Time.
The Versum special meeting will be held at 8555 South River Parkway, Tempe, Arizona 85284, on April 26, 2019, at 9:00 a.m., Mountain Standard Time.

If you choose to vote your shares in person at your respective company s special meeting, please bring required documentation in accordance with the section entitled **The Entegris Special Meeting Attending the Entegris Special Meeting** beginning on page 63, with respect to the Entegris special meeting, and the section entitled **The Versum Special Meeting Attending the Versum Special Meeting** beginning on page 74, with respect to the Versum special meeting. The use of video, still photography or audio recording at each of the special meetings is not permitted. For the safety of attendees, all bags, packages and briefcases are subject to inspection.

Even if you plan to attend your respective company s special meeting, Versum and Entegris recommend that you vote your shares in advance as described below so that your vote will be counted if you later decide not to or become unable to attend the applicable special meeting. Shares held in street name may be voted in person by you only if you obtain a signed legal proxy from your bank, broker or other nominee giving you the right to vote the shares.

**Q: Does my vote matter?**

A: Yes, your vote is very important, regardless of the number of shares that you own. The merger cannot be completed unless the merger agreement is adopted by Versum stockholders and by Entegris stockholders.
For Entegris stockholders, if you do not return or submit your proxy or vote at the special meeting as provided in this joint proxy statement/prospectus, the effect will be the same as a vote **AGAINST** the Entegris merger agreement proposal and the Entegris charter proposal, and will have no effect on the Entegris compensation proposal or the Entegris adjournment proposal. The board of directors of Entegris, which is referred to as the Entegris board of directors, unanimously recommends that you vote **FOR** the Entegris merger agreement proposal, **FOR** the Entegris charter proposal, **FOR** the Entegris compensation proposal and **FOR** the Entegris adjournment proposal.

For Versum stockholders, if you do not return or submit your proxy or vote at the special meeting as provided in this joint proxy statement/prospectus, the effect will be the same as a vote **AGAINST** the Versum merger agreement proposal, and will have no effect on the Versum compensation proposal or the Versum adjournment proposal. The Versum board of directors, which is referred to as the Versum board of directors, unanimously recommends that you vote **FOR** the Versum merger agreement proposal, **FOR** the Versum compensation proposal and **FOR** the Versum adjournment proposal.

**Q: What will I receive if the merger is completed?**

A: If the merger is completed, each share of Versum common stock outstanding at the effective time of the merger will be converted into the right to receive 1.120 shares of Entegris common stock. Each Versum stockholder will receive cash for any fractional shares of Entegris common stock that such stockholder

would otherwise receive in the merger. Any cash amounts to be received by a Versum stockholder in respect of fractional shares will be aggregated and rounded to the nearest whole cent. As referred to in this joint proxy statement/prospectus, the effective time means the date and time when the certificate of merger has been duly filed with and accepted by the Secretary of State of the State of Delaware, or such later date and time as may be agreed by Entegris and Versum in writing and specified in the certificate of merger.

If the merger is completed, Entegris stockholders shares of Entegris common stock will, after the effective time, constitute shares of the combined company.

Because Entegris will issue a fixed number of shares of Entegris common stock in exchange for each share of Versum common stock, the value of the merger consideration that Versum stockholders will receive in the merger will depend on the market price of shares of Entegris common stock at the time the merger is completed. The market price of shares of Entegris common stock that Versum stockholders receive after the merger is completed could be greater than, less than or the same as the market price of shares of Entegris common stock on the date of this joint proxy statement/prospectus or at the time of the special meetings. Accordingly, you should obtain current market quotations for Entegris common stock and Versum common stock before deciding how to vote with respect to the adoption of the merger agreement. Entegris common stock is traded on the NASDAQ Global Select market, which is referred to as NASDAQ, and Versum common stock is traded on the New York Stock Exchange, which is referred to as the NYSE, under the symbols ENTG and VSM, respectively. Shares of common stock of the combined company are expected to trade on NASDAQ or the NYSE under the symbol ENTG after completion of the merger. Stockholders will be informed in conjunction with the closing on which exchange the shares will trade.

For more information regarding the merger consideration to be received by Versum stockholders if the merger is completed, see the section entitled **The Merger Agreement Merger Consideration** beginning on page 128.

**Q: Will Entegris equity awards be affected by the merger?**

A: Entegris equity awards will remain equity awards relating to shares of Entegris common stock. Entegris equity awards will continue to vest in accordance with the terms of the award agreements applicable to such Entegris equity awards. However, the Entegris board of directors (or the applicable committee thereof) may determine to treat the merger as a change in control or term of similar meaning for purposes of the Entegris compensation and benefit plans, including Entegris equity awards, which determination may result in certain double trigger benefits under such plans upon a qualifying termination of employment subsequent to the effective time, but in no event may such determination result in the single trigger payment of benefits under such plans upon or in connection with the merger. Entegris may amend any outstanding Entegris stock options, each of which is referred to as an Entegris option, and Entegris time-based restricted stock units, each of which is referred to as an Entegris RSU award, granted prior to January 27, 2019 to provide for, and may include in Entegris options, Entegris RSU awards and Entegris performance-based restricted stock units, each of which is referred to as an Entegris PSU award, granted in fiscal year 2019, double-trigger vesting upon certain qualifying terminations of employment.

**Q: Will Versum equity awards be affected by the merger?**

A: At the effective time, each option to purchase shares of Versum common stock, each of which is referred to as a Versum option, that is outstanding immediately prior to the effective time will vest and be converted into an

option, each of which is referred to as a converted option, to purchase a number of shares of Entegris common stock equal to the product of (i) the number of shares of Versum common stock subject to the Versum option immediately prior to the effective time multiplied by (ii) the exchange ratio (rounded down to the nearest whole share number), with a per share exercise price equal to (a) the per share exercise price applicable to such Versum option immediately prior to the effective time divided by (b) the exchange ratio

(rounded up to the nearest whole cent). Except as noted in the immediately preceding sentence, each converted option will continue to be governed by the same terms and conditions as were applicable to the Versum option immediately prior to the effective time.

At the effective time, each Versum time-based restricted stock unit award (including equity-based awards granted by Air Products and Chemicals, Inc. and its consolidated subsidiaries, which is referred to as Air Products, that converted to Versum RSU awards in connection with the spin-off of Versum from Air Products), each of which is referred to as a Versum RSU award, and Versum performance-based restricted stock unit award (including market-based performance stock units, each of which is referred to as a Versum MSU and performance-based performance stock units, each of which is referred to as a Versum PRSU) (collectively, Versum MSUs and Versum PRSUs are referred to as Versum PSU awards), relating to Versum common stock that is outstanding immediately prior to the effective time will be converted into a restricted stock unit award, each of which is referred to as a converted RSU award, relating to a number of shares of Entegris common stock equal to (i) the number of shares of Versum common stock subject to the Versum RSU award or Versum PSU award immediately prior to the effective time multiplied by (ii) the exchange ratio. For Versum PSU awards, the number of shares in clause (i) of the immediately preceding sentence will be determined based on actual performance through a shortened performance period ending immediately prior to the effective time. The converted RSU awards will vest and settle on terms (including acceleration events) at least as favorable as were applicable to the corresponding Versum RSU award or Versum PSU award immediately prior to the effective time, except that converted RSU awards relating to Versum PSU awards will vest solely based on continued service. Each converted RSU award will vest in full on the original vesting date or if the holder experiences a covered termination following the effective time and prior to the original vesting date, on the date of such covered termination. For employees of Versum and its subsidiaries, a covered termination means a termination by Versum or one of its subsidiaries or their successor in interest without cause or, to the extent good reason rights are provided for in the award agreement (or employment or similar agreement) applicable to the corresponding Versum RSU award or Versum PSU award, a resignation by the employee for good reason (as such terms are defined in the applicable Versum agreement), in either case, during the 24-month period following the effective time. For non-employee directors of Versum, a covered termination means the termination of their service as a director for any reason at or following the effective time.

At the effective time, each deferred stock unit award relating to shares of Versum common stock, each of which is referred to as a Versum DSU award, will vest and be converted into the right to receive a number of shares of Entegris common stock equal to (i) the number of shares of Versum common stock covered by the Versum DSU award immediately prior to the effective time by (ii) the exchange ratio, with such shares distributed to the holder within 30 business days following the effective time.

**Q: What will happen to the Entegris Amended and Restated Employee Stock Purchase Plan?**

A: The Entegris Amended and Restated Employee Stock Purchase Plan will remain in effect in accordance with its terms.

**Q: How does the board of directors of Entegris recommend that I vote at the Entegris special meeting?**

A: The Entegris board of directors unanimously recommends that you vote **FOR** the Entegris merger agreement proposal, **FOR** the Entegris charter proposal, **FOR** the Entegris compensation proposal and **FOR** the Entegris

adjournment proposal.

In considering the recommendations of the Entegris board of directors, Entegris stockholders should be aware that Entegris directors and executive officers have interests in the merger that are different from, or in addition to, their interests as Entegris stockholders. These interests may include, among others, the payment of severance benefits and acceleration of outstanding Entegris equity awards upon a qualifying termination

Table of Contents

of employment, and the payment of retention bonuses. For a more complete description of these interests, see the information provided in the section entitled **Interests of Entegris Directors and Executive Officers in the Merger** beginning on page 170.

**Q: How does the board of directors of Versum recommend that I vote at the Versum special meeting?**

A: The Versum board of directors unanimously recommends that you vote **FOR** the Versum merger agreement proposal, **FOR** the Versum compensation proposal and **FOR** the Versum adjournment proposal.

In considering the recommendations of the Versum board of directors, Versum stockholders should be aware that Versum directors and executive officers have interests in the merger that are different from, or in addition to, their interests as Versum stockholders. These interests may include, among others, the payment of severance benefits and acceleration of outstanding Versum equity awards upon certain terminations of employment or service, the payment of retention bonuses and the combined company s agreement to indemnify Versum directors and officers against certain claims and liabilities. For a more complete description of these interests, see the information provided in the section entitled **Interests of Versum s Directors and Executive Officers in the Merger** beginning on page 176.

**Q: Who is entitled to vote at the Entegris special meeting?**

A: The record date for the Entegris special meeting is April 2, 2019, which is referred to as the Entegris record date. All holders of shares of Entegris common stock who held shares at the close of business on the Entegris record date are entitled to receive notice of, and to vote at, the Entegris special meeting. Each such holder of Entegris common stock is entitled to cast one vote on each matter properly brought before the Entegris special meeting for each share of Entegris common stock that such holder owned of record as of the record date. Physical attendance at the special meeting is not required to vote. See below and the section entitled **The Entegris Special Meeting Methods of Voting** beginning on page 62 for instructions on how to vote your shares without attending the Entegris special meeting.

Entegris is commencing its solicitation of proxies on or about March 20, 2019, which is before the Entegris record date. Entegris will continue to solicit proxies until the date of the Entegris special meeting. Each holder of shares of Entegris common stock of record on April 2, 2019 who has not yet received this joint proxy statement/prospectus will receive this joint proxy statement/prospectus and have the opportunity to vote on the matters described in this joint proxy statement/prospectus. Proxies delivered prior to the Entegris record date will be valid and effective so long as the holder providing the proxy is a holder on the Entegris record date. If you are not a holder of record on the Entegris record date, any proxy you deliver will not be counted. If you deliver a proxy prior to the Entegris record date and remain a holder on the Entegris record date, you do not need to deliver another proxy after the Entegris record date. If you deliver a proxy prior to the Entegris record date and do not revoke that proxy, your proxy will be deemed to cover the number of shares of Entegris common stock you own on the Entegris record date even if that number is different from the number of shares of Entegris common stock you owned when you executed and delivered your WHITE proxy card.

**Q: Who is entitled to vote at the Versum special meeting?**

A: The record date for the Versum special meeting is April 2, 2019, which is referred to as the Versum record date. All holders of shares of Versum common stock who held shares at the close of business on the Versum record date are entitled to receive notice of, and to vote at, the Versum special meeting. Each such holder of Versum common stock is entitled to cast one vote on each matter properly brought before the Versum special meeting for each share of Versum common stock that such holder owned of record as of the record date. Physical attendance at the special meeting is not required to vote. See below and the section entitled **The Versum Special Meeting Methods of Voting** beginning on page 72 for instructions on how to vote your shares without attending the Versum special meeting.

Table of Contents

Versum is commencing its solicitation of proxies on or about March 20, 2019, which is before the Versum record date. Versum will continue to solicit proxies until the date of the Versum special meeting. Each holder of shares of Versum common stock of record on April 2, 2019 who has not yet received this joint proxy statement/prospectus will receive this joint proxy statement/prospectus and have the opportunity to vote on the matters described in this joint proxy statement/prospectus. Proxies delivered prior to the Versum record date will be valid and effective so long as the holder providing the proxy is a holder on the Versum record date. If you are not a holder of record on the Versum record date, any proxy you deliver will not be counted. If you deliver a proxy prior to the Versum record date and remain a holder on the Versum record date, you do not need to deliver another proxy after the Versum record date. If you deliver a proxy prior to the Versum record date and do not revoke that proxy, your proxy will be deemed to cover the number of shares of Versum common stock you own on the Versum record date even if that number is different from the number of shares of Versum common stock you owned when you executed and delivered your WHITE proxy card.

**Q: What is a proxy?**

A: A stockholder s legal designation of another person to vote shares of such stockholder s common stock at a special meeting is referred to as a proxy. The document used to designate a proxy to vote your shares of Entegris common stock or Versum common stock, as applicable, is referred to as a WHITE proxy card.

**Q: How many votes do I have for the Entegris special meeting?**

A: Each Entegris stockholder is entitled to one vote for each share of Entegris common stock held of record as of the close of business on the Entegris record date. As of the close of business on March 11, 2019, the latest practicable date prior to the date of this joint proxy statement/prospectus, there were 135,513,636 outstanding shares of Entegris common stock.

**Q: How many votes do I have for the Versum special meeting?**

A: Each Versum stockholder is entitled to one vote for each share of Versum common stock held of record as of the close of business on the Versum record date. As of the close of business on March 11, 2019, the latest practicable date prior to the date of this joint proxy statement/prospectus, there were 109,143,954 outstanding shares of Versum common stock.

**Q: What constitutes a quorum for the Entegris special meeting?**

A: The holders of a majority of the issued and outstanding shares of Entegris common stock entitled to vote at the Entegris special meeting must be represented at the Entegris special meeting in person or by proxy in order to constitute a quorum.

**Q: What constitutes a quorum for the Versum special meeting?**

A: The holders of a majority of the shares of Versum common stock entitled to vote at the Versum special meeting must be represented at the Versum special meeting in person or by proxy in order to constitute a quorum.

**Q: Where will the common stock of the combined company that I receive in the merger be publicly traded?**

A: The shares of common stock of the combined company to be issued in the merger will be listed for trading on NASDAQ or the NYSE under the symbol ENTG. Stockholders will be informed in conjunction with the closing on which exchange the shares will trade.

Table of Contents

**Q: What happens if the merger is not completed?**

A: If the merger agreement is not adopted by Versum stockholders or by Entegris stockholders or if the merger is not completed for any other reason, Versum stockholders will not receive any merger consideration for their shares of Versum common stock in connection with the merger. Instead, Versum will remain an independent public company and Versum common stock will continue to be listed and traded on the NYSE, and Entegris common stock will continue to be traded on NASDAQ, and Entegris will not complete the share issuance pursuant to the merger agreement or amend and restate its certificate of incorporation as contemplated by the Entegris merger agreement proposal and the Entegris charter proposal, respectively. If the merger agreement is terminated under specified circumstances, Versum may be required to pay Entegris a termination fee of $140 million. If the merger agreement is terminated under other specified circumstances, Entegris may be required to pay Versum a termination fee of $155 million. See the section entitled **The Merger Agreement Termination Fees** beginning on page 155 for a more detailed discussion of the termination fees.

**Q: What is a broker non-vote ?**

A: Under the NYSE and NASDAQ rules, banks, brokers and other nominees may use their discretion to vote uninstructed shares (i.e., shares of record held by banks, brokers or other nominees, but with respect to which the beneficial owner of such shares has not provided instructions on how to vote on a particular proposal) with respect to matters that are considered to be routine, but not with respect to non-routine matters. All of the proposals currently scheduled for consideration at the Entegris special meeting and the Versum special meeting are non-routine matters.

A broker non-vote occurs on an item when (a) a bank, broker or other nominee has discretionary authority to vote on one or more proposals to be voted on at a meeting of stockholders, but is not permitted to vote on other proposals without instructions from the beneficial owner of the shares and (b) the beneficial owner fails to provide the bank, broker or other nominee with such instructions. Because none of the proposals currently scheduled to be voted on at either the Entegris special meeting or the Versum special meeting are routine matters for which brokers may have discretionary authority to vote, Entegris and Versum do not expect there to be any broker non-votes at the Entegris special meeting or the Versum special meeting.

**Q: What stockholder vote is required for the approval of each proposal at the Entegris special meeting? What will happen if I fail to vote or abstain from voting on each proposal at the Entegris special meeting?**

A: *Entegris Proposal 1: Entegris merger agreement proposal.* Assuming a quorum is present, the adoption of the merger agreement by Entegris stockholders requires the affirmative vote of a majority of the outstanding shares of Entegris common stock entitled to vote on such proposal. Accordingly, an Entegris stockholder s abstention from voting, a broker non-vote or the failure of an Entegris stockholder to vote (including the failure of an Entegris stockholder who holds shares in street name through a bank, broker or other nominee to give voting instructions to that bank, broker or other nominee) will have the same effect as a vote **AGAINST** the Entegris merger agreement proposal.

*Entegris Proposal 2: Entegris charter proposal.* Assuming a quorum is present, the adoption of the amended and restated certificate of incorporation by Entegris stockholders requires the affirmative vote of a majority of the

outstanding shares of Entegris common stock entitled to vote on such proposal. Accordingly, an Entegris stockholder s abstention from voting, a broker non-vote or the failure of an Entegris stockholder to vote (including the failure of an Entegris stockholder who holds shares in street name through a bank, broker or other nominee to give voting instructions to that bank, broker or other nominee) will have the same effect as a vote **AGAINST** the Entegris charter proposal.

*Entegris Proposal 3: Entegris compensation proposal.* Assuming a quorum is present, approval of the Entegris compensation proposal requires the affirmative vote of a majority of votes properly cast on the

proposal at the Entegris special meeting. Accordingly, an Entegris stockholder s abstention from voting, a broker non-vote or an Entegris stockholder s other failure to vote (including the failure of an Entegris stockholder who holds shares in street name through a bank, broker or other nominee to give voting instructions to that bank, broker or other nominee) will have no effect on the outcome of the Entegris compensation proposal.

*Entegris Proposal 4: Entegris adjournment proposal*. The Entegris special meeting may be adjourned to solicit additional proxies if there are not sufficient votes at the time of the Entegris special meeting to approve the Entegris merger agreement proposal and the Entegris charter proposal or to ensure that any supplement or amendment to this joint proxy statement/prospectus is timely provided to Entegris stockholders. Whether or not a quorum is present, the approval of the holders of a majority of the voting shares of Entegris common stock present or represented at the Entegris special meeting is required to adjourn the Entegris special meeting. An Entegris stockholder s abstention from voting will have the same effect as a vote **AGAINST** the Entegris adjournment proposal, while a broker non-vote or the failure of an Entegris stockholder to vote (including the failure of an Entegris stockholder who holds shares in street name through a bank, broker or other nominee to give voting instructions to that bank, broker or other nominee) will have no effect on the Entegris adjournment proposal.

**Q: What stockholder vote is required for the approval of each proposal at the Versum special meeting? What will happen if I fail to vote or abstain from voting on each proposal at the Versum special meeting?**

A: *Versum Proposal 1: Versum merger agreement proposal*. Assuming a quorum is present, the adoption of the merger agreement by Versum stockholders requires the affirmative vote of a majority of the outstanding shares of Versum common stock entitled to vote thereon. Accordingly, a Versum stockholder s abstention from voting, a broker non-vote or the failure of a Versum stockholder to vote (including the failure of a Versum stockholder who holds shares in street name through a bank, broker or other nominee to give voting instructions to that bank, broker or other nominee) will have the same effect as a vote **AGAINST** the Versum merger agreement proposal.

*Versum Proposal 2: Versum compensation proposal*. Assuming a quorum is present, approval of the Versum compensation proposal requires the affirmative vote of a majority of the votes cast at the Versum special meeting on this proposal. Accordingly, a Versum stockholder s abstention from voting, a broker non-vote or the failure of a Versum stockholder to vote (including the failure of a Versum stockholder who holds shares in street name through a bank, broker or other nominee to give voting instructions to that bank, broker or other nominee) will have no effect on the Versum compensation proposal.

*Versum Proposal 3: Versum adjournment proposal*. The Versum special meeting may be adjourned to solicit additional proxies if there are not sufficient votes at the time of the Versum special meeting to approve the Versum merger agreement proposal or to ensure that any supplement or amendment to this joint proxy statement/prospectus is timely provided to Versum stockholders. Whether or not a quorum is present, the affirmative vote of a majority of the votes entitled to be cast who are present in person or represented by proxy at the Versum special meeting is required to adjourn the Versum special meeting. Accordingly, a Versum stockholder s abstention from voting will have the same effect as a vote **AGAINST** the Versum adjournment proposal, while a broker non-vote or the failure of a Versum stockholder to vote (including the failure of a Versum stockholder who holds shares in street name through a bank, broker or other nominee to give voting instructions to that bank, broker or other nominee) will have no effect on the Versum adjournment proposal. The chairman of the Versum special meeting may also adjourn the Versum special meeting, whether or not there is a quorum.

8

Table of Contents

**Q: Why am I being asked to consider and vote on a proposal to approve, by non-binding, advisory vote, merger-related compensation arrangements for Entegris or Versum s named executive officers (i.e., the Entegris compensation proposal and the Versum compensation proposal, respectively)?**

A: Under the SEC rules, Entegris and Versum are each required to seek a non-binding, advisory vote of their respective stockholders with respect to the compensation that may be paid or become payable to Entegris or Versum s respective named executive officers that is based on or otherwise relates to the merger, also known as golden parachute compensation.

**Q: What happens if Entegris stockholders or Versum stockholders do not approve, by non-binding, advisory vote, merger-related compensation arrangements for Entegris or Versum s named executive officers (i.e., the Entegris compensation proposal and the Versum compensation proposal, respectively)?**

A: The votes on the proposals to approve the merger-related compensation arrangements for each of Entegris and Versum s named executive officers are separate and apart from the votes to approve the other proposals being presented at the Entegris special meeting and the Versum special meeting. Because the votes on the proposals to approve the merger-related executive compensation are advisory in nature, they will not be binding upon Entegris, Versum or the combined company. Accordingly, the merger-related compensation may be paid to Entegris and Versum s named executive officers to the extent payable in accordance with the terms of their compensation agreements and arrangements even if Entegris or Versum s respective stockholders do not approve the proposals to approve the merger-related executive compensation.

**Q: What if I hold shares in both Entegris and Versum?**

A: If you are both an Entegris stockholder and a Versum stockholder, you will receive two separate packages of proxy materials. A vote cast as an Entegris stockholder will not count as a vote cast as a Versum stockholder, and a vote cast as a Versum stockholder will not count as a vote cast as an Entegris stockholder. **Therefore, please submit separate proxies for your shares of Entegris common stock and your shares of Versum common stock.**

**Q: How can I vote my shares in person at my respective special meeting?**

A: *Record Holders*. Shares held directly in your name as the stockholder of record of Entegris or Versum may be voted in person at the Entegris special meeting or the Versum special meeting, as applicable. If you choose to vote your shares in person at the respective special meeting, please bring required documentation in accordance with the section entitled **The Entegris Special Meeting Attending the Entegris Special Meeting** beginning on page 63, with respect to the Entegris special meeting, and the section entitled **The Versum Special Meeting Attending the Versum Special Meeting** beginning on page 74, with respect to the Versum special meeting.

*Shares in street name.* Shares held in street name may be voted in person by you only if you obtain a signed legal proxy from your bank, broker or other nominee giving you the right to vote the shares. If you choose to vote your

shares in person at the Entegris special meeting or Versum special meeting, as applicable, please bring required documentation in accordance with the section entitled **The Entegris Special Meeting Attending the Entegris Special Meeting** beginning on page 63, with respect to the Entegris special meeting, and the section entitled **The Versum Special Meeting Attending the Versum Special Meeting** beginning on page 74, with respect to the Versum special meeting.

Even if you plan to attend the Entegris special meeting or the Versum special meeting, as applicable, Entegris and Versum recommend that you vote your shares in advance as described below so that your vote will be counted if you later decide not to or become unable to attend the respective special meeting. The use of video, still photography or audio recording is not permitted at either special meeting. For the safety of attendees, all bags, packages and briefcases are subject to inspection. Your compliance is appreciated.

Table of Contents

Additional information on attending the special meetings can be found under the section entitled **The Entegris Special Meeting** on page 59 and under the section entitled **The Versum Special Meeting** on page 70.

**Q: How can I vote my shares without attending my respective special meeting?**

A: Whether you hold your shares directly as the stockholder of record of Entegris or Versum or beneficially in street name, you may direct your vote by proxy without attending the Entegris special meeting or the Versum special meeting, as applicable. You can vote by proxy over the Internet, or by telephone or by mail by following the instructions provided in the enclosed WHITE proxy card. Please note that if you hold shares beneficially in street name, you should follow the voting instructions provided by your bank, broker or other nominee.

Additional information on voting procedures can be found under the section entitled **The Entegris Special Meeting** on page 59 and under the section entitled **The Versum Special Meeting** on page 70.

**Q: What is the difference between holding shares as a stockholder of record and as a beneficial owner of shares held in street name?**

A: If your shares of common stock in Entegris or Versum are registered directly in your name with EQ Shareowner Services, Entegris transfer agent, or Broadridge Corporate Issuer Solutions, Inc., Versum s transfer agent, you are considered the stockholder of record with respect to those shares. As the stockholder of record, you have the right to vote, or to grant a proxy for your vote directly to Entegris or Versum, as applicable, or to a third party to vote, at the respective special meeting.

If your shares of common stock in Entegris or Versum are held by a bank, broker or other nominee, you are considered the beneficial owner of shares held in street name, and your bank, broker or other nominee is considered the stockholder of record with respect to those shares. Your bank, broker or other nominee will send you, as the beneficial owner, a package describing the procedure for voting your shares. You should follow the instructions provided by them to vote your shares. You are invited to attend the Entegris special meeting or the Versum special meeting, as applicable, however, you may not vote these shares in person at the respective special meeting unless you obtain a signed legal proxy, executed in your favor, from your bank, broker or other nominee that holds your shares, giving you the right to vote the shares at the applicable special meeting.

**Q: If my shares of Entegris common stock or Versum common stock are held in street name by my bank, broker or other nominee, will my bank, broker or other nominee automatically vote those shares for me?**

A: No. Your bank, broker or other nominee will only be permitted to vote your shares of Entegris common stock or Versum common stock, as applicable, if you instruct your bank, broker or other nominee how to vote. You should follow the procedures provided by your bank, broker or other nominee regarding the voting of your shares. Under the rules of the NYSE and NASDAQ, banks, brokers and other nominees who hold shares of Entegris common stock or Versum common stock in street name for their customers have authority to vote on routine proposals when they have not received instructions from beneficial owners. However, banks, brokers and

other nominees are prohibited from exercising their voting discretion with respect to non-routine matters, which include all the proposals currently scheduled to be considered and voted on at each of the Entegris and Versum special meetings. As a result, absent specific instructions from the beneficial owner of such shares, banks, brokers and other nominees are not empowered to vote such shares.

For Entegris stockholders, the effect of not instructing your bank, broker or other nominee how you wish to vote your shares will be the same as a vote **AGAINST** the Entegris merger agreement proposal and the

Table of Contents

Entegris charter proposal, but will not be counted as **FOR** or **AGAINST** and, assuming a quorum is present at the Entegris special meeting, will have no effect on, the Entegris compensation proposal or the Entegris adjournment proposal.

For Versum stockholders, the effect of not instructing your bank, broker or other nominee how you wish to vote your shares will be the same as a vote **AGAINST** the Versum merger agreement proposal, but will not be counted as **FOR** or **AGAINST** and, assuming a quorum is present at the Versum special meeting, will have no effect on, the Versum compensation proposal or the Versum adjournment proposal.

**Q: What should I do if I receive more than one set of voting materials for the same special meeting?**

A: If you hold shares of Entegris common stock or Versum common stock in street name and also directly in your name as a stockholder of record or otherwise, or if you hold shares of Entegris common stock or Versum common stock in more than one brokerage account, you may receive more than one set of voting materials relating to the same special meeting.

*Record Holders*. For shares held directly, please complete, sign, date and return each WHITE proxy card (or cast your vote by telephone or Internet as provided on each WHITE proxy card) or otherwise follow the voting instructions provided in this joint proxy statement/prospectus in order to ensure that all of your shares of Entegris common stock or Versum common stock are voted.

*Shares in street name.* For shares held in street name through a bank, broker or other nominee, you should follow the procedures provided by your bank, broker or other nominee to vote your shares.

We urge you to discard any green proxy cards and disregard any related solicitation materials, which may have been sent to you by Merck KGaA, Darmstadt, Germany, which is referred to as Merck, who is soliciting proxies from Versum stockholders in opposition to the merger. If you previously submitted a green proxy card, we urge you to cast your vote as instructed on your WHITE proxy card, which will revoke any earlier dated proxy card that you may have submitted, including any green proxy card. Only the latest dated proxy you submit will be counted.

**Q: If a stockholder gives a proxy, how are the shares of Entegris or Versum common stock voted?**

A: Regardless of the method you choose to vote, the individuals named on the enclosed WHITE proxy card will vote your shares of Entegris common stock or Versum common stock, as applicable, in the way that you indicate. When completing the Internet or telephone processes or the WHITE proxy card, you may specify whether your shares of Entegris common stock or Versum common stock, as applicable, should be voted for or against, or abstain from voting on, all, some or none of the specific items of business to come before the respective special meetings.

**Q: How will my shares of Entegris common stock be voted if I return a blank proxy?**

A: If you sign, date and return your WHITE proxy card and do not indicate how you want your shares of Entegris common stock to be voted, then your shares of Entegris common stock will be voted **FOR** the Entegris merger agreement proposal, **FOR** the Entegris charter proposal, **FOR** the Entegris compensation proposal and **FOR** the Entegris adjournment proposal.

**Q: How will my shares of Versum common stock be voted if I return a blank proxy?**

A: If you sign, date and return your WHITE proxy card and do not indicate how you want your shares of Versum common stock to be voted, then your shares of Versum common stock will be voted **FOR** the Versum merger agreement proposal, **FOR** the Versum compensation proposal and **FOR** the Versum adjournment proposal.

Table of Contents

**Q: I received a green proxy card. Should I sign and mail it?**

A: No. We urge you to discard any green proxy card and disregard any related solicitation materials, which may have been sent to you by Merck, who is soliciting proxies from Versum stockholders in opposition to the merger. If you previously submitted a green proxy card, we urge you to cast your vote as instructed on your WHITE proxy card, which will revoke any earlier dated proxy card that you submitted, including any green proxy card. Only the latest dated proxy you submit will be counted. If you have any questions or need assistance voting, please call Innisfree M&A Incorporated, which is referred to as Innisfree, Versum s proxy solicitor, toll-free at (877) 456-3463 or call collect at (212) 750-5833.

**Q: Can I change my vote after I have submitted my proxy?**

A: Any stockholder giving a proxy has the right to revoke it, including any green proxy card you may have previously submitted, before the proxy is voted at the applicable special meeting by doing any of the following:

subsequently submitting a new proxy including a WHITE proxy card (including by submitting a proxy via the Internet or telephone);

giving written notice of your revocation to Entegris corporate secretary or Versum s corporate secretary, as applicable; or

revoking your proxy and voting in person at the applicable special meeting.

Execution or revocation of a proxy will not in any way affect your right to attend the applicable special meeting and vote in person. Written notices of revocation and other communications with respect to the revocation of proxies should be addressed:

| if you are an Entegris stockholder, to: | if you are a Versum stockholder, to: |
|---|---|
| Entegris, Inc.<br>Attn: Corporate Secretary<br>129 Concord Road,<br>Billerica, Massachusetts 01821 | Versum Materials, Inc.<br>Attn: Corporate Secretary<br>8555 South River Parkway,<br>Tempe, Arizona 85284 |

For more information, see the section entitled **The Entegris Special Meeting Revocability of Proxies** beginning on page 63 and the section entitled **The Versum Special Meeting Revocability of Proxies** beginning on page 73, as applicable.

**Q: If I hold my shares in street name, can I change my voting instructions after I have submitted voting instructions to my bank, broker or other nominee?**

If your shares are held in the name of a bank, broker or other nominee and you previously provided voting instructions to your bank, broker or other nominee, you should follow the instructions provided by your bank, broker or other nominee to revoke or change your voting instructions.

**Q: Where can I find the voting results of the special meetings?**

A: The preliminary voting results for each special meeting will be announced at that special meeting. In addition, within four business days following certification of the final voting results, each of Entegris and Versum intends to file the final voting results of its respective special meeting with the SEC on a Current Report on Form 8-K.

Table of Contents

**Q: If I do not favor the merger, what are my rights?**

A: Neither Entegris stockholders nor Versum stockholders are entitled to dissenters rights under the DGCL. If they are not in favor of the merger, Entegris stockholders may vote against the Entegris merger agreement proposal or the Entegris charter proposal, and Versum stockholders may vote against the Versum merger agreement proposal. For more information, see the section entitled **No Appraisal Rights** beginning on page 204. Information about how Entegris stockholders may vote on the proposals being considered in connection with the merger can be found under the section entitled **The Entegris Special Meeting** beginning on page 59. Information about how Versum stockholders may vote on the proposals being considered in connection with the merger can be found under the section entitled **The Versum Special Meeting** beginning on page 70.

**Q: Are there any risks that I should consider in deciding whether to vote for the approval of the Entegris merger agreement proposal, the approval of the Entegris charter proposal or the approval of the Versum merger agreement proposal?**

A: Yes. You should read and carefully consider the risk factors set forth in the section entitled **Risk Factors** beginning on page 43. You also should read and carefully consider the risk factors of Entegris and Versum contained in the documents that are incorporated by reference into this joint proxy statement/prospectus.

**Q: What happens if I sell my shares of Entegris common stock or Versum common stock after the respective record date but before the respective special meeting?**

A: The Entegris record date is earlier than the date of the Entegris special meeting, and the Versum record date is earlier than the date of the Versum special meeting. If you transfer your shares of Entegris common stock or Versum common stock after the respective record date but before the applicable special meeting, you will, unless special arrangements are made, retain your right to vote at the applicable special meeting.

**Q: Who will solicit and pay the cost of soliciting proxies?**

A: Entegris has engaged MacKenzie Partners, Inc., which is referred to as MacKenzie, to assist in the solicitation of proxies for the Entegris special meeting. Entegris estimates that it will pay MacKenzie a fee of approximately $25,000, plus reimbursement of reasonable expenses. Entegris has agreed to indemnify MacKenzie against various liabilities and expenses that relate to or arise out of its solicitation of proxies (subject to certain exceptions). Versum has engaged Innisfree to assist in the solicitation of proxies for the Versum special meeting. Versum estimates that it will pay Innisfree a fee of approximately $750,000, plus reimbursement for certain out-of-pocket fees and expenses. Versum has agreed to indemnify Innisfree against various liabilities and expenses that relate to or arise out of its solicitation of proxies (subject to certain exceptions). Entegris and Versum also may be required to reimburse banks, brokers and other custodians, nominees and fiduciaries or their respective agents for their expenses in forwarding proxy materials to beneficial owners of Entegris common stock and Versum common stock, respectively. Entegris directors, officers and employees and Versum s directors, officers and employees also may solicit proxies by telephone, by electronic means or in person. They will not be

paid any additional amounts for soliciting proxies.

**Q: What are the material United States federal income tax consequences of the merger to Versum stockholders?**

A: The merger is intended to qualify as a reorganization within the meaning of Section 368(a) of the Internal Revenue Code of 1986, as amended, which is referred to as the Code, and it is a condition to the respective obligations of Entegris and Versum to complete the merger that each of Entegris and Versum receives a legal opinion to that effect. Accordingly, holders of Versum common stock are not expected to recognize

Table of Contents

any gain or loss for U.S. federal income tax purposes on the exchange of shares of Versum common stock for shares of Entegris common stock in the merger, except with respect to any cash received instead of fractional shares of Entegris common stock.

For further information, see the section entitled **Material U.S. Federal Income Tax Consequences** beginning on page 183.

**Q: When is the merger expected to be completed?**

A: Subject to the satisfaction or waiver of the closing conditions described under the section entitled **The Merger Agreement Conditions to the Completion of the Merger** beginning on page 152, including the adoption of the merger agreement by both Entegris stockholders and Versum stockholders, the merger is expected to close in the second half of 2019. However, neither Entegris nor Versum can predict the actual date on which the merger will be completed, or if the merger will be completed at all, because completion of the merger is subject to conditions and factors outside the control of both companies. Entegris and Versum hope to complete the merger as soon as reasonably practicable. See also the section entitled **The Merger Regulatory Approvals** beginning on page 122.

**Q: What are the conditions to completion of the merger?**

A: The merger is subject to a number of conditions to closing as specified in the merger agreement. These closing conditions include, among others, approval for listing on NASDAQ or the NYSE of the shares of Entegris common stock to be issued pursuant to the merger agreement, the expiration or earlier termination of any applicable waiting period, the receipt of approvals under U.S. and foreign antitrust and competition laws in China, Germany, Japan, South Korea, and Taiwan, the absence of governmental restraints or prohibitions preventing the consummation of the merger, the effectiveness of the registration statement on Form S-4 registering the Entegris common stock issuable pursuant to the merger agreement and the absence of any stop order or proceedings by the SEC with respect thereto. The obligation of each of Versum and Entegris to consummate the merger is also conditioned on, among other things, the receipt by such party of a written opinion from such party s counsel to the effect that for U.S. federal income tax purposes the merger will qualify as a reorganization within the meaning of Section 368(a) of the Code, the truth and correctness of the representations and warranties made by the other party on the date of the merger agreement and on the closing date (subject to certain materiality qualifiers) and the performance by the other party in all material respects of its obligations under the merger agreement. No assurance can be given that the required stockholder, governmental and regulatory consents and approvals will be obtained or that the required conditions to closing will be satisfied, and, even if all required consents and approvals are obtained and the conditions are satisfied, no assurance can be given as to the terms, conditions and timing of such consents and approvals. Any delay in completing the merger could cause the combined company not to realize, or to be delayed in realizing, some or all of the benefits that Entegris and Versum expect to achieve if the merger is successfully completed within its expected time frame. For a more complete summary of the conditions that must be satisfied or waived prior to completion of the merger, see the section entitled **The Merger Agreement Conditions to the Completion of the Merger** beginning on page 152.

**Q:**

**What respective equity stakes will Entegris stockholders and Versum stockholders hold in the combined company immediately following the merger?**

A: As of the date of this joint proxy statement/prospectus, based on the exchange ratio of 1.120 and the estimated number of shares of common stock of Entegris and Versum that will be outstanding immediately prior to the completion of the merger, including exercisable options, Entegris and Versum estimate that holders of shares of Entegris common stock as of immediately prior to the completion of the merger will hold, in the aggregate, approximately 52.5% of the issued and outstanding shares of common stock of the combined company (based on fully diluted shares outstanding of the combined company including

Table of Contents

exercisable options only) immediately following the completion of the merger, and holders of shares of Versum common stock as of immediately prior to the completion of the merger will hold, in the aggregate, approximately 47.5% of the issued and outstanding shares of common stock of the combined company (based on fully diluted shares outstanding of the combined company including exercisable options only) immediately following the completion of the merger. The exact equity stake of Entegris stockholders and Versum stockholders in the combined company immediately following the merger will depend on the number of shares of Entegris common stock and Versum common stock issued and outstanding immediately prior to the merger.

**Q: Will I still be paid dividends prior to the merger?**

A: Entegris may declare and pay one regular quarterly cash dividend per quarter in an amount per share of up to $0.07 per quarter with a record date consistent with the record date for each quarterly period. Versum may declare and pay one regular quarterly cash dividend per quarter in an amount per share of up to $0.08 per quarter and with a record date consistent with the record date for each quarterly period.

Entegris and Versum have agreed to coordinate with each other on the declaration, setting of record dates and payment dates of dividends with the intention that holders of shares of Versum common stock do not receive dividends on both shares of Versum common stock and Entegris common stock received in the merger in respect of any calendar quarter or fail to receive a dividend on either shares of Versum common stock or Entegris common stock received in the merger in respect of any calendar quarter. The declaration and payment of any dividends on shares of Entegris common stock or Versum common stock remain subject to applicable law and the approval of the Versum board of directors or the Entegris board of directors, as applicable.

For more information regarding the payment of dividends, see the section entitled **The Merger Agreement Conduct of Business Prior to the Effective Time** beginning on page 136.

**Q: If I am a Versum stockholder, how will I receive the merger consideration to which I am entitled?**

A: If you hold your shares of Versum common stock through The Depository Trust Company, which is referred to as DTC, in book-entry form, you will not be required to take any specific actions to exchange your shares for shares of Entegris common stock. After the completion of the merger, shares of Versum common stock held through DTC in book-entry form will be automatically exchanged for shares of Entegris common stock in book-entry form and cash to be paid in lieu of any fractional share of Entegris common stock to which you are entitled. If you hold your shares of Versum common stock in certificated form, or in book-entry form but not through DTC, after receiving the proper documentation from you, following the effective time, the exchange agent will deliver to you the Entegris common stock (in book-entry form) and cash in lieu of fractional shares to which you are entitled. More information may be found in the sections entitled **The Merger Exchange of Shares** beginning on page 125 and **The Merger Agreement Exchange of Shares** beginning on page 129.

**Q: What should I do now?**

A:

You should read this joint proxy statement/prospectus carefully and in its entirety, including the annexes, and return your completed, signed and dated WHITE proxy card(s) by mail in the enclosed postage-paid envelope or submit your voting instructions by telephone or over the Internet as soon as possible so that your shares will be voted in accordance with your instructions.

Table of Contents

**Q: Whom do I call if I have questions about the Entegris special meeting, the Versum special meeting or the merger?**

A: If you have questions about the Entegris special meeting, the Versum special meeting or the merger, or desire additional copies of this joint proxy statement/prospectus or additional proxies, you may contact:

if you are an Entegris stockholder:

MacKenzie Partners, Inc.
1407 Broadway, 27th Floor
New York, New York 10018
Toll-Free: (800) 322-2885

Call Collect: (212) 929-5500

if you are a Versum stockholder:

Innisfree M&A Incorporated
501 Madison Avenue, 20th Floor
New York, New York 10022
Toll-Free: (877) 456-3463
Call Collect: (212) 750-5833

Table of Contents

## SUMMARY

*For your convenience, provided below is a brief summary of certain information contained in this joint proxy statement/prospectus. This summary highlights selected information from this joint proxy statement/prospectus and does not contain all of the information that may be important to you as an Entegris stockholder or a Versum stockholder. To understand the merger fully and for a more complete description of the terms of the merger, you should read carefully this entire joint proxy statement/prospectus, its annexes and the other documents to which you are referred. Items in this summary include a page reference directing you to a more complete description of those items. You may obtain the information incorporated by reference into this joint proxy statement/prospectus without charge by following the instructions under the section entitled* ***Where You Can Find More Information*** *beginning on page 213.*

**The Parties to the Merger** (Page 58)

***Entegris, Inc.***

Entegris is a leading global developer, manufacturer and supplier of microcontamination control products, specialty chemicals and advanced materials handling solutions for manufacturing processes in the semiconductor and other high-technology industries. Entegris operates in three segments: Specialty Chemicals and Engineered Materials, Microcontamination Control and Advanced Materials Handling. Entegris principal executive offices are located at 129 Concord Road, Billerica, Massachusetts 01821 and its telephone number is (978) 436-6500.

***Versum Materials, Inc.***

Versum is a global provider of innovative solutions to the semiconductor and display industries with expertise in the development, manufacturing, transportation and handling of specialty materials. Versum employs expertise in molecular design and synthesis, purification, advanced analytics, formulation development and containers and delivery systems for the handling of high purity materials to deliver leading-edge solutions and critical process support to Versum s customers. Versum s principal executive offices are located at 8555 South River Parkway, Tempe, Arizona 85284 and its telephone number is (602) 282-1000.

**The Merger and the Merger Agreement** (Pages 80 and 127)

The terms and conditions of the merger are contained in the merger agreement, a copy of which is attached as Annex A to this joint proxy statement/prospectus. You are encouraged to read the merger agreement carefully and in its entirety, as it is the primary legal document that governs the merger.

Pursuant to the merger agreement, Versum will merge with and into Entegris. At the effective time, the separate existence of Versum will cease, and Entegris will be the surviving corporation. Following the merger, Versum common stock will be delisted from the NYSE, deregistered under the Exchange Act and will cease to be publicly traded.

**Exchange Ratio** (Page 80)

At the effective time, each share of Versum common stock (other than shares of Versum common stock owned by Versum (excluding any such shares of Versum common stock owned by a Versum benefits plan or held on behalf of third parties), which are referred to collectively as Versum excluded shares) will be converted into the right to receive 1.120 shares of Entegris common stock.

The exchange ratio is fixed, which means that it will not change between now and the date of the merger, regardless of whether the market price of either Entegris common stock or Versum common stock changes. No

Table of Contents

fractional shares of Entegris common stock will be issued upon the conversion of shares of Versum common stock pursuant to the merger agreement. Each Versum stockholder that otherwise would have been entitled to receive a fraction of a share of Entegris common stock will be entitled to receive cash in lieu of a fractional share.

Entegris stockholders will continue to own their existing shares, which will not be affected by the merger and which will constitute shares of the combined company following completion of the merger.

**Treatment of Existing Entegris Equity Awards** (Page 128)

Entegris equity awards will remain equity awards relating to shares of Entegris common stock. Entegris equity awards will continue to vest in accordance with the terms of the award agreements applicable to such Entegris equity awards. However, the Entegris board of directors (or the applicable committee thereof) may determine to treat the merger as a change in control or term of similar meaning for purposes of the Entegris compensation and benefit plans, including Entegris equity awards, which determination may result in certain double trigger benefits under such plans upon a qualifying termination of employment subsequent to the effective time, but in no event may such determination result in the single-trigger payment of benefits under such plans upon or in connection with the merger. Entegris may amend any outstanding Entegris options and Entegris RSU awards, granted prior to January 27, 2019 to provide for, and may include in Entegris options, Entegris RSU awards and Entegris PSU awards granted in fiscal year 2019, double-trigger vesting upon certain qualifying terminations of employment.

**Treatment of Existing Versum Equity Awards** (Page 129)

At the effective time, each Versum option that is outstanding immediately prior to the effective time will vest and be converted into a converted option relating to a number of shares of Entegris common stock equal to the product of (i) the number of shares of Versum common stock subject to the Versum option immediately prior to the effective time multiplied by (ii) the exchange ratio (rounded down to the nearest whole share number), with a per share exercise price equal to (a) the per share exercise price applicable to such Versum option immediately prior to the effective time divided by (b) the exchange ratio (rounded up to the nearest whole cent). Except as noted in the immediately preceding sentence, each converted option will continue to be governed by the same terms and conditions as were applicable to the Versum option immediately prior to the effective time.

At the effective time, each Versum RSU award and Versum PSU award that is outstanding immediately prior to the effective time will be converted into a converted RSU award relating to a number of shares of Entegris common stock equal to (i) the number of shares of Versum common stock subject to the Versum RSU award or Versum PSU award immediately prior to the effective time multiplied by (ii) the exchange ratio. For Versum PSU awards, the number of shares in clause (i) of the immediately preceding sentence will be determined based on actual performance through a shortened performance period ending immediately prior to the effective time. The converted RSU awards will vest and settle on terms (including acceleration events) at least as favorable as were applicable to the corresponding Versum RSU award or Versum PSU award immediately prior to the effective time, except that converted RSU awards relating to Versum PSU awards will vest solely based on continued service. Each converted RSU award will vest in full on the original vesting date or if the holder experiences a covered termination following the effective time and prior to the original vesting date, on the date of such covered termination. For employees of Versum and its subsidiaries, a covered termination means a termination by Versum or one of its subsidiaries or their successor in interest without cause or, to the extent good reason rights are provided for in the award agreement (or employment or similar agreement) applicable to the corresponding Versum RSU award or Versum PSU award, a resignation by the employee for good reason (as such terms are defined in the applicable Versum agreement), in either case, during the 24-month period following the effective time. For non-employee directors of Versum, a covered termination means the termination of their service as a director for any reason at or following the effective time.

18

Table of Contents

At the effective time, each Versum DSU award will vest and be converted into the right to receive a number of shares of Entegris common stock equal to (i) the number of shares of Versum common stock covered by the Versum DSU award immediately prior to the effective time by (ii) the exchange ratio, with such shares distributed to the holder within 30 business days following the effective time.

**Entegris Recommendation and Reasons for the Merger** (Page 87)

The Entegris board of directors unanimously recommends that Entegris stockholders vote **FOR** the Entegris merger agreement proposal, **FOR** the Entegris charter proposal, **FOR** the Entegris compensation proposal and **FOR** the Entegris adjournment proposal. In reaching its determinations and recommendations, the Entegris board of directors consulted with Entegris senior management and its outside legal and financial advisors, and considered a number of factors, including the following factors that weighed in favor of the merger:

- the benefits of a combined company, including the belief of the Entegris board of directors that the combined company would be well positioned to achieve future growth and generate additional returns for Entegris stockholders;

- the exchange ratio and merger consideration, including the relative favorability of the exchange ratio relative to the exchange ratios historically implied by the relative trading prices of Entegris and Versum common stock over various periods and relative to the current assessment of the valuation of each company and of the synergies and other benefits of the merger;

- the governance terms for the combined company, including the structure of the transaction as a merger of equals in addition to the governance terms in the merger agreement;

- certain other factors, including the past experience the Entegris management team has had in timely and effective corporate integration following significant combinations and acquisitions, including a prior merger of equals, historical information concerning Entegris and Versum s respective businesses, financial condition, results of operations, earnings, trading prices, technology positions, managements, competitive positions and prospects on a stand-alone basis and forecasted combined basis, and the current and prospective business environment in which Entegris and Versum operate, including international, national and local economic conditions, the competitive and regulatory environment, and the likely effect of these factors on Entegris and the combined company; and

- the terms of the merger agreement, taken as a whole.

For a more complete description of the factors considered by the Entegris board of directors in reaching this decision, including potentially negative factors against which these advantages and opportunities were weighed, and additional information on the recommendation of the Entegris board of directors, see the section entitled **The Merger Recommendation of the Entegris Board of Directors; Entegris Reasons for the Merger** beginning on page 87.

**Versum s Recommendation and Reasons for the Merger** (Page 91)

The Versum board of directors unanimously recommends that Versum stockholders vote **FOR** the Versum merger agreement proposal, **FOR** the Versum compensation proposal and **FOR** the Versum adjournment proposal. In reaching its determinations and recommendations, the Versum board of directors consulted with Versum s senior management and its outside legal and financial advisors, and considered a number of factors, including the following factors that weighed in favor of the merger:

- the expectation that the combined company will have flexibility to invest, make acquisitions, and return capital to stockholders, while enjoying greater earnings stability and margin growth potential;

Table of Contents

the fact that the exchange ratio, based on the closing price of the Versum common stock and the Entegris common stock as of January 25, 2019, the last trading day prior to the announcement of the merger agreement, represented an implied premium of approximately 10.8% to the closing price of the Versum common stock on January 25, 2019;

the structure of the transaction as a merger of equals, including the governance terms in the merger agreement;

certain other factors, including the opportunity to combine resources and expertise to better meet the evolving needs of customers of both companies, the historical and projected financial information concerning Versum s business, financial performance and condition, results of operations, earnings, competitive position and prospects as a stand-alone company, and the current and prospective business environment in which Versum and Entegris operate, including international, national and local economic conditions, the competitive and regulatory environment, and the likely effect of these factors on Versum and the combined company; and

the terms of the merger agreement, taken as a whole.

For a more complete description of the factors considered by the Versum board of directors in reaching this decision, including potentially negative factors against which these advantages and opportunities were weighed, and additional information on the recommendation of the Versum board of directors, see the section entitled **The Merger Recommendation of the Versum Board of Directors; Versum s Reasons for the Merger** beginning on page 91.

**Opinion of Entegris Financial Advisor** (Page 96 and Annex C)

Entegris retained Morgan Stanley & Co. LLC, which is referred to as Morgan Stanley, to act as financial advisor to the Entegris board of directors in connection with the proposed merger of Entegris and Versum. The Entegris board of directors selected Morgan Stanley to act as its financial advisor based on Morgan Stanley s qualifications, expertise and reputation, its knowledge of and involvement in recent transactions in the industry, and its knowledge of Entegris business and affairs. At the meeting of the Entegris board of directors on January 27, 2019, Morgan Stanley rendered its oral opinion, subsequently confirmed in writing, that as of such date and based upon and subject to the various assumptions made, procedures followed, matters considered, and qualifications and limitations on the scope of the review undertaken by Morgan Stanley as set forth in the written opinion, the exchange ratio pursuant to the merger agreement was fair from a financial point of view to Entegris.

The full text of the written opinion of Morgan Stanley, dated as of January 27, 2019, which sets forth, among other things, the assumptions made, procedures followed, matters considered and qualifications and limitations on the scope of the review undertaken by Morgan Stanley in rendering its opinion, is attached to this joint proxy statement/prospectus as Annex C. You are encouraged to read the entire opinion carefully and in its entirety. Morgan Stanley s opinion was rendered for the benefit of the Entegris board of directors, in its capacity as such, and addressed only the fairness from a financial point of view of the exchange ratio pursuant to the merger agreement to Entegris as of the date of the opinion. Morgan Stanley s opinion did not address any other aspect of the merger or related transactions, including the relative merits of the merger as compared to any other alternative business transaction, or other alternatives, the prices at which shares of Entegris common stock or Versum common stock would trade at any time in the future, or any compensation or compensation agreements arising from (or relating to) the merger which

benefit any officer, director or employee of any party to the merger, or any class of such persons. The opinion was addressed to, and rendered for the benefit of, the Entegris board of directors and was not intended to, and does not, constitute advice or a recommendation to any holder of shares of Entegris common stock or any holder of shares of Versum common stock as to how to vote or act on any matter with respect to the merger or related transactions or any other action with respect to the transactions

Table of Contents

contemplated by the merger agreement, including the merger. For a further discussion of Morgan Stanley s opinion, see **The Merger Opinion of Entegris Financial Advisor** beginning on page 96.

**Opinion of Versum s Financial Advisor** (Page 107 and Annex D)

On January 27, 2019, at the meeting of the Versum board of directors at which the merger was approved, Lazard Frères & Co. LLC, which is referred to as Lazard, Versum s financial advisor in connection with the merger, rendered to the Versum board of directors an oral opinion, confirmed by delivery of a written opinion, dated January 27, 2019, to the effect that, as of such date, and based upon and subject to the assumptions, procedures, factors, qualifications and limitations set forth in its written opinion, the exchange ratio in the merger was fair, from a financial point of view, to Versum stockholders (other than the holders of Versum excluded shares).

The full text of Lazard s written opinion, dated January 27, 2019, which sets forth the assumptions made, procedures followed, factors considered and qualifications and limitations on the review undertaken by Lazard in connection with its opinion, is attached as Annex D to this joint proxy statement/prospectus and is incorporated herein by reference. The summary of the opinion of Lazard set forth in this joint proxy statement/prospectus is qualified in its entirety by reference to the full text of such opinion. Versum stockholders are urged to read the opinion in its entirety. Lazard s written opinion was addressed to the Versum board of directors (in its capacity as such) in connection with and for the purpose of its evaluation of the merger, was directed only to the fairness, from a financial point of view, to holders of Versum common stock (other than the holders of Versum excluded shares) of the exchange ratio in the merger, and did not address any other aspect of the merger. Lazard expressed no opinion as to the fairness of the exchange ratio to the holders of any other class of securities, creditors or other constituencies of Versum or as to the underlying decision by Versum to engage in the merger. The issuance of Lazard s opinion was approved by a fairness committee of Lazard. The opinion does not constitute a recommendation to any Versum stockholder as to how such stockholder should vote with respect to the merger or any other matter.

For a description of the opinion that the Versum board of directors received from Lazard, see **The Merger Opinion of Versum s Financial Advisor** beginning on page 107.

**The Entegris Special Meeting** (Page 59)

The Entegris special meeting will be held on April 26, 2019 at 12:00 p.m., Eastern Time, at Entegris headquarters at 129 Concord Road, Billerica, Massachusetts 01821. The purposes of the Entegris special meeting are as follows:

*Entegris Proposal 1: Adoption of the Merger Agreement*. To consider and vote on the Entegris merger agreement proposal;

*Entegris Proposal 2: Adoption of the Amended and Restated Certificate of Incorporation of Entegris*. To consider and vote on the Entegris charter proposal;

*Entegris Proposal 3: Approval, on an Advisory (Non-Binding) Basis, of Certain Compensatory Arrangements with Entegris Named Executive Officers*. To consider and vote on the Entegris compensation proposal; and

*Entegris Proposal 4: Adjournment of the Entegris Special Meeting*. To consider and vote on the Entegris adjournment proposal.

Completion of the merger is conditioned on the approval of the Entegris merger agreement proposal by Entegris stockholders. Approval of the Entegris charter proposal and the advisory proposal concerning the merger-related compensation arrangements for Entegris named executive officers are not conditions to the obligation of either Versum or Entegris to complete the merger.

Table of Contents

Only holders of record of issued and outstanding shares of Entegris common stock as of the close of business on April 2, 2019, the record date for the Entegris special meeting, are entitled to notice of, and to vote at, the Entegris special meeting or any adjournment or postponement of the Entegris special meeting. Entegris stockholders may cast one vote for each share of Entegris common stock that Entegris stockholders owned as of that record date.

Assuming a quorum is present at the Entegris special meeting, the Entegris merger agreement proposal requires the affirmative vote of a majority of the outstanding shares of Entegris common stock entitled to vote on such proposal. Shares of Entegris common stock not present, and shares present and not voted, whether by broker non-vote, abstention or otherwise, will have the same effect as votes cast **AGAINST** the proposal to adopt the merger agreement.

Assuming a quorum is present at the Entegris special meeting, the Entegris charter proposal requires the affirmative vote of a majority of the outstanding shares of Entegris common stock entitled to vote on such proposal. Shares of Entegris common stock not present, and shares present and not voted, whether by broker non-vote, abstention or otherwise, will have the same effect as votes cast **AGAINST** the proposal to approve the charter proposal.

Assuming a quorum is present at the Entegris special meeting, approval of the Entegris compensation proposal requires the affirmative vote of a majority of votes properly cast on the proposal. Accordingly, an Entegris stockholder s abstention from voting, a broker non-vote or an Entegris stockholder s other failure to vote, will have no effect on the outcome of the Entegris compensation proposal.

Whether or not there is a quorum, the approval of the Entegris adjournment proposal requires the approval of the holders of a majority of the voting shares of Entegris common stock represented at the Entegris special meeting. Accordingly, an abstention will have the same effect as a vote **AGAINST** the Entegris adjournment proposal, while a broker non-vote or other failure to vote will have no effect on the outcome of the Entegris adjournment proposal.

**The Versum Special Meeting** (Page 70)

The Versum special meeting will be held at 8555 South River Parkway, Tempe, Arizona 85284, on April 26, 2019, beginning at 9:00 a.m., Mountain Standard Time. The purposes of the Versum special meeting are as follows:

*Versum Proposal 1: Adoption of the Merger Agreement*. To consider and vote on the Versum merger agreement proposal;

*Versum Proposal 2: Approval, on an Advisory (Non-Binding) Basis of Certain Compensatory Arrangements with Versum s Named Executive Officers*. To consider and vote on the Versum compensation proposal; and

*Versum Proposal 3: Adjournment of the Versum Special Meeting*. To consider and vote on the Versum adjournment proposal.

Completion of the merger is conditioned on the approval of the Versum merger agreement proposal by Versum stockholders. Approval of the advisory proposal concerning the merger-related compensation arrangements for Versum s named executive officers is not a condition to the obligation of either Versum or Entegris to complete the merger.

Only holders of record of issued and outstanding shares of Versum common stock as of the close of business on April 2, 2019, the record date for the Versum special meeting, are entitled to notice of, and to vote at,

Table of Contents

the Versum special meeting or any adjournment or postponement of the Versum special meeting. Versum stockholders may cast one vote for each share of Versum common stock that Versum stockholders owned as of that record date.

Assuming a quorum is present at the Versum special meeting, the Versum merger agreement proposal requires the affirmative vote of a majority of the outstanding shares of Versum common stock entitled to vote thereon. Shares of Versum common stock not present, and shares present and not voted, whether by broker non-vote, abstention or otherwise, will have the same effect as votes cast **AGAINST** the proposal to adopt the merger agreement.

Assuming a quorum is present at the Versum special meeting, approval of the Versum compensation proposal requires the affirmative vote of a majority of the votes cast at Versum special meeting on this proposal. Accordingly, a failure to vote, a broker non-vote or an abstention will have no effect on the outcome of the Versum compensation proposal.

Whether or not there is a quorum, the approval of the Versum adjournment proposal requires the affirmative vote of a majority of the votes entitled to be cast who are present in person or represented by proxy at the Versum special meeting on this proposal. Accordingly, an abstention will have the same effect as a vote **AGAINST** the Versum adjournment proposal, while a broker non-vote or other failure to vote will have no effect on the outcome of the Versum adjournment proposal.

**Interests of Entegris Directors and Executive Officers in the Merger** (Page 170)

In considering the recommendations of the Entegris board of directors, Entegris stockholders should be aware that Entegris directors and executive officers have interests in the merger, including financial interests, that may be different from, or in addition to, the interests of other Entegris stockholders generally. The Entegris board of directors was aware of and considered these interests, among other matters, in reaching its decisions to adopt the merger agreement and approve the transactions contemplated thereby and to recommend the adoption of the merger agreement to Entegris stockholders.

These interests include:

- the Entegris board of directors (or the applicable committee thereof) has determined to treat the transactions contemplated by the merger agreement as a change in control or term of similar meaning for purposes of the Entegris compensation and benefit plans, including with respect to Entegris equity awards held by directors and executive officers, subject to certain limitations;

- Entegris executive officers will be entitled to enhanced severance benefits under their respective employment arrangements in the event of a qualifying termination of employment within 24 months following the effective time;

- Entegris executive officers may be eligible to receive a cash-based retention award in connection with a cash retention program that Entegris may establish in connection with the merger; and

the merger agreement provides that certain members of the Entegris board of directors, who will be determined prior to closing by mutual agreement of the parties, and certain executive officers of Entegris will become directors and/or executive officers of the combined company following the merger; the parties intend that the combined company board of directors represent an appropriate mix of relevant experience, qualifications and attributes.

For a more complete description of these interests, see the information provided in the section entitled **Interests of Entegris Directors and Executive Officers in the Merger** beginning on page 170.

Table of Contents

**Interests of Versum s Directors and Executive Officers in the Merger** (Page 176)

In considering the recommendations of the Versum board of directors, Versum stockholders should be aware that Versum s directors and executive officers have interests in the merger, including financial interests, that may be different from, or in addition to, the interests of the other Versum stockholders generally. The Versum board of directors was aware of and considered these interests, among other matters, in reaching its decisions to adopt the merger agreement and approve the transactions contemplated thereby and to recommend the adoption of the merger agreement to Versum stockholders.

These interests include:

- unvested Versum RSU awards, including those held by directors and executive officers, will be converted into a number of Entegris time-based restricted stock units, which will vest in full upon certain terminations of employment following the effective time;

- unvested Versum PSU awards, including those held by executive officers, will be converted (based on actual Versum performance for a truncated performance period ending immediately prior to the effective time) into a number of Entegris time based restricted stock units, which will vest in full upon certain terminations of employment following the effective time;

- each Versum DSU award held in a director s account under Versum Deferred Compensation Plan for Directors shall be fully vested and settled in shares of Entegris common stock within 30 days following the effective time;

- Versum s executive officers are entitled to enhanced severance benefits under their respective employment agreements in the event of a qualifying termination of employment following the effective time;

- certain of Versum s executive officers have account balances under the Versum Deferred Compensation Plan, with such balances paid out as soon as administratively feasible following the effective time, but in no event longer than 90 days thereafter;

- certain of Versum s executive officers may be eligible to receive a cash-based retention award in connection with a cash retention program that Versum has established in connection with the merger;

- the merger agreement provides that the directors and officers of Versum and its subsidiaries will have the right to indemnification and continued coverage under directors and officers liability insurance policies following the merger; and

certain members of the Versum board of directors, who will be determined prior to closing by mutual agreement of the parties, and certain executive officers of Versum will become directors and/or executive officers of the combined company following the merger, as agreed between the parties and as provided in the merger agreement; the parties intend that the combined company board of directors represent an appropriate mix of relevant experience, qualifications and attributes.

These interests are discussed in more detail in the section entitled **Interests of Versum s Directors and Executive Officers in the Merger** beginning on page 176.

**Governance of the Combined Company** (Page 124, Annex A and Annex B)

The merger agreement and the amended and restated certificate of incorporation of Entegris, copies of which are attached to this joint proxy statement/prospectus as Annex A and Annex B, respectively, contain certain provisions relating to the governance of the combined company following completion of the merger, which reflect the merger of equals structure of the proposed business combination.

Table of Contents

***Board of Directors***

As of the effective time, the board of directors of the combined company will consist of nine directors, who will be determined prior to closing by mutual agreement of the parties, including:

- four directors designated by Entegris prior to the effective time who were directors of Entegris prior to the effective time, who are referred to as the Entegris designees;
- four directors designated by Versum prior to the effective time who were directors of Versum prior to the effective time, who are referred to as the Versum designees (which will include the chairman of the board of directors of Versum); and
- the chief executive officer of Entegris, who is referred to as the Entegris CEO.

The parties intend that the combined company board of directors represent an appropriate mix of relevant experience, qualifications and attributes. Each of the Entegris designees and the Versum designees will meet the independence standards of NASDAQ or the NYSE as may be applicable with respect to the combined company as of the effective time. Subject to adoption of the amended and restated certificate of incorporation of Entegris by Entegris stockholders, from the closing until the third anniversary of the closing, any action by the board of directors of the combined company to change the chief executive officer or the chairman of the board of directors of the combined company will require approval of at least 75% of the then-serving directors.

As of the date of this joint proxy statement/prospectus, other than as set forth above, the individuals to serve on the board of directors of the combined company at the effective time have not been determined.

***Chairman of the Board of Directors***

The chairman of the board of directors of Versum will serve as the chairman of the board of directors of the combined company as of the effective time. Subject to adoption of the amended and restated certificate of incorporation of Entegris by Entegris stockholders, from the closing until the third anniversary of the closing, the removal of the chairman of the board of directors of the combined company will require the approval of at least 75% of the then-serving directors.

***Committees of the Board of Directors***

As of the effective time, the board of directors of the combined company will include three committees: the audit and finance committee, the compensation committee and the nominating and governance committee.

***Chief Executive Officer***

As of the effective time, the Entegris CEO will serve as the chief executive officer of the combined company. Subject to adoption of the amended and restated certificate of incorporation of Entegris by Entegris stockholders, from the closing until the third anniversary of the closing, the removal of the chief executive officer of the combined company will require the approval of at least 75% of the then-serving directors.

***Name***

The name of the combined company will be Entegris, Inc. as of the effective time.

***Headquarters***

As of the effective time, the headquarters of the combined company will be located in Billerica, Massachusetts.

Table of Contents

**Certain Beneficial Owners of Entegris Common Stock** (Page 207)

At the close of business on March 11, 2019, the latest practicable date prior to the date of this joint proxy statement/prospectus, Entegris directors and executive officers and their affiliates, as a group, beneficially owned and were entitled to vote approximately 1,125,061 shares of Entegris common stock, collectively representing 0.8% of the shares of Entegris common stock outstanding on March 11, 2019. Although none of them has entered into any agreement obligating them to do so, Entegris currently expects that all of its directors and executive officers will vote their shares **FOR** the Entegris merger agreement proposal, **FOR** the Entegris charter proposal, **FOR** the Entegris compensation proposal and **FOR** the Entegris adjournment proposal. For more information regarding the security ownership of Versum directors and executive officers, see the information provided in the section entitled **Certain Beneficial Owners of Entegris Common Stock Security Ownership of Entegris Directors and Executive Officers** beginning on page 207.

**Certain Beneficial Owners of Versum Common Stock** (Page 209)

At the close of business on March 11, 2019, the latest practicable date prior to the date of this joint proxy statement/prospectus, Versum s directors and executive officers and their affiliates, as a group, beneficially owned and were entitled to vote approximately 679,695 shares of Versum common stock, collectively representing 0.62% of the shares of Versum common stock outstanding on March 11, 2019. Although none of them has entered into any agreement obligating them to do so, Versum currently expects that all of its directors and executive officers will vote their shares **FOR** the Versum merger agreement proposal, **FOR** the Versum compensation proposal, and **FOR** the Versum adjournment proposal. For more information regarding the security ownership of Versum directors and executive officers, see the information provided in the section entitled **Certain Beneficial Owners of Versum Common Stock Security Ownership of Versum s Directors and Executive Officers** beginning on page 209.

**Regulatory Approvals** (Page 122)

Entegris and Versum are required to cooperate with each other and use (and to cause their respective subsidiaries to use) their respective reasonable best efforts to take or cause to be taken all actions, and do or cause to be done all things reasonably necessary, proper or advisable on its part under the merger agreement and applicable law to cause the conditions to closing to be satisfied as promptly as reasonably practicable and advisable (and in any event no later than the outside date (as defined in the section entitled **The Merger Agreement Termination of the Merger Agreement Termination by Either Entegris or Versum** beginning on page 153)) and to consummate and make effective the merger and the other transactions contemplated by the merger agreement as soon as reasonably practicable, including preparing and filing as promptly as reasonably practicable and advisable all documentation to effect all necessary notices, reports and other filings, and to obtain as promptly as reasonably practicable (and in any event no later than the outside date) all actions or nonactions, waivers, consents, registrations, expirations or terminations of waiting periods, approvals, permits and authorizations, which are collectively referred to as consents, necessary or advisable to be obtained from any third party or any governmental entity in order to consummate the merger and the other transactions contemplated by the merger agreement.

Entegris and Versum are required under the merger agreement to accept or agree to certain conditions (as described in the section entitled **The Merger Agreement Cooperation; Efforts to Consummate** beginning on page 145), including potential asset divestitures, in order to obtain such regulatory approvals.

The completion of the merger is subject to the receipt of antitrust clearance in the United States and in China, Germany, Japan, South Korea, and Taiwan. With respect to the United States, under the Hart-Scott-Rodino Antitrust Improvements Act of 1976, as amended, and the rules and regulations promulgated thereunder, which is

26

Table of Contents

referred to as the HSR Act, the merger may not be completed until notification and report forms have been filed with the U.S. Federal Trade Commission, which is referred to as the FTC, and the Antitrust Division of the U.S. Department of Justice, which is referred to as the DOJ, and the applicable waiting period has expired or been terminated. A transaction requiring notification under the HSR Act may not be completed until the expiration of a 30-calendar-day waiting period following the parties filing of their respective HSR notifications or the early termination of that waiting period. Entegris and Versum each filed an HSR notification with the FTC and the DOJ on February 6, 2019 and the waiting period expired at 11:59 p.m. Eastern Time on March 8, 2019. With respect to Germany, clearance was received on March 19, 2019.

**Ownership of the Combined Company after the Merger** (Page 123)

As of the date of this joint proxy statement/prospectus, based on the exchange ratio of 1.120 and the estimated number of shares of common stock of Entegris and Versum that will be outstanding immediately prior to the completion of the merger (including shares of Entegris common stock issuable upon the exercise of any converted options), Entegris and Versum estimate that holders of shares of Entegris common stock as of immediately prior to the completion of the merger will hold, in the aggregate, approximately 52.5% of the issued and outstanding shares of common stock of the combined company (based on fully diluted shares outstanding of the combined company including exercisable options only) immediately following the completion of the merger, and holders of shares of Versum common stock as of immediately prior to the completion of the merger will hold, in the aggregate, approximately 47.5% of the issued and outstanding shares of common stock of the combined company (based on fully diluted shares outstanding of the combined company including exercisable options only) immediately following the completion of the merger.

**No Appraisal Rights** (Page 204)

Neither Entegris stockholders nor Versum stockholders are entitled to dissenters rights under the DGCL.

**Conditions to the Completion of the Merger** (Page 152)

Each party s obligation to effect the merger is subject to the satisfaction at closing or waiver at or prior to closing of each of the following conditions:

- receipt of the required Entegris vote and the required Versum vote (each as defined in the section entitled **The Merger Agreement Representations and Warranties** beginning on page 133);

- the shares of Entegris common stock to be issued to Versum stockholders in accordance with the merger agreement (including shares of Entegris common stock issuable upon the exercise of any converted options) having been approved for listing on NASDAQ or the NYSE;

- expiration of waiting periods and the receipt of all requisite regulatory approvals (as defined in the section entitled **The Merger Regulatory Approvals** beginning on page 122), the continued full force and effectiveness of the requisite regulatory approvals and no governmental entity of competent jurisdiction having enacted, issued, promulgated, enforced or entered any law or governmental order (whether temporary, preliminary or permanent) in connection with a requisite regulatory approval that (a) requires either party or any of its subsidiaries to take an action that would constitute or would reasonably be expected

to have a burdensome effect (as defined in the section **The Merger Agreement Cooperation; Efforts to Consummate** beginning on page 145) or (b) would otherwise constitute or reasonably be expected to have a burdensome effect and is in effect;

no governmental entity of competent jurisdiction having enacted, issued, promulgated, enforced or entered any relevant legal restraint (as defined in the section **The Merger Agreement Conditions to the Completion of the Merger** beginning on page 152);

Table of Contents

the effectiveness of the registration statement of which this joint proxy statement/prospectus forms a part and the absence of a stop order or proceeding seeking a stop order by the SEC;

the accuracy of the representations and warranties of the other party to the extent required under the merger agreement;

the other party s performance of, in all material respects, its obligations under the merger agreement required to be performed at or prior to the closing date;

the receipt by such party of a certificate of the chief executive officer or chief financial officer of the other party certifying that the conditions in the immediately two preceding bullets have been satisfied; and

the receipt of a written opinion from such party s counsel, in form and substance reasonably satisfactory to such party, dated as of the closing date, to the effect that for U.S. federal income tax purposes the merger will qualify as a reorganization within the meaning of Section 368(a) of the Code.

In addition, the obligations of Versum to effect the merger are subject to the satisfaction or waiver of the following additional condition:

Entegris having taken the actions necessary such that the board of directors, chairman of the board of directors and chief executive officer of the combined company are as provided in the merger agreement effective as of the effective time.

**No Solicitation of Acquisition Proposals** (Page 140)

Entegris and Versum have agreed that neither Entegris nor Versum, nor any of their respective subsidiaries, will, and that they will cause their and their respective subsidiaries directors, officers, employees not to, and not permit its investment bankers, attorneys, accountants and other advisors or representatives to, which directors, officers, employees, investment bankers, attorneys, accountants and other advisors or representatives are collectively referred to as representatives, directly or indirectly:

initiate, solicit, propose, knowingly encourage (including by way of furnishing information) or knowingly take any action designed to facilitate any inquiry regarding, or the making of any inquiry, proposal or offer that constitutes or would reasonably be expected to lead to, an acquisition proposal (as defined in the section entitled **The Merger Agreement No Solicitation of Acquisition Proposals** beginning on page 140);

engage in, continue or otherwise participate in any discussions with or negotiations relating to, or otherwise cooperate in any way with, any acquisition proposal or any inquiry, proposal or offer that would reasonably be expected to lead to an acquisition proposal (other than to state that the terms of the merger agreement prohibit such discussions or negotiations);

provide any nonpublic information to any person in connection with any acquisition proposal or any inquiry, proposal or offer that constitutes or would reasonably be expected to lead to an acquisition proposal; or

otherwise knowingly facilitate any effort or attempt to make an acquisition proposal or any inquiry, proposal or offer that constitutes or would reasonably be expected to lead to an acquisition proposal.

Notwithstanding the restrictions described above, prior to the time, but not after, in the case of Versum, the required Versum vote is obtained or, in the case of Entegris, the required Entegris vote is obtained, in response to

Table of Contents

an unsolicited, *bona fide* written acquisition proposal received after the date of the merger agreement that did not arise from or in connection with a breach of the above obligations, Entegris or Versum, as applicable, may:

provide information in response to a request therefor (including nonpublic information regarding it or any of its subsidiaries) to the person who made such acquisition proposal if such information has previously been made available to, or is made available to, Entegris or Versum, as applicable, prior to or substantially concurrently with the time such information is made available to such person and, prior to furnishing any such information, Entegris or Versum, as applicable, receives from the person making such acquisition proposal an executed confidentiality agreement, subject to certain conditions; and

participate in any discussions or negotiations with any such person regarding such acquisition proposal,

in each case only if, prior to doing so, the Entegris board of directors or Versum board of directors, as applicable, determines in good faith after consultation with its outside legal counsel that based on the information then available and after consultation with its financial advisor, such acquisition proposal either constitutes a superior proposal (as defined in the section entitled **The Merger Agreement No Solicitation of Acquisition Proposals** beginning on page 140) or could reasonably be expected to result in a superior proposal.

**No Change of Recommendation** (Page 142)

Subject to certain exceptions described below, neither the Entegris board of directors nor the Versum board of directors, including any committee thereof, may make a change of recommendation (as defined in the section entitled **The Merger Agreement No Change of Recommendation** beginning on page 142) or cause or permit Versum or Entegris, as applicable, to enter into an alternative acquisition agreement (as defined in the section entitled **The Merger Agreement No Change of Recommendation** beginning on page 142).

***Permitted Change of Recommendation Superior Proposal***

Prior to the time, but not after, in the case of Versum, the required Versum vote is obtained or, in the case of Entegris, the required Entegris vote is obtained, the Versum board of directors or the Entegris board of directors, as applicable, may effect a change of recommendation or terminate the merger agreement to enter into a definitive written agreement with respect to a superior proposal if an unsolicited, *bona fide* written acquisition proposal received after the date of the merger agreement that did not arise from or in connection with a breach of the obligations set forth in the merger agreement is received by Versum or Entegris, as applicable, and is not withdrawn, and the Versum board of directors or the Entegris board of directors, as applicable, determines in good faith, after consultation with its outside legal counsel and its financial advisor that such acquisition proposal constitutes a superior proposal, and meets certain other conditions as described in the section entitled **The Merger Agreement No Change of Recommendation Permitted Change of Recommendation Intervening Event** beginning on page 142.

***Permitted Change of Recommendation Intervening Event***

Prior to the time, but not after, in the case of Versum, the required Versum vote is obtained or, in the case of Entegris, the required Entegris vote is obtained, the Versum board of directors or the Entegris board of directors, as applicable, may effect a change of recommendation if an intervening event (as defined in the section entitled **The Merger Agreement No Change of Recommendation Permitted Change of Recommendation Intervening Event** beginning on page 143) has occurred, and prior to taking such action, the Versum board of directors or Entegris board of

directors, as applicable, determines in good faith, after consultation with its outside legal counsel and its financial advisor, that failure to take such action in response to such intervening event would reasonably be expected to be inconsistent with the directors fiduciary duties under applicable law, and

Table of Contents

meets certain other conditions as described in the section entitled **The Merger Agreement No Change of Recommendation Permitted Change of Recommendation Intervening Event** beginning on page 143.

**Termination of the Merger Agreement** (Page 153)

***Termination by Mutual Consent***

The merger agreement may be terminated and the merger and the other transactions contemplated by the merger agreement may be abandoned at any time prior to the effective time by mutual written consent of Versum and Entegris by action of their respective boards of directors.

***Termination by Either Entegris or Versum***

Either Entegris or Versum may terminate the merger agreement and the merger may be abandoned at any time prior to the effective time by action of its respective board of directors if:

- there is an outside date termination event;
- there is a regulatory restraint termination event;
- there is a Versum no vote termination event; or
- there is an Entegris no vote termination event,

in each case, as such terms are defined in the section entitled **The Merger Agreement Termination of the Merger Agreement Termination by Either Entegris or Versum** beginning on page 153.

***Termination by Entegris***

Entegris may terminate the merger agreement and the merger may be abandoned at any time prior to the effective time by action of the Entegris board of directors:

- prior to the time the required Versum vote is obtained, if the Versum board of directors has made a change of recommendation;
- if at any time prior to the effective time, there has been a breach by Versum of any of its representations, warranties, covenants or agreements set forth in the merger agreement such that the conditions relating to accuracy of representations and warranties and performance of covenants would not be satisfied (and such breach is not curable prior to the outside date, or if curable prior to the outside date, has not been cured within the earlier of (i) 30 days after the giving of notice thereof by Entegris to Versum or (ii) three business days prior to the outside date), except that this right to terminate the merger agreement is not available if

Entegris has breached in any material respect any of its representations, warranties, covenants or agreements set forth in the merger agreement in any manner that has been the primary cause of or primarily resulted in the occurrence of the failure of a condition to the consummation of the merger to be satisfied; or

in order to enter into a definitive written agreement with respect to a superior proposal with respect to Entegris, provided that Entegris has complied with its obligations described in the sections entitled **The Merger Agreement No Solicitation of Acquisition Proposals** , **The Merger Agreement Notice Regarding Acquisition Proposals** , **The Merger Agreement No Change of Recommendation** and **The Merger Agreement Existing Discussions and Standstill Provisions** beginning on pages 140, 142, 142 and 144, respectively, and, in connection with the termination of the merger agreement, Entegris pays to Versum in immediately available funds the Entegris termination fee (as defined in the section entitled **The Merger Agreement Termination Fees** beginning on page 155).

Table of Contents

***Termination by Versum***

Versum may terminate the merger agreement and the merger may be abandoned at any time prior to the effective time by action of the Versum board of directors:

- prior to the time the required Entegris vote is obtained, if the Entegris board of directors has made a change of recommendation;

- if at any time prior to the effective time, there has been a breach by Entegris of any of its representations, warranties, covenants or agreements set forth in the merger agreement such that the conditions relating to accuracy of representations and warranties and performance of covenants would not be satisfied (and such breach is not curable prior to the outside date, or if curable prior to the outside date, has not been cured within the earlier of (i) 30 days after the giving of notice thereof by Versum to Entegris or (ii) three business days prior to the outside date), except that this right to terminate the merger agreement is not available if Versum has breached in any material respect any of its representations, warranties, covenants or agreements set forth in the merger agreement in any manner that has been the primary cause of or primarily resulted in the occurrence of the failure of a condition to the consummation of the merger to be satisfied; or

- in order to enter into a definitive written agreement with respect to a superior proposal with respect to Versum, provided that Versum has complied with its obligations described in the sections entitled **The Merger Agreement No Solicitation of Acquisition Proposals** , **The Merger Agreement Notice Regarding Acquisition Proposals** , **The Merger Agreement No Change of Recommendation** and **The Merger Agreement Existing Discussions and Standstill Provisions** beginning on pages 140, 142, 142 and 144, respectively, and, in connection with the termination of the merger agreement, Versum pays to Entegris in immediately available funds the Versum termination fee (as defined in the section entitled **The Merger Agreement Termination Fees** beginning on page 155).

**Termination Fees** (Page 155)

Versum will be required to pay to Entegris a termination fee of $140 million, which is referred to as the Versum termination fee, if the merger agreement is terminated:

- by either Versum or Entegris pursuant to an outside date termination (if the sole reason that the merger was not consummated was the failure of Versum to convene and hold the Versum special meeting prior to the outside date) or pursuant to a Versum no vote termination, and, in either case:

  - a *bona fide* acquisition proposal with respect to Versum has been made public or any person has publicly announced an intention (whether or not conditional) to make an acquisition proposal with respect to Versum (and such acquisition proposal or publicly announced intention has not been publicly withdrawn without qualification five business days prior to (i) the date of such termination, with respect to an outside date termination or (ii) the date of the Versum special meeting, with respect to a Versum no vote termination), and

within 12 months after the termination (a) Versum or any of its subsidiaries has entered into an alternative acquisition agreement with respect to any acquisition proposal with respect to Versum, or (b) there has been consummated any acquisition proposal with respect to Versum, as further described in the section entitled **The Merger Agreement Termination Fees** beginning on page 155,

by Entegris pursuant to a change of recommendation by the Versum board of directors,

Table of Contents

by either Entegris or Versum pursuant to a Versum no vote termination (and, at the time of such termination, Entegris had the right to terminate the merger agreement as a result of a change of recommendation by the Versum board of directors), or

by Versum to accept a superior proposal.

Entegris will be required to pay to Versum a termination fee of $155 million, which is referred to as the Entegris termination fee, if the merger agreement is terminated:

by either Versum or Entegris pursuant to an outside date termination (if the sole reason that the merger was not consummated was the failure of Entegris to convene and hold the Entegris special meeting prior to the outside date) or pursuant to an Entegris no vote termination and, in either case:

a *bona fide* acquisition proposal with respect to Entegris has been made public or any person has publicly announced an intention (whether or not conditional) to make an acquisition proposal with respect to Entegris (and such acquisition proposal or publicly announced intention has not been publicly withdrawn without qualification five business days prior to (i) the date of such termination, with respect to an outside date termination or (ii) the date of the Entegris special meeting, with respect to an Entegris no vote termination), and

within 12 months after the termination (a) Entegris or any of its subsidiaries has entered into an alternative acquisition agreement with respect to any acquisition proposal with respect to Entegris, or (b) there has been consummated any acquisition proposal with respect to Entegris, as further described in the section entitled **The Merger Agreement Termination Fees** beginning on page 155,

by Versum pursuant to a change of recommendation by the Entegris board of directors,

by either Entegris or Versum pursuant to an Entegris no vote termination (and, at the time of such termination, Versum had the right to terminate the merger agreement as a result of a change of recommendation by the Entegris board of directors), or

by Entegris to accept a superior proposal.

**Accounting Treatment** (Page 125)

Entegris and Versum prepare their respective financial statements in accordance with GAAP. Although the parties have structured the merger as a merger of equals, GAAP requires that one party to the merger be identified as the acquirer. The merger will be accounted for using the acquisition method of accounting, and Entegris will be treated as the accounting acquirer. In identifying Entegris as the acquiring entity for accounting purposes, Entegris and Versum took into account a number of factors as of the date of this joint proxy statement/prospectus, including the relative voting rights of all equity instruments in the combined company and the intended corporate governance structure of the combined company. No single factor was the sole determinant in the overall conclusion that Entegris is the

acquirer for accounting purposes; rather all factors were considered in arriving at such conclusion.

**Material U.S. Federal Income Tax Consequences** (Page 183)

The merger is intended to qualify as a reorganization within the meaning of Section 368(a) of the Code, and it is a condition to the respective obligations of Entegris and Versum to complete the merger that each of Entegris and Versum receives a legal opinion to that effect. Accordingly, holders of Versum common stock are not expected to recognize any gain or loss for U.S. federal income tax purposes on the exchange of shares of Versum common stock for shares of Entegris common stock in the merger, except with respect to any cash received instead of fractional shares of Entegris common stock.

Table of Contents

**Comparison of Stockholders Rights** (Page 188)

Upon completion of the merger, Versum stockholders receiving shares of Entegris common stock will become stockholders of the combined company, and their rights will be governed by Delaware law and the governing corporate documents of the combined company in effect at the effective time. The form of the combined company charter (as defined in the section entitled **Comparison of Stockholders Rights** beginning on page 188) is attached as Annex B to this joint proxy statement/prospectus. Versum stockholders will have different rights once they become stockholders of the combined company due to differences between the governing corporate documents of Entegris and the proposed governing corporate documents of the combined company, as described in more detail under the section entitled **Comparison of Stockholders Rights** beginning on page 188.

**Listing of Entegris Common Stock; Delisting and Deregistration of Versum Common Stock** (Page 126)

If the merger is completed, Versum common stock will be delisted from the NYSE and deregistered under the Exchange Act, and Versum will no longer be required to file periodic reports with the SEC with respect to Versum common stock.

Versum has agreed to cooperate with Entegris and use its reasonable best efforts to take, or cause to be taken, all actions, and do or cause to be done all things, reasonably necessary, proper or advisable on its part under applicable laws and rules and policies of the NYSE to enable the delisting of the shares of Versum common stock from the NYSE and the deregistration of the shares of Versum common stock under the Exchange Act as promptly as practicable after the effective time.

**Litigation Related to the Merger (Page 126)**

Following the public announcement of the merger, purported stockholders of Versum have filed five putative class action lawsuits and one individual lawsuit against Versum, the members of the Versum board of directors and, in the case of two of the putative class actions, Broadridge Corporate Issuer Solutions, Inc. and, in the case of another of the putative class actions, Entegris. The lawsuits contain allegations contending, among other things, that the registration statement on Form S-4, of which this joint proxy statement/prospectus forms a part, misleads and fails to disclose certain allegedly material information in violation of federal securities laws and that the Versum board of directors breached their fiduciary duties. The lawsuits seek injunctive relief enjoining the merger, damages and costs, among other remedies. The defendants have not yet answered or otherwise responded to the complaints. Versum, the Versum board of directors and Entegris believe these lawsuits are without merit and intend to defend against them vigorously.

**Risk Factors** (Page 43)

In evaluating the merger agreement, the merger or the issuance of shares of Entegris common stock in the merger, you should carefully read this joint proxy statement/prospectus and give special consideration to the factors discussed in the section entitled **Risk Factors** beginning on page 43.

Table of Contents

## SELECTED HISTORICAL CONSOLIDATED FINANCIAL DATA OF ENTEGRIS

The following table presents selected historical condensed consolidated financial data for Entegris as of and for the years ended December 31, 2018, 2017, 2016, 2015 and 2014. The selected historical condensed consolidated financial data for each of the years ended December 31, 2018, 2017 and 2016, as of December 31, 2018 and 2017 were derived from Entegris Annual Report on Form 10-K filed on February 11, 2019, incorporated herein by reference. The selected historical condensed consolidated financial data for Entegris as of and for each of the years ended December 31, 2015 and 2014, and as of December 31, 2016, 2015 and 2014 have been derived from Entegris audited financial statements for such years, which have not been incorporated by reference into this joint proxy statement/prospectus.

The selected historical consolidated financial data set forth below is not necessarily indicative of future results of Entegris and should be read together with the other information contained in Management s Discussion and Analysis of Financial Condition and Results of Operations and the consolidated financial statements and related notes included in Entegris Annual Report on Form 10-K filed on February 11, 2019, which is incorporated herein by reference.

See the section entitled **Where You Can Find More Information** beginning on page 213.

| | Years Ended December 31, | | | | |
|---|---|---|---|---|---|
| | 2018 | 2017 | 2016 | 2015 | 2014 |
| | (Amounts in thousands, except per share data) | | | | |
| **Consolidated Statement of Operations Data:** | | | | | |
| Total Revenues | $ 1,550,497 | $ 1,342,532 | $ 1,175,270 | $ 1,081,121 | $ 962,069 |
| Net Income | 240,755 | 85,066 | 97,147 | 80,296 | 7,887 |
| Net Earnings per Common to ENTG: | | | | | |
| Basic | $ 1.71 | $ 0.60 | $ 0.69 | $ 0.57 | $ 0.06 |
| Diluted | $ 1.69 | $ 0.59 | $ 0.68 | $ 0.57 | $ 0.06 |
| Average common shares outstanding: | | | | | |
| Basic | 141,026 | 141,553 | 141,093 | 140,353 | 139,311 |
| Diluted | 142,610 | 143,518 | 142,050 | 141,121 | 140,062 |
| Cash dividends paid on ENTG common stock | $ 39,591 | $ 9,896 | $ | $ | $ |
| Cash dividends declared per common share | $ 0.28 | $ 0.07 | $ | $ | $ |

| | Years Ended December 31, | | | | |
|---|---|---|---|---|---|
| | 2018 | 2017 | 2016 | 2015 | 2014 |
| | (Amounts in thousands, except per share data) | | | | |
| **Consolidated Balance Sheets Data:** | | | | | |
| Cash and cash equivalents | $ 482,062 | $ 625,408 | $ 406,389 | $ 349,825 | $ 389,699 |
| Short-term investments | | | | 2,181 | 4,601 |
| Total assets[(1)] | 2,317,641 | 1,976,172 | 1,699,532 | 1,646,697 | 1,748,307 |
| Long-term debt[(1)(2)] | 938,863 | 674,380 | 584,677 | 656,044 | 753,012 |
| Equity | 1,012,025 | 993,018 | 899,218 | 802,883 | 748,441 |

(1)

Total assets and long-term debt, net of discount have been restated as of December 31, 2015 and 2014 to reflect the retroactive reclassification of debt issuance costs with ASU 2015-03, Simplifying the Presentation of Debt Issuance Costs.

(2) Includes current and non-current portion.

Table of Contents

## SELECTED HISTORICAL CONSOLIDATED FINANCIAL DATA OF VERSUM

The following table presents selected historical condensed consolidated financial data for Versum as of and for the years ended September 30, 2018, 2017, 2016, 2015 and 2014 and as of and for the three month periods ended December 31, 2018 and December 31, 2017. The selected historical condensed consolidated financial data as of and for each of the years ended September 30, 2018, 2017, 2016, 2015 and 2014 were derived from Versum s Annual Report on Form 10-K filed on November 21, 2018, incorporated herein by reference. The selected historical condensed consolidated financial data as of and for the three month periods ended December 31, 2018 and December 31, 2017 were derived from Versum s unaudited condensed consolidated financial statements included in Versum s Quarterly Report on Form 10-Q for the quarter ended December 31, 2018, incorporated herein by reference. Versum s unaudited condensed consolidated financial statements as of and for the three month periods ended December 31, 2018 and December 31, 2017 include, in Versum s opinion, all adjustments necessary for a fair statement of the results of the interim periods presented.

Prior to the October 1, 2016 legal separation, which is referred to as the separation, resulting in the allocation, transfer and assignment to Versum of the assets, liabilities and operations of the Electronic Materials business of Air Products, and the creation of a separate, publicly traded company, Versum, the selected historical condensed consolidated financial data included certain expenses of Air Products that were allocated to Versum for certain functions, including general corporate expenses related to finance, legal, information technology, insurance, compliance and human resources activities, employee benefits and incentives and stock-based compensation. These past costs included in Versum s historical information prior to the separation may not be representative of the costs incurred by Versum after the separation as an independent, publicly traded company.

In addition, Versum s historical financial information prior to the separation did not reflect changes as a result of its separation from Air Products, including changes in Versum s cost structure, personnel needs, tax structure, capital structure, financing and business operations. Prior to the separation, Versum s financial information also did not reflect the assignment of certain assets and liabilities between Air Products and Versum. Consequently, the historical financial information of Versum prior to the separation included here may not necessarily reflect what Versum s financial position, results of operations, and cash flows would have been had it been an independent, publicly traded company during the periods presented prior to the separation. Accordingly, the historical results of Versum prior to the separation should not be relied upon as an indicator of Versum s future performance.

Amounts disclosed in the table below have been adjusted for Versum s conversion effective the fourth quarter of 2018 from the last in, first out cost method, which is referred to as the LIFO cost method, to the first in, first out cost method for determining the cost of inventories in the United States, which were Versum s only operations that were using the LIFO cost method. Versum applied this change retrospectively to all prior periods presented.

The selected historical consolidated financial data set forth below is not necessarily indicative of future results of Versum and should be read together with the other information contained in Management s Discussion and Analysis of Financial Condition and Results of Operations and the consolidated financial statements and related notes included in Versum s Annual Report on Form 10-K filed on November 21, 2018 and Versum s Quarterly Report on Form 10-Q for the quarter ended December 31, 2018 filed on February 7, 2019, each of which is incorporated herein by reference.

35

Table of Contents

See the section entitled **Where You Can Find More Information** beginning on page 213.

| | Three Months Ended | | Fiscal Year Ended | | | | |
|---|---|---|---|---|---|---|---|
| | December 31, 2018 | December 31, 2017 | 2018 | 2017 | 2016 | 2015 | 2014 |
| | (In millions, except per share data) | | | | | | |
| **State of operations data:** | | | | | | | |
| Net sales | $ 339.5 | $ 330.8 | $ 1,372.3 | $ 1,126.9 | $ 970.1 | $ 1,009.3 | $ 942.5 |
| Income from continuing operations before income taxes | 82.8 | 75.7 | 323.6 | 253.2 | 276.0 | 225.9 | 166.0 |
| Income from continuing operations | 63.1 | 20.7 | 204.7 | 200.2 | 217.2 | 194.2 | 134.1 |
| **Per share data:** | | | | | | | |
| Earnings from continuing operations allocable to Versum common stockholders: | | | | | | | |
| Basic | 0.56 | 0.17 | 1.81 | 1.78 | 1.93 | 1.72 | 1.17 |
| Diluted | 0.56 | 0.17 | 1.80 | 1.77 | 1.93 | 1.72 | 1.17 |
| Cash dividends declared per common share | 0.08 | 0.05 | 0.22 | 0.10 | | | |
| **Balance Sheet data (at period end):** | | | | | | | |
| Total assets | 1,545.4 | 1,331.1 | 1,505.3 | 1,255.6 | 1,052.1 | 898.4 | 1,042.0 |
| Long-term debt | 979.0 | 982.9 | 980.0 | 982.8 | 986.1 | | |

Table of Contents

## SELECTED UNAUDITED PRO FORMA CONDENSED COMBINED FINANCIAL INFORMATION

The following table shows a summary of the unaudited pro forma condensed combined financial information about the financial condition and results of operations of the combined company, after giving effect to the merger, which were prepared using the acquisition method of accounting with Entegris as the accounting acquirer of Versum. See the section entitled **The Merger Accounting Treatment** beginning on page 125.

Entegris fiscal year ends on December 31, whereas Versum s fiscal year ends on September 30. Due to this difference in year end, for the purpose of the unaudited pro forma condensed combined statement of operations for the twelve months ended December 31, 2018 the Versum financial results for the twelve months ended December 31, 2018 have been calculated by adding its financial results for the three months ended December 31, 2018 to its financial results for the twelve months ended September 30, 2018 and subtracting its financial results for the three months ended December 31, 2017. The unaudited pro forma condensed combined statement of operations, which is referred to as the pro forma statement of operations, for the twelve months ended December 31, 2018 combines the Entegris audited consolidated statement of operations for the year ended December 31, 2018 and the Versum financial results for the twelve months ended December 31, 2018. This gives effect to the merger as if it had been consummated on January 1, 2018.

The pro forma balance sheet and the pro forma statement of operations are collectively referred to as the pro forma financial statements.

The pro forma financial statements should be read in conjunction with the accompanying notes to the pro forma financial statements. In addition, the pro forma financial statements were based on and should be read in conjunction with the following historical consolidated financial statements and accompanying notes of Entegris and Versum for the applicable periods, which are incorporated by reference into this joint proxy statement/prospectus:

- Separate historical financial statements of Entegris as of and for the fiscal year ended December 31, 2018 and the related notes included in Entegris Annual Report on Form 10-K for the year ended December 31, 2018.

- Separate historical financial statements of Versum as of and for the fiscal year ended September 30, 2018 and the related notes included in Versum s Annual Report on Form 10-K for the year ended September 30, 2018 as well as the separate historical financial statements of Versum as of and for the fiscal quarter ended December 31, 2018 and the related notes included in Versum s Quarterly Report on Form 10-Q for the quarter ended December 31, 2018.

The pro forma financial statements have been prepared for illustrative purposes only and are not necessarily indicative of what the combined company s operating results or financial position would actually have been had the merger been completed as of the dates indicated. In addition, the pro forma financial statements include adjustments which are preliminary and may be revised. The pro forma financial statements do not purport to project the future financial position or operating results of the combined company. Future results may vary significantly from the results reflected because of various factors, including those discussed in the section entitled **Risk Factors** beginning on page 43.

The pro forma financial statements have been developed from and should be read in conjunction with the section entitled **Unaudited Pro Forma Condensed Combined Financial Statements** and the notes related thereto beginning on page 158 and with the historical consolidated financial statements of Entegris and Versum and related notes that

have been filed with the SEC, certain of which are incorporated by reference into this joint proxy statement.

Table of Contents

**Selected Unaudited Pro forma Condensed Combined Financial Information**

| | | Year ended December 31, 2018 |
|---|---|---|
| **Pro forma condensed combined statement of operations data:** | | |
| Net sales | $ | 2,927,825 |
| Net income | | 352,731 |
| Net income attributable to Entegris | | 345,495 |
| Basic earnings per share | | 1.31 |
| Diluted earnings per share | | 1.30 |
| **Pro forma condensed combined balance sheet data:** | | |
| Total assets | $ | 8,393,950 |
| Total liabilities | | 3,037,746 |
| Total equity | | 5,356,204 |

Table of Contents

## COMPARATIVE HISTORICAL AND UNAUDITED PRO FORMA PER SHARE DATA

### Equivalent and Comparative Per Share Information

The following table sets forth selected per share information for Entegris common stock on a historical basis for the year ended December 31, 2018, selected per share information for Versum common stock on a historical basis for the twelve month period ended December 31, 2018, selected per share information for the combined company s common stock on a pro forma combined basis for the year ended December 31, 2018, and selected per share information for Versum common stock on a pro forma equivalent basis for the twelve month period ended December 31, 2018. The per share information reflects the Entegris common stock and Versum common stock issued and outstanding.

The combined company s pro forma combined earnings per share was calculated in the section entitled **Unaudited Pro Forma Condensed Combined Financial Statements** beginning on page 158.

| | Year ended December 31, 2018 | | | |
|---|---|---|---|---|
| | Entegris - Historical | Versum - Historical | Pro forma Combined | Versum Equivalent Pro forma[2] |
| Income from continuing operations per common share attributable to common stockholders (basic) | $ 1.71 | $ 2.20 | $ 1.31 | $ 1.47 |
| Income from continuing operations per common share attributable to common stockholders (diluted) | $ 1.69 | $ 2.19 | $ 1.30 | $ 1.46 |
| Cash dividends per share[1] | $ 0.28 | $ 0.25 | $ 0.28 | $ 0.31 |
| Book value per share[3] | $ 7.44 | $ 2.12 | $ 20.57 | $ 23.04 |

(1) Pro forma combined amounts are the same as Entegris historical cash dividends per share under the assumption that there is no change to Entegris dividend policy as a result of the merger.
(2) Versum s pro forma equivalent per share amounts were calculated by multiplying Entegris pro forma combined per share amounts by the Exchange Ratio.
(3) Amount is calculated by dividing stockholders equity by common shares outstanding.

Table of Contents

## COMPARISON OF ENTEGRIS AND VERSUM MARKET PRICES AND IMPLIED VALUE OF MERGER CONSIDERATION

The following table sets forth the closing sale price per share of Entegris common stock and Versum common stock as reported on NASDAQ and the NYSE, respectively, as of January 25, 2019, the last trading day prior to the public announcement of the merger, and on March 11, 2019, the last practicable trading day before the filing of this joint proxy statement/prospectus with the SEC. The table also shows the estimated implied value of the per share consideration proposed for each share of Versum common stock as of the same two dates. This implied value was calculated by multiplying the closing price of a share of Entegris common stock on the relevant date by the exchange ratio of 1.120 shares of Entegris common stock for each share of Versum common stock.

| | Entegris Common Stock | Versum Common Stock | Implied Per Share Value of Merger Consideration |
|---|---|---|---|
| January 25, 2019 | $ 31.32 | $ 31.65 | $ 35.08 |
| March 11, 2019 | $ 35.51 | $ 48.86 | $ 39.77 |

The market prices of Entegris common stock and Versum common stock have fluctuated prior to and after the date of the announcement of the merger agreement and will continue to fluctuate prior to the completion of the merger. No assurance can be given concerning the market prices of Entegris common stock or Versum common stock before completion of the merger or of the market price of the common stock of the combined company after completion of the merger. Because the exchange ratio is fixed and will not be adjusted for changes in the market prices of either Entegris common stock or Versum common stock, the market price of Entegris common stock (and, therefore, the value of the merger consideration) when received by Versum stockholders after the merger is completed could be greater than, less than or the same as shown in the table above. Accordingly, these comparisons may not provide meaningful information to Entegris stockholders and Versum stockholders in determining how to vote with respect to the proposals described in this joint proxy statement/prospectus. Entegris stockholders and Versum stockholders are encouraged to obtain current market quotations for Entegris common stock and Versum common stock and to review carefully the other information contained in this joint proxy statement/prospectus or incorporated by reference into this joint proxy statement/prospectus. For more information, see the section entitled **Where You Can Find More Information** beginning on page 213.

Table of Contents

## CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

This registration statement on Form S-4, of which this joint proxy statement/prospectus forms a part, and the documents to which Versum and Entegris refer you to in this registration statement, as well as oral statements made or to be made by Entegris and Versum, include certain forward-looking statements within the meaning of, and subject to the safe harbor created by, Section 27A of the Securities Act, Section 21E of the Exchange Act and the Private Securities Litigation Reform Act of 1995, which are referred to as the safe harbor provisions with respect to the businesses, strategies and plans of Entegris and Versum, their expectations relating to the merger and their future financial condition and performance. Statements included in or incorporated by reference into this registration statement, of which this joint proxy statement/prospectus forms a part, that are not historical facts are forward-looking statements, including statements about the beliefs and expectations of the management of each of Entegris and Versum. Words such as believe, continue, could, expect, anticipate, intends, estimate, forecast, projec will, would or the negative thereof and similar expressions are intended to identify such forward-looking statements that are intended to be covered by the safe harbor provisions. Entegris and Versum caution investors that any forward-looking statements are subject to known and unknown risks and uncertainties, many of which are outside Entegris and Versum s control, and which may cause actual results and future trends to differ materially from those matters expressed in, or implied or projected by, such forward-looking statements, which speak only as of the date of this joint proxy statement/prospectus. Investors are cautioned not to place undue reliance on these forward-looking statements. Among the risks and uncertainties that could cause actual results to differ from those described in forward-looking statements are the following:

- the occurrence of any change, event, series of events or circumstances that could give rise to the termination of the merger agreement, including a termination of the merger agreement under circumstances that could require Versum to pay the Versum termination fee to Entegris or require Entegris to pay the Entegris termination fee to Versum;

- uncertainties related to the timing of the receipt of required regulatory approvals for the merger and the possibility that Versum and Entegris may be required to accept conditions that could reduce or eliminate the anticipated benefits of the merger as a condition to obtaining regulatory approvals or that the required regulatory approvals might not be obtained at all;

- the stock price for Entegris common stock and Versum common stock could change before the completion of the merger, including as a result of uncertainty as to the long-term value of the common stock of the combined company following the merger or as a result of broader stock market movements;

- the inability to complete the merger due to the failure, or unexpected delays, of Versum stockholders to adopt the merger agreement or of Entegris stockholders to adopt the merger agreement, or the failure to satisfy other conditions to the completion of the merger;

- delays in closing, or the failure to close, the merger for any reason could negatively impact Entegris or Versum;

risks that the merger and the other transactions contemplated by the merger agreement disrupt current plans and operations that may harm Entegris or Versum s respective businesses;

difficulties or delays in integrating the businesses of Entegris and Versum following completion of the merger or fully realizing the anticipated synergies and other benefits expected from the merger;

certain restrictions during the pendency of the proposed merger that may impact the ability of Entegris or Versum to pursue certain business opportunities or strategic transactions;

the outcome of any legal proceedings that have been or may be instituted against Entegris, Versum and/or others relating to the merger;

Table of Contents

risks related to the diversion of the attention and time of Entegris or Versum s respective management teams from ongoing business concerns;

the risk that the proposed merger and any announcement relating to the proposed merger could have an adverse effect on the ability of Entegris or Versum to retain and hire key personnel or maintain relationships with customers, suppliers, vendors, or other third parties, standing with regulators, the U.S. government or other governments, or on Entegris or Versum s respective operating results and businesses generally;

the amount of any costs, fees, expenses, impairments or charges related to the merger;

the potential dilution of Entegris stockholders and Versum stockholders ownership percentage of the combined company as a result of the merger;

the business, economic and political conditions in the countries in which Entegris or Versum operate;

events beyond Entegris and Versum s control, such as acts of terrorism; and

the potential dilution of the combined company s earnings per share as a result of the merger.

For further discussion of these and other risks, contingencies and uncertainties applicable to Entegris and Versum, see the section entitled **Risk Factors** beginning on page 43 and in Entegris and Versum s other filings with the SEC incorporated by reference into this joint proxy statement/prospectus. See also the section entitled **Where You Can Find More Information** beginning on page 213 for more information about the SEC filings incorporated by reference into this joint proxy statement/prospectus.

All subsequent written or oral forward-looking statements attributable to Entegris or Versum or any person acting on its or their behalf are expressly qualified in their entirety by the cautionary statements contained or referred to in this section. Neither Versum nor Entegris is under any obligation, and each expressly disclaims any obligation, to update, alter, or otherwise revise any forward-looking statements, whether written or oral, that may be made from time to time, whether as a result of new information, future events or otherwise, except as may be required by law.

Table of Contents

## RISK FACTORS

*In deciding whether to vote for the adoption of the merger agreement and the adoption of the amended and restated certificate of incorporation of Entegris, in the case of Entegris stockholders, or the adoption of the merger agreement, in the case of Versum stockholders, you are urged to carefully consider all of the information included or incorporated by reference in this joint proxy statement/prospectus, which is listed in the section entitled* ***Where You Can Find More Information*** *beginning on page 213. You should also read and consider the risks associated with each of the businesses of Entegris and Versum because these risks will also affect the combined company. The risks associated with the business of Entegris can be found in Entegris Annual Report on Form 10-K for the fiscal year ended December 31, 2018 and the risks associated with the business of Versum can be found in Versum s Annual Report on Form 10-K for the year ended September 30, 2018, as such risks may be updated or supplemented in each company s subsequently filed Quarterly Reports on Form 10-Q or Current Reports on Form 8-K (excluding any information and exhibits furnished under Item 2.02 or 7.01 thereof), each of which are incorporated by reference into this joint proxy statement/prospectus. In addition, you are urged to carefully consider the following material risks relating to the merger, the business of Entegris, the business of Versum and the business of the combined company.*

### Risks Relating to the Merger

***Because the exchange ratio is fixed and will not be adjusted in the event of any change in either Entegris or Versum s stock price, the value of the shares of the combined company is uncertain.***

Upon completion of the merger, each share of Versum common stock outstanding immediately prior to the merger, other than Versum excluded shares, will be converted into and become exchangeable for 1.120 shares of Entegris common stock. This exchange ratio is fixed in the merger agreement and will not be adjusted for changes in the market price of either Entegris common stock or Versum common stock. The market prices of Entegris common stock and Versum common stock have fluctuated prior to and after the date of the announcement of the merger agreement and will continue to fluctuate from the date of this joint proxy statement/prospectus to the date of the Entegris special meeting and the Versum special meeting, respectively, and the date the merger is consummated, and the market price of the common stock of the combined company will continue to fluctuate thereafter.

Because the value of the merger consideration will depend on the market price of Entegris common stock at the time the merger is completed, Versum stockholders will not know or be able to determine at the time of the Versum special meeting the market value of the merger consideration they would receive upon completion of the merger. Similarly, Entegris stockholders will not know or be able to determine at the time of the Entegris special meeting the market value of the shares of Entegris common stock to be issued pursuant to the merger agreement compared to the market value of the shares of Versum common stock that are being exchanged in the merger.

Stock price changes may result from a variety of factors, including, among others, general market and economic conditions, changes in Entegris or Versum s respective businesses, operations and prospects, reductions or changes in U.S. government spending or budgetary policies, market assessments of the likelihood that the merger will be completed, interest rates, general market, industry and economic conditions and other factors generally affecting the respective prices of Entegris or Versum s common stock, federal, state and local legislation, governmental regulation and legal developments in the industry segments in which Versum or Entegris operate, and the timing of the merger and receipt of required regulatory approvals.

Many of these factors are beyond Entegris and Versum s control, and neither Entegris nor Versum are permitted to terminate the merger agreement solely due to a decline in the market price of the common stock of the other party. You are urged to obtain current market quotations for Entegris common stock and Versum common stock in

determining whether to vote for the adoption of the merger agreement and the adoption of the amended and restated certificate of incorporation of Entegris in the case of Entegris stockholders or for the

Table of Contents

adoption of the merger agreement in the case of Versum stockholders. In addition, see the section entitled **Comparison of Entegris and Versum Market Prices and Implied Value of Merger Consideration** beginning on page 40.

***The merger may not be completed and the merger agreement may be terminated in accordance with its terms.***

The merger is subject to a number of conditions that must be satisfied, including the approval by Entegris stockholders of the Entegris merger agreement proposal and approval by Versum stockholders of the Versum merger agreement proposal, or waived (to the extent permissible), in each case prior to the completion of the merger. These conditions are described in the section entitled **The Merger Agreement Conditions to the Completion of the Merger** beginning on page 152. These conditions to the completion of the merger, some of which are beyond the control of Entegris and Versum, may not be satisfied or waived in a timely manner or at all, and, accordingly, the merger may be delayed or not completed.

Additionally, either Entegris or Versum may terminate the merger agreement under certain circumstances, including, among other reasons, if the merger is not completed by January 28, 2020 (which date may be extended to April 28, 2020 under certain circumstances if certain regulatory approvals are not obtained by January 28, 2020). In addition, if the merger agreement is terminated under certain circumstances specified in the merger agreement, Versum may be required to pay Entegris a termination fee of $140 million, including certain circumstances in which the Versum board of directors effects a change of recommendation (as defined in the section entitled **The Merger Agreement No Change of Recommendation** beginning on page 142) or Versum enters into an agreement with respect to a superior proposal following the termination of the merger agreement. In addition, if the merger agreement is terminated under certain circumstances specified in the merger agreement, Entegris may be required to pay Versum a termination fee of $155 million, including certain circumstances in which the Entegris board of directors effects a change of recommendation or Entegris enters into an agreement with respect to a superior proposal following the termination of the merger agreement. See the section entitled **The Merger Agreement Termination of the Merger Agreement** beginning on page 153 and the section entitled **The Merger Agreement Termination Fees** beginning on page 155 for a more complete discussion of the circumstances under which the merger agreement could be terminated and when a termination fee may be payable by Entegris or Versum.

***The termination of the merger agreement could negatively impact Entegris or Versum.***

If the merger is not completed for any reason, including as a result of a failure to obtain the required Versum vote or the required Entegris vote, the ongoing businesses of Entegris and Versum may be adversely affected and, without realizing any of the benefits of having completed the merger, Entegris and Versum would be subject to a number of risks, including the following:

- each company may experience negative reactions from the financial markets, including negative impacts on its stock price;
- each company may experience negative reactions from its suppliers, customers and employees;
- each company will be required to pay their respective costs relating to the merger, such as financial advisory, legal, financing and accounting costs and associated fees and expenses, whether or not the merger is

completed;

the merger agreement places certain restrictions on the conduct of each company s business prior to completion of the merger and such restrictions, the waiver of which is subject to the consent of the other company (not to be unreasonably withheld, conditioned or delayed), which may prevent Entegris or Versum from making certain acquisitions or taking certain other specified actions during the pendency of the merger (see the section entitled **The Merger Agreement Conduct of Business Prior to the Effective Time** beginning on page 136 for a description of the restrictive covenants applicable to Entegris and Versum); and

Table of Contents

matters relating to the merger (including integration planning) will require substantial commitments of time and resources by Entegris management and Versum management, which could otherwise have been devoted to day-to-day operations or to other opportunities that may have been beneficial to Entegris or Versum, as applicable, as an independent company.

***The market price for shares of common stock of the combined company following the completion of the merger may be affected by factors different from, or in addition to, those that historically have affected or currently affect the market prices of shares of Entegris common stock and Versum common stock.***

Upon consummation of the merger, Entegris stockholders and Versum stockholders will both hold shares of common stock in the combined company. Entegris businesses differ from those of Versum, and Versum s businesses differ from those of Entegris, and, accordingly, the results of operations of the combined company will be affected by some factors that are different from those currently or historically affecting the results of operations of Entegris and those currently or historically affecting the results of operations of Versum. The results of operations of the combined company may also be affected by factors different from those that currently affect or have historically affected either Entegris or Versum. For a discussion of the businesses of each of Entegris and Versum and some important factors to consider in connection with those businesses, please see the section entitled **The Parties to the Merger** beginning on page 58 and the documents and information included elsewhere in this joint proxy statement/prospectus or incorporated by reference into this joint proxy statement/prospectus and listed under the section entitled **Where You Can Find More Information** beginning on page 213.

***The shares of common stock of the combined company to be received by Versum stockholders as a result of the merger will have rights different from the shares of Versum common stock.***

Upon consummation of the merger, the rights of Versum stockholders, who will become stockholders of the combined company, will be governed by the certificate of incorporation and bylaws of the combined company. The rights associated with Versum common stock are different from the rights which will be associated with the common stock of the combined company. See the section entitled **Comparison of Stockholders Rights** beginning on page 188 for a discussion of these rights.

***Entegris stockholders and Versum stockholders will each have reduced ownership and voting interest in and will exercise less influence over management of the combined company.***

Entegris stockholders currently have the right to vote in the election of the Entegris board of directors and on other matters affecting Entegris, and Versum stockholders currently have the right to vote in the election of the Versum board of directors and on other matters affecting Versum. Upon consummation of the merger, each Entegris stockholder and each Versum stockholder will become a stockholder of the combined company with a percentage ownership of the combined company that is smaller than such stockholder s percentage ownership of Entegris or Versum, as applicable, immediately prior to the merger. As of the date of this joint proxy statement/prospectus, based on the exchange ratio of 1.120 and the estimated number of shares of common stock of Entegris and Versum that will be outstanding immediately prior to the completion of the merger, including exercisable options, Entegris and Versum estimate that holders of shares of Entegris common stock as of immediately prior to the completion of the merger will hold, in the aggregate, approximately 52.5% of the issued and outstanding shares of common stock of the combined company (based on fully diluted shares outstanding of the combined company including exercisable options only) immediately following the completion of the merger, and holders of shares of Versum common stock as of immediately prior to the completion of the merger will hold, in the aggregate, approximately 47.5% of the issued and outstanding shares of common stock of the combined company (based on fully diluted shares outstanding of the combined company including exercisable options only) immediately following the completion of the merger. Because of this, each share of Entegris common stock and each share of Versum common stock will represent a smaller

percentage ownership of the combined company than it represented in Entegris or Versum, respectively. In addition, directors of Entegris and

Table of Contents

directors of Versum, in each case, as of immediately prior to the effective time, who will be determined prior to closing by mutual agreement of the parties, will respectively represent five and four of the nine members of the combined company s board of directors as of the effective time. Accordingly, each Entegris stockholder and each Versum stockholder will have less influence on the management and policies of the combined company than such stockholder now has on the management and policies of Entegris or Versum, as applicable.

***Until the completion of the merger or the termination of the merger agreement in accordance with its terms, Entegris and Versum are each prohibited from entering into certain transactions and taking certain actions that might otherwise be beneficial to Entegris or Versum and their respective stockholders.***

From and after the date of the merger agreement and prior to completion of the merger, the merger agreement restricts Entegris and Versum from taking specified actions without the consent of the other party and requires that the business of each company and its respective subsidiaries be conducted in all material respects in the ordinary course of business consistent with past practice. These restrictions may prevent Entegris or Versum from making appropriate changes to their respective businesses or organizational structures or from pursuing attractive business opportunities that may arise prior to the completion of the merger, and could have the effect of delaying or preventing other strategic transactions. Adverse effects arising from the pendency of the merger could be exacerbated by any delays in consummation of the merger or termination of the merger agreement. See the section entitled **The Merger Agreement Conduct of Business Prior to the Effective Time** beginning on page 136.

***Obtaining required approvals and satisfying closing conditions may prevent or delay completion of the merger.***

The merger is subject to a number of conditions to closing as specified in the merger agreement. These closing conditions include, among others, approval for listing on NASDAQ or the NYSE of the shares of Entegris common stock to be issued pursuant to the merger agreement, the expiration or earlier termination of any applicable waiting period, and the receipt of approvals under, U.S. and foreign antitrust and competition laws in China, Germany, Japan, South Korea, and Taiwan, the absence of governmental restraints or prohibitions preventing the consummation of the merger, the effectiveness of the registration statement on Form S-4 registering the Entegris common stock issuable pursuant to the merger agreement and the absence of any stop order or proceedings by the SEC with respect thereto. The obligation of each of Versum and Entegris to consummate the merger is also conditioned on, among other things, the receipt by such party of a written opinion from such party s counsel, to the effect that for U.S. federal income tax purposes the merger will qualify as a reorganization within the meaning of Section 368(a) of the Code, the absence of a material adverse effect on the other party, the truth and correctness of the representations and warranties made by the other party on the date of the merger agreement and on the closing date (subject to certain materiality qualifiers), and the performance by the other party in all material respects of its obligations under the merger agreement. No assurance can be given that the required stockholder, governmental and regulatory consents and approvals will be obtained or that the required conditions to closing will be satisfied, and, if all required consents and approvals are obtained and the conditions are satisfied, no assurance can be given as to the terms, conditions and timing of such consents and approvals. Any delay in completing the merger could cause the combined company not to realize, or to be delayed in realizing, some or all of the benefits that Entegris and Versum expect to achieve if the merger is successfully completed within its expected time frame. For a more complete summary of the conditions that must be satisfied or waived prior to completion of the merger, see the section entitled **The Merger Agreement Conditions to the Completion of the Merger** beginning on page 152.

Table of Contents

***Entegris and Versum must obtain certain regulatory approvals and clearances to consummate the merger, which, if delayed, not granted or granted with unacceptable conditions, could prevent, substantially delay or impair consummation of the merger, result in additional expenditures of money and resources or reduce the anticipated benefits of the merger.***

The completion of the merger is subject to the receipt of antitrust clearance in the United States and in China, Germany, Japan, South Korea and Taiwan.

With respect to the United States, under the HSR Act, the merger may not be completed until Notification and Report Forms have been filed with the FTC and the DOJ and the applicable waiting period has expired or been terminated. A transaction requiring notification under the HSR Act may not be completed until the expiration of a 30-calendar-day waiting period following the parties filing of their respective HSR notifications or the early termination of that waiting period. Entegris and Versum each filed an HSR notification with the FTC and the DOJ on February 6, 2019 and the waiting period expired at 11:59 p.m. Eastern Time on March 8, 2019. With respect to Germany, clearance was received on March 19, 2019.

At any time before or after consummation of the merger, notwithstanding the expiration or termination of the applicable waiting period under the HSR Act, the DOJ or the FTC, or any state, could take such action under the antitrust laws as it deems necessary or desirable in the public interest, including seeking to enjoin the completion of the merger, seeking divestiture of substantial assets of the parties or requiring the parties to license, or hold separate, assets or terminate existing relationships and contractual rights. At any time before or after the completion of the merger, and notwithstanding the expiration or termination of the applicable waiting period under the HSR Act, any state could take such action under the antitrust laws as it deems necessary or desirable in the public interest. Such action could include seeking to enjoin the completion of the merger or seeking divestiture of substantial assets of the parties. Private parties may also seek to take legal action under the antitrust laws under certain circumstances.

The merger is also subject to clearance or approval by antitrust authorities in certain other jurisdictions. The merger cannot be completed until Entegris and Versum obtain clearance to consummate the merger or applicable waiting periods have expired or been terminated in each applicable jurisdiction. Entegris and Versum, in consultation and cooperation with each other, will file notifications, as required with antitrust authorities in certain other jurisdictions, as promptly as practicable after the date of the merger agreement. The relevant antitrust authorities could take such actions under the applicable antitrust laws as they deem necessary or desirable, including seeking divestiture of substantial assets of the parties or requiring the parties to license, or hold separate, assets or terminate existing relationships and contractual rights. Any one of these requirements, limitations, costs, divestitures or restrictions could jeopardize or delay the completion of or reduce the anticipated benefits of the merger. There is no assurance that Entegris and Versum will obtain all required antitrust clearances or approvals on a timely basis, or at all. Failure to obtain the necessary clearance in any of these jurisdictions could substantially delay or prevent the consummation of the merger, which could negatively impact both Entegris and Versum.

***Failure to attract, motivate and retain executives and other key employees could diminish the anticipated benefits of the merger.***

The success of the merger will depend in part on the retention of personnel critical to the business and operations of the combined company due to, for example, their technical skills or management expertise. Competition for qualified personnel can be intense.

Current and prospective employees of Entegris and Versum may experience uncertainty about their future role with Entegris and Versum until strategies with regard to these employees are announced or executed, which may impair

Entegris and Versum s ability to attract, retain and motivate key management, sales, marketing, technical and other personnel prior to and following the merger. Employee retention may be particularly challenging during the pendency of the merger, as employees of Entegris and Versum may experience

uncertainty about their future roles with the combined company. If Entegris and Versum are unable to retain personnel, including Entegris and Versum s key management, who are critical to the successful integration and future operations of the companies, Entegris and Versum could face disruptions in their operations, loss of existing customers or loss of sales to existing customers, loss of key information, expertise or know-how, and unanticipated additional recruitment and training costs. In addition, the loss of key personnel could diminish the anticipated benefits of the merger.

If key employees of Entegris or Versum depart, the integration of the companies may be more difficult and the combined company s business following the merger may be harmed. Furthermore, the combined company may have to incur significant costs in identifying, hiring and retaining replacements for departing employees and may lose significant expertise and talent relating to the business of each of Entegris or Versum, and the combined company s ability to realize the anticipated benefits of the merger may be adversely affected. In addition, there could be disruptions to or distractions for the workforce and management associated with activities of labor unions or integrating employees into the combined company. No assurance can be given that the combined company will be able to attract or retain key employees of Entegris and Versum to the same extent that those companies have been able to attract or retain their own employees in the past.

***The merger, and uncertainty regarding the merger, may cause customers, suppliers or strategic partners to delay or defer decisions concerning Entegris and Versum and adversely affect each company s ability to effectively manage their respective businesses.***

The merger will happen only if the stated conditions are met, including the adoption of the merger agreement by Entegris stockholders and Versum stockholders and the receipt of regulatory approvals, among other conditions. Many of the conditions are outside the control of Entegris and Versum, and both parties also have certain rights to terminate the merger agreement. Accordingly, there may be uncertainty regarding the completion of the merger. This uncertainty may cause customers, suppliers, vendors, strategic partners or others that deal with Entegris or Versum to delay or defer entering into contracts with Entegris or Versum or making other decisions concerning Entegris or Versum or seek to change or cancel existing business relationships with Entegris or Versum, which could negatively affect their respective businesses. Any delay or deferral of those decisions or changes in existing agreements could have an adverse impact on the respective businesses of Entegris and Versum, regardless of whether the merger is ultimately completed.

In addition, the merger agreement restricts Entegris, Versum and their respective subsidiaries from making certain acquisitions and taking other specified actions until the merger occurs without the consent of the other parties. These restrictions may prevent Entegris and Versum from pursuing attractive business opportunities or strategic transactions that may arise prior to the completion of the merger. See the section entitled **The Merger Agreement Conduct of Business Prior to the Effective Time** beginning on page 136 for a description of the restrictive covenants to which each of Entegris and Versum is subject.

***The opinions rendered to Entegris and Versum from their respective financial advisors will not reflect changes in circumstances between the dates of such opinions and the completion of the merger.***

Morgan Stanley delivered its oral opinion to the Entegris board of directors on January 27, 2019, which opinion was subsequently confirmed in a written opinion dated January 27, 2019, that as of such date and based upon and subject to the various assumptions made, procedures followed, matters considered, and qualifications and limitations on the scope of the review undertaken by Morgan Stanley as set forth in the written opinion, the exchange ratio pursuant to the merger agreement was fair from a financial point of view to Entegris. Lazard rendered an oral opinion to the Versum board of directors on January 27, 2019, subsequently confirmed in writing by delivery of Lazard s opinion

dated as of the same date, to the effect that, as of such date, and based upon and subject to the assumptions, procedures, factors, qualifications and limitations set forth in its written opinion, the exchange ratio in the merger was fair, from a financial point of view, to Versum stockholders (other than the holders of Versum excluded shares).

Table of Contents

Neither Entegris nor Versum has obtained, nor will obtain, an updated opinion regarding the fairness, from a financial point of view, of the exchange ratio as of the date of this joint proxy statement/prospectus or prior to the completion of the merger from Morgan Stanley or from Lazard. Each of Morgan Stanley s opinion and Lazard s opinion was necessarily based on economic, monetary, market and other conditions as in effect on, and the information made available to Morgan Stanley and Lazard, as applicable, only as of the dates of the respective opinions of Morgan Stanley and Lazard and does not address the fairness of the exchange ratio, from a financial point of view, at the time the merger is completed. Changes in the operations and prospects of Entegris or Versum, general economic, monetary, market and other conditions and other factors that may be beyond the control of Entegris and Versum, and on which the opinion of Morgan Stanley and the opinion of Lazard was based, may alter the value of Entegris or Versum or the prices of shares of Entegris common stock or Versum common stock by the time the merger is completed. The opinions of Morgan Stanley and Lazard do not speak as of any date other than the respective dates of such opinions. The recommendation of the Entegris board of directors that Entegris stockholders vote **FOR** the Entegris merger agreement proposal, **FOR** the Entegris charter proposal, **FOR** the Entegris compensation proposal and **FOR** the Entegris adjournment proposal and the recommendation of the Versum board of directors that Versum stockholders vote **FOR** the Versum merger agreement proposal, **FOR** the Versum compensation proposal and **FOR** the Versum adjournment proposal are each made as of the date of this joint proxy statement/prospectus. For a description of the opinion that Versum and Entegris received from their respective financial advisors, please see the sections entitled **The Merger Opinion of Entegris Financial Advisor** beginning on page 96 and **The Merger Opinion of Versum s Financial Advisor** beginning on page 107.

***Whether or not the merger is completed, the announcement and pendency of the merger could cause disruptions in the businesses of Entegris and Versum, which could have an adverse effect on their respective businesses and financial results.***

Whether or not the merger is completed, the announcement and pendency of the merger could cause disruptions in the businesses of Entegris and Versum. Specifically:

- current and prospective employees of Entegris and Versum will experience uncertainty about their future roles with the combined company, which might adversely affect Entegris or Versum s abilities to retain key managers and other employees; and
- the attention of management of each of Entegris and Versum may be directed toward the completion of the merger.

In addition, Entegris and Versum have each diverted significant management resources in an effort to complete the merger and are each subject to restrictions contained in the merger agreement on the conduct of their respective businesses. If the merger is not completed, Entegris and Versum will have incurred significant costs, including the diversion of management resources, for which they will have received little or no benefit.

***The directors and executive officers of Entegris and Versum have interests and arrangements that may be different from, or in addition to, those of Entegris and Versum stockholders generally.***

When considering the recommendations of the boards of directors of Entegris or Versum, as applicable, with respect to the proposals described in this joint proxy statement/prospectus, stockholders should be aware that the directors and executive officers of each of Entegris and Versum have interests in the merger that are different from, or in addition to, those of Entegris stockholders and Versum stockholders generally. These interests include the continued

employment of certain executive officers of Entegris and Versum by the combined company, the continued service of certain directors of Entegris and Versum as directors of the combined company, the treatment in the merger of outstanding equity, equity-based and incentive awards, severance arrangements, other compensation and benefit arrangements, and the right to continued indemnification of former Entegris and Versum directors and officers by the combined company.

Table of Contents

Entegris stockholders and Versum stockholders should be aware of these interests when they consider the recommendations of the respective Entegris and Versum boards of directors that they vote to adopt the merger agreement and to adopt the amended and restated certificate of incorporation of Entegris, in the case of Entegris, or that they adopt the merger agreement, in the case of Versum. The Entegris board of directors was aware of these interests when it approved and declared advisable the merger agreement and the transactions contemplated thereby on the terms and subject to the conditions set forth in the merger agreement and recommended that Entegris stockholders adopt the merger agreement and adopt the amended and restated certificate of incorporation of Entegris. The interests of Entegris directors and executive officers are described in more detail in the section entitled **Interests of Entegris Directors and Executive Officers in the Merger** beginning on page 170. Likewise, the Versum board of directors was aware of these interests when it approved and declared advisable the merger agreement, the merger and the transactions contemplated thereby on the terms and subject to the conditions set forth in the merger agreement, determined that the merger agreement, the merger and the transactions contemplated by the merger agreement were fair to, and in the best interests of, Versum and Versum stockholders and recommended that Versum stockholders adopt the merger agreement. The interests of Versum directors and executive officers are described in more detail in the section entitled **Interests of Versum s Directors and Executive Officers in the Merger** beginning on page 176.

***Entegris or Versum may waive one or more of the closing conditions without re-soliciting stockholder approval.***

Entegris or Versum may determine to waive, in whole or part, one or more of the conditions of its obligations to consummate the merger. Entegris and Versum currently expect to evaluate the materiality of any waiver and its effect on Entegris or Versum stockholders, as applicable, in light of the facts and circumstances at the time to determine whether any amendment of this joint proxy statement/prospectus or any re-solicitation of proxies or voting cards is required in light of such waiver. Any determination whether to waive any condition to the merger or as to re-soliciting stockholder approval or amending this joint proxy statement/prospectus as a result of a waiver will be made by Entegris or Versum, as applicable, at the time of such waiver based on the facts and circumstances as they exist at that time.

***The merger agreement contains provisions that could discourage a potential competing acquirer that might be willing to pay more to acquire or merge with either Entegris or Versum.***

The merger agreement contains no shop provisions that restrict each of Entegris and Versum s ability to, among other things (each as described under the section entitled **The Merger Agreement No Solicitation of Acquisition Proposals** beginning on page 140):

- initiate, solicit, propose, knowingly encourage (including by way of furnishing information) or knowingly take any action designed to facilitate any inquiry regarding, or the making of any inquiry, proposal or offer that constitutes or would reasonably be expected to lead to, an acquisition proposal;

- engage in, continue or otherwise participate in any discussions with or negotiations relating to, or otherwise cooperate in any way with, any acquisition proposal or any inquiry, proposal or offer that would reasonably be expected to lead to an acquisition proposal (other than to state that the terms of the merger agreement prohibits such discussions or negotiations);

provide any nonpublic information to any person in connection with any acquisition proposal or any inquiry, proposal or offer that constitutes or would reasonably be expected to lead to an acquisition proposal; or

otherwise knowingly facilitate any effort or attempt to make an acquisition proposal or any inquiry, proposal or offer that constitutes or would reasonably be expected to lead to an acquisition proposal.

Furthermore, there are only limited exceptions to the requirement under the merger agreement that neither the Entegris board of directors nor the Versum board of directors adversely withhold, withdraw, qualify or

Table of Contents

modify the Entegris recommendation or the Versum recommendation, as applicable (each as defined in the section entitled **The Merger Agreement Representations and Warranties** beginning on page 133). Although the Entegris board of directors is permitted to effect a change of recommendation, after complying with certain procedures set forth in the merger agreement, in response to a superior proposal or an intervening event, if it determines in good faith that a failure to do so would be inconsistent with its fiduciary duties, such change of recommendation would entitle Versum to terminate the merger agreement and collect a termination fee from Entegris in the amount of $155 million. Although the Versum board of directors is permitted to effect a change of recommendation, after complying with certain procedures set forth in the merger agreement, in response to a superior proposal or an intervening event, if it determines in good faith that a failure to do so would be inconsistent with its fiduciary duties, such change of recommendation would entitle Entegris to terminate the merger agreement and collect a termination fee from Versum in the amount of $140 million. For more information, see the sections titled **The Merger Agreement Termination of the Merger Agreement** beginning on page 153 and **The Merger Agreement Termination Fees** beginning on page 155.

These provisions could discourage a potential competing acquirer from considering or proposing an acquisition or merger, even if it were prepared to pay consideration with a higher value than that implied by the exchange ratio in the merger, or might result in a potential competing acquirer proposing to pay a lower per share price than it might otherwise have proposed to pay because of the added expense of the termination fee.

***Each of Entegris and Versum will incur significant transaction, merger-related and restructuring costs in connection with the merger.***

Entegris and Versum have incurred and expect to incur a number of non-recurring costs associated with combining the operations of the two companies, as well as transaction fees and other costs related to the merger. These costs and expenses include fees paid to financial, legal and accounting advisors, facilities and systems consolidation costs, severance and other potential employment-related costs, including retention and severance payments that may be made to certain Entegris employees and Versum employees, filing fees, printing expenses and other related charges. Some of these costs are payable by Entegris or Versum regardless of whether the merger is completed.

The combined company will also incur restructuring and integration costs in connection with the merger. The costs related to restructuring will be expensed as a cost of the ongoing results of operations of either Entegris or Versum or the combined company. There are a large number of processes, policies, procedures, operations, technologies and systems that must be integrated in connection with the merger and the integration of the two companies businesses. Although Entegris and Versum expect that the elimination of duplicative costs, strategic benefits, additional income as well as the realization of other efficiencies related to the integration of the businesses, may offset incremental transaction, merger-related and restructuring costs over time, any net benefit may not be achieved in the near term or at all. Many of these costs will be borne by Entegris or Versum even if the merger is not completed. While both Entegris and Versum have assumed that certain expenses would be incurred in connection with the merger and the other transactions contemplated by the merger agreement, there are many factors beyond their control that could affect the total amount or the timing of the integration and implementation expenses.

***Entegris stockholders and Versum stockholders will not be entitled to appraisal rights in the merger.***

Appraisal rights are statutory rights that, if applicable under law, enable stockholders of a corporation to dissent from an extraordinary transaction, such as a merger, and to demand that such corporation pay the fair value for their shares as determined by a court in a judicial proceeding instead of receiving the consideration offered to such stockholders in connection with the transaction. Under the DGCL, stockholders do not have appraisal rights if the shares of stock they hold are either listed on a national securities exchange or held of record by more than 2,000 holders. Notwithstanding

the foregoing, appraisal rights are available if stockholders are required by the terms of the merger agreement to accept for their shares anything other than (a) shares of stock of

Table of Contents

the surviving corporation, (b) shares of stock of another corporation that will either be listed on a national securities exchange or held of record by more than 2,000 holders, (c) cash in lieu of fractional shares or (d) any combination of the foregoing.

Because the merger is of Versum with and into Entegris and holders of Entegris common stock will continue to hold their shares following completion of the merger, holders of Entegris common stock are not entitled to appraisal rights in the merger.

Because shares of Entegris common stock are listed on NASDAQ, a national securities exchange, and are expected to continue to be so listed or listed on the NYSE, a national securities exchange, and because Versum stockholders are not required by the terms of the merger agreement to accept for their shares anything other than shares of Entegris common stock and cash in lieu of fractional shares, holders of Versum common stock will not be entitled to appraisal rights in the merger. See the section entitled **No Appraisal Rights** beginning on page 204.

***Litigation filed against Versum, the Versum board of directors and Entegris could prevent or delay the consummation of the merger or result in the payment of damages following completion of the merger.***

In connection with the merger, purported stockholders of Versum have filed five putative class action lawsuits and one individual lawsuit against one or more of Versum, the members of the Versum board of directors, Entegris and Broadridge Corporate Issuer Solutions, Inc. Among other remedies, the plaintiffs in these lawsuits seek to enjoin the merger and any vote on the merger. The outcome of any such litigation is uncertain. If a dismissal is not granted or a settlement is not reached, these lawsuits could prevent or delay completion of the merger and result in substantial costs to Versum and Entegris, including any costs associated with indemnification. Additional lawsuits in connection with the merger may be filed against Versum, Entegris and/or their respective directors and officers, which additional lawsuits could also prevent or delay the consummation of the merger and result in additional costs to Versum and Entegris. The ultimate resolution of these lawsuits cannot be predicted with certainty, and an adverse ruling in any such lawsuit may cause the merger to be delayed or not to be completed, which could cause Versum and Entegris not to realize some or all of the anticipated benefits of the merger. The defense or settlement of any lawsuit or claim that remains unresolved at the time the merger is consummated may adversely affect the combined company s business, financial condition, results of operations and cash flows. Versum and Entegris cannot currently predict the outcome of or reasonably estimate the possible loss or range of loss from any these lawsuits or claims. See **The Merger Litigation Related to the Merger** beginning on page 126 for more information about the lawsuits that have been filed related to the merger.

**Risks Relating to the Combined Company**

***The failure to successfully combine the businesses of Entegris and Versum may adversely affect the combined company s future results.***

The success of the merger will depend, in part, on the ability of the combined company to realize anticipated benefits from combining the businesses of Entegris and Versum. To realize these anticipated benefits, the businesses of Entegris and Versum must be successfully combined. If the combined company is not able to achieve these objectives, the anticipated benefits of the merger may not be realized fully or at all, or may take longer to realize than expected.

***The combined company may not be able to retain customers or suppliers or customers or suppliers may seek to modify contractual obligations with the combined company, which could have an adverse effect on the combined company s business and operations. Third parties may terminate or alter existing contracts or relationships with Entegris or Versum.***

As a result of the merger, the combined company may experience impacts on relationships with customers and suppliers that may harm the combined company s business and results of operations. Certain customers or suppliers may seek to terminate or modify contractual obligations following the merger whether or not

contractual rights are triggered as a result of the merger. There can be no guarantee that customers and suppliers will remain with or continue to have a relationship with the combined company or do so on the same or similar contractual terms following the merger. If any customers or suppliers seek to terminate or modify contractual obligations or discontinue the relationship with the combined company, then the combined company s business and results of operations may be harmed. Furthermore, the combined company will not have long-term arrangements with many of its significant suppliers. If the combined company s suppliers were to seek to terminate or modify an arrangement with the combined company, then the combined company may be unable to procure necessary supplies from other suppliers in a timely and efficient manner and on acceptable terms, or at all.

Entegris and Versum also have contracts with vendors, landlords, licensors and other business partners which may require Entegris or Versum, as applicable, to obtain consent from these other parties in connection with the merger. If these consents cannot be obtained, the combined company may suffer a loss of potential future revenue, incur costs, and lose rights that may be material to the business of the combined company. In addition, third parties with whom Entegris or Versum currently have relationships may terminate or otherwise reduce the scope of their relationship with either party in anticipation of the merger. Any such disruptions could limit the combined company s ability to achieve the anticipated benefits of the merger. The adverse effect of any such disruptions could also be exacerbated by a delay in the completion of the merger or by a termination of the merger agreement.

***The combined company may be exposed to increased litigation, which could have an adverse effect on the combined company s business and operations.***

The combined company may be exposed to increased litigation from stockholders, customers, suppliers, consumers and other third parties due to the combination of Entegris business and Versum s business following the merger. Such litigation may have an adverse impact on the combined company s business and results of operations or may cause disruptions to the combined company s operations.

***Combining the businesses of Entegris and Versum may be more difficult, costly or time-consuming than expected and the combined company may fail to realize the anticipated benefits of the merger, which may adversely affect the combined company s business results and negatively affect the value of the common stock of the combined company following the merger.***

The success of the merger will depend on, among other things, the ability of Entegris and Versum to combine their businesses in a manner that facilitates growth opportunities and realizes cost savings. Entegris and Versum have entered into the merger agreement because each believes that the merger and the other transactions contemplated by the merger agreement are fair to and in the best interests of its respective stockholders and that combining the businesses of Entegris and Versum will produce benefits and cost savings. See also the section entitled **The Merger Recommendation of the Entegris Board of Directors; Entegris Reasons for the Merger** beginning on page 87 and **The Merger Recommendation of the Versum Board of Directors; Versum s Reasons for the Merger** beginning on page 91.

However, Entegris and Versum must successfully combine their respective businesses in a manner that permits these benefits to be realized. In addition, the combined company must achieve the anticipated growth and cost savings without adversely affecting current revenues and investments in future growth. If the combined company is not able to successfully achieve these objectives, the anticipated benefits of the merger may not be realized fully, or at all, or may take longer to realize than expected.

An inability to realize the full extent of the anticipated benefits of the merger and the other transactions contemplated by the merger agreement, as well as any delays encountered in the integration process, could have an adverse effect

upon the revenues, level of expenses and operating results of the combined company, which may adversely affect the value of the common stock of the combined company after the completion of the merger.

Table of Contents

In addition, the actual integration may result in additional and unforeseen expenses, and the anticipated benefits of the integration plan may not be realized. Actual growth and cost savings, if achieved, may be lower than what Entegris and Versum expect and may take longer to achieve than anticipated. If Entegris and Versum are not able to adequately address integration challenges, they may be unable to successfully integrate their operations or realize the anticipated benefits of the integration of the two companies.

***The failure to successfully integrate the businesses and operations of Entegris and Versum in the expected time frame may adversely affect the combined company s future results.***

Entegris and Versum have operated and, until the completion of the merger, will continue to operate independently. There can be no assurances that their businesses can be integrated successfully. It is possible that the integration process could result in the loss of key Entegris employees or key Versum employees, the loss of customers, the disruption of either company s or both companies ongoing businesses, inconsistencies in standards, controls, procedures and policies, unexpected integration issues, higher than expected integration costs and an overall post-completion integration process that takes longer than originally anticipated. Specifically, the following issues, among others, must be addressed in integrating the operations of Entegris and Versum in order to realize the anticipated benefits of the merger so the combined company performs as expected:

- combining the companies operations and corporate functions;
- combining the businesses of Entegris and Versum and meeting the capital requirements of the combined company, in a manner that permits the combined company to achieve any cost savings or revenue synergies anticipated to result from the merger, the failure of which would result in the anticipated benefits of the merger not being realized in the time frame currently anticipated or at all;
- integrating personnel from the two companies;
- integrating the companies technologies;
- integrating and unifying the offerings and services available to customers;
- identifying and eliminating redundant and underperforming functions and assets;
- harmonizing the companies operating practices, employee development and compensation programs, internal controls and other policies, procedures and processes;
- maintaining existing agreements with customers, distributors, providers and vendors and avoiding delays in entering into new agreements with prospective customers, distributors, providers and vendors;

addressing possible differences in business backgrounds, corporate cultures and management philosophies;

consolidating the companies administrative and information technology infrastructure;

coordinating distribution and marketing efforts;

managing the movement of certain positions to different locations;

coordinating geographically dispersed organizations; and

effecting actions that may be required in connection with obtaining regulatory approvals.

In addition, at times the attention of certain members of either company s or both companies management and resources may be focused on completion of the merger and the integration of the businesses of the two companies and diverted from day-to-day business operations or other opportunities that may have been beneficial to such company, which may disrupt each company s ongoing business and the business of the combined company.

Table of Contents

Furthermore, the board of directors and executive leadership of the combined company will consist of former directors and executive officers from each of Entegris and Versum. Combining the boards of directors and management teams of each company into a single board and a single management team could require the reconciliation of differing priorities and philosophies.

***The Entegris and Versum unaudited prospective financial information is inherently subject to uncertainties, the unaudited pro forma financial data included in this document is preliminary and the combined company s actual financial position and results of operations after the merger may differ materially from these estimates and the unaudited pro forma financial data included in this joint proxy statement/prospectus. The unaudited pro forma combined financial data does not reflect the effect of any divestitures that may be required in connection with the merger.***

The unaudited pro forma combined financial statements and unaudited pro forma per share data included in this joint proxy statement/prospectus are presented for illustrative purposes only, contain a variety of adjustments, assumptions and preliminary estimates and are not necessarily indicative of what the combined company s actual financial position or results of operations would have been had the merger been completed on the dates indicated. The combined company s actual results and financial position after the merger may differ materially and adversely from the unaudited pro forma financial data included in this joint proxy statement/prospectus. The unaudited pro forma combined financial information does not reflect the effect of any divestitures that may be required in connection with the merger. For more information, see the sections entitled **Comparative Historical and Unaudited Pro Forma Per Share Data** beginning on page 39 and **Unaudited Pro Forma Condensed Combined Financial Statements** beginning on page 158.

While presented with numeric specificity, the Entegris and Versum unaudited prospective financial information provided in this joint proxy statement/prospectus is based on numerous variables and assumptions (including, but not limited to, those related to industry performance and competition, general business, the specialty materials and related industries, and economic, market and financial conditions and additional matters specific to Entegris or Versum s business, as applicable) that are inherently subjective and uncertain and are beyond the control of the respective management teams of Entegris and Versum. As a result, actual results may differ materially from the unaudited prospective financial information. Important factors that may affect actual results and cause these unaudited projected financial forecasts to not be achieved include, but are not limited to, risks and uncertainties relating to Entegris or Versum s business, as applicable (including each company s ability to achieve strategic goals, objectives and targets over applicable periods), industry performance, general business and economic conditions. For more information see the sections entitled **The Merger Entegris Unaudited Financial Projections** beginning on page 115, **The Merger Versum Unaudited Financial Projections** beginning on page 118 and **The Merger Certain Estimated Synergies** beginning on page 121.

***The combined company may be unable to retain Entegris and Versum personnel successfully after the merger is completed.***

The success of the merger will depend in part on the combined company s ability to retain the talents and dedication of the professionals currently employed by Entegris and Versum. It is possible that these employees may decide not to remain with Entegris or Versum, as applicable, while the merger is pending, or with the combined company after the merger is consummated. If key employees terminate their employment, or if an insufficient number of employees are retained to maintain effective operations, the combined company s business activities may be adversely affected and management s attention may be diverted from successfully integrating Entegris and Versum to hiring suitable replacements, all of which may cause the combined company s business to suffer. In addition, Entegris and Versum may not be able to locate suitable replacements for any key employees that leave either company or offer employment

to potential replacements on reasonable terms.

Table of Contents

***The combined company s debt may limit its financial flexibility.***

Entegris and Versum continue to review the treatment of their existing indebtedness. Entegris and Versum may seek to repay, refinance, repurchase, redeem, exchange or otherwise terminate their existing indebtedness prior to, in connection with or following the completion of the merger. If either Entegris or Versum seeks to refinance its existing indebtedness, there can be no guarantee that it will be able to execute the refinancing on favorable terms or at all. Alternatively, Entegris and Versum may seek to leave all or a portion of their existing indebtedness outstanding as the primary obligation of the combined company or to incur additional indebtedness or refinancing indebtedness prior to, in connection with or following the completion of the merger.

Entegris or Versum s substantial indebtedness could have adverse effects on such company s and/or the combined company s financial condition and results of operations, including:

- increasing its vulnerability to changing economic, regulatory and industry conditions;
- limiting its ability to compete and its flexibility in planning for, or reacting to, changes in its business and the industry;
- limiting its ability to pay dividends to its stockholders;
- limiting its ability to borrow additional funds; and
- increasing its interest expense and requiring it to dedicate a substantial portion of its cash flow from operations to payments on its debt, thereby reducing funds available for working capital, capital expenditures, acquisitions, share repurchases, dividends and other purposes.

The companies ability to arrange any additional financing for the purposes described above or otherwise will depend on, among other factors, the companies respective financial positions and performance, as well as prevailing market conditions and other factors beyond their control. The level and quality of the combined company s earnings, operations, business and management, among other things, will impact the determination of the combined company s credit ratings. A decrease in the ratings assigned to the combined company by the ratings agencies may negatively impact the combined company s access to the debt capital markets and increase the combined company s cost of borrowing. There can be no assurance that the combined company will be able to obtain financing on acceptable terms or at all. In addition, there can be no assurance that the combined company will be able to maintain the current credit worthiness or prospective credit ratings of Entegris or Versum, and any actual or anticipated changes or downgrades in such credit ratings may have a negative impact on the liquidity, capital position or access to capital markets of the combined company.

***If the existing indebtedness of Entegris and/or Versum remains outstanding, or if either company refinances its existing indebtedness, covenants contained in the agreements governing such indebtedness will impose restrictions on the combined company and certain of its subsidiaries that may affect their ability to operate their businesses.***

The agreements that govern the indebtedness of Entegris and Versum, in addition to any refinanced indebtedness, may contain various affirmative and negative covenants. Such covenants may, subject to certain significant exceptions, restrict the ability of the combined company and certain of its subsidiaries to, among other things, incur liens, incur debt, engage in mergers, consolidations and acquisitions, transfer assets outside the ordinary course of business, make loans or other investments, pay dividends, repurchase equity interests, make other payments with respect to equity interests, repay or repurchase subordinated debt and engage in affiliate transactions. In addition, the agreements governing the existing indebtedness of Entegris and Versum contain financial covenants that would require the combined company to maintain certain financial ratios under certain circumstances. The ability of the combined company and its subsidiaries to comply with these provisions may be affected by events beyond their control. Failure to comply with these covenants could result in an event of default, which, if not cured or waived, could accelerate the combined company s repayment obligations.

Table of Contents

***Declaration, payment and amounts of dividends, if any, distributed to stockholders of the combined company will be uncertain.***

Whether any dividends are declared or paid to stockholders of the combined company following the merger, and the amounts of any such dividends that are declared or paid, are uncertain and depend on a number of factors. If dividends are paid to stockholders of the combined company, they may not be of the same amount as paid by Entegris or Versum to their respective stockholders prior to the merger. The board of directors of the combined company will have the discretion to determine the dividend policy of the combined company, which may be impacted by any of the following factors:

- the combined company may not have enough cash to pay such dividends or to repurchase shares due to its cash requirements, capital spending plans, cash flow or financial position;
- decisions on whether, when and in which amounts to make any future distributions will remain at all times entirely at the discretion of the combined company s board of directors, which could change its dividend practices at any time and for any reason;
- the combined company s desire to maintain or improve the credit ratings on its debt;
- the amount of dividends that the combined company may distribute to its stockholders is subject to restrictions under Delaware law and is limited by restricted payment and leverage covenants in the combined company s credit facilities and indentures and, potentially, the terms of any future indebtedness that the combined company may incur; and
- certain limitations on the amount of dividends subsidiaries of the combined company can distribute to the combined company, as imposed by state law, regulators or agreements.

Stockholders should be aware that they have no contractual or other legal right to dividends that have not been declared.

**Risks Relating to Entegris Business**

Entegris business will continue to be subject to the risks described in the sections entitled Risk Factors in Entegris Annual Report on Form 10-K for the fiscal year ended December 31, 2018, and in other documents incorporated by reference into this joint proxy statement/prospectus. See the section entitled **Where You Can Find More Information** beginning on page 213 for the location of information incorporated by reference into this joint proxy statement/prospectus.

**Risks Relating to Versum s Business**

Versum s business will continue to be subject to the risks described in the sections entitled Risk Factors in Versum s Annual Report on Form 10-K for the year ended September 30, 2018, Versum s Quarterly Report on Form 10-Q for the quarterly period ended December 31, 2018 and in other documents incorporated by reference into this joint proxy

statement/prospectus. See the section entitled **Where You Can Find More Information** beginning on page 213 for the location of information incorporated by reference into this joint proxy statement/prospectus.

Table of Contents

## THE PARTIES TO THE MERGER

***Entegris, Inc.***

*129 Concord Road*

*Billerica, Massachusetts 01821*

*(978) 436-6500*

Entegris is a leading global developer, manufacturer and supplier of microcontamination control products, specialty chemicals and advanced materials handling solutions for manufacturing processes in the semiconductor and other high-technology industries. Entegris operates in three segments: Specialty Chemicals and Engineered Materials, Microcontamination Control and Advanced Materials Handling.

Entegris common stock is listed on NASDAQ under the ticker symbol ENTG.

For more information about Entegris, please visit Entegris website at http://www.entegris.com. The information contained on Entegris website or accessible through it (other than the documents incorporated by reference herein) does not constitute a part of this joint proxy statement/prospectus or any other report or document on file with or furnished to the SEC. Additional information about Entegris is included in the documents incorporated by reference into this joint proxy statement/prospectus. See the section entitled **Where You Can Find More Information** beginning on page 213.

***Versum Materials, Inc.***

*8555 South River Parkway*

*Tempe, Arizona 85284*

*(602) 282-1000*

Versum is a global provider of innovative solutions to the semiconductor and display industries with expertise in the development, manufacturing, transportation and handling of specialty materials. Versum employs expertise in molecular design and synthesis, purification, advanced analytics, formulation development and containers and delivery systems for the handling of high purity materials to deliver leading-edge solutions and critical process support to Versum s customers.

Versum common stock is listed on the NYSE under the ticker symbol VSM.

For more information about Versum, please visit Versum s website at http://www.versummaterials.com. The information contained on Versum s website or accessible through it (other than the documents incorporated by reference herein) does not constitute a part of this joint proxy statement/prospectus or any other report or document on file with or furnished to the SEC. Additional information about Versum is included in the documents incorporated by reference into this joint proxy statement/prospectus. See the section entitled **Where You Can Find More Information** beginning on page 213.

58

Table of Contents

## THE ENTEGRIS SPECIAL MEETING

This joint proxy statement/prospectus is first being mailed on or about March 22, 2019 and constitutes notice of the Entegris special meeting in conformity with the requirements of the DGCL and the by-laws of Entegris, which are referred to as the Entegris by-laws.

This joint proxy statement/prospectus is being provided to Entegris stockholders as part of a solicitation of proxies by the Entegris board of directors for use at the Entegris special meeting and at any adjournments or postponements of the Entegris special meeting. Entegris stockholders are encouraged to read the entire document carefully, including the annexes to and documents incorporated by reference into this document, for more detailed information regarding the merger agreement and the transactions contemplated by the merger agreement.

### Date, Time and Place of the Entegris Special Meeting

The Entegris special meeting is scheduled to be held at Entegris headquarters at 129 Concord Road, Billerica, Massachusetts, on April 26, 2019, beginning at 12:00 p.m., Eastern Time, unless postponed to a later date.

### Matters to be Considered at the Entegris Special Meeting

The purposes of the Entegris special meeting are as follows, each as further described in this joint proxy statement/prospectus:

*Entegris Proposal 1: Adoption of the Merger Agreement*. To consider and vote on the Entegris merger agreement proposal;

*Entegris Proposal 2: Adoption of the Amended and Restated Certificate of Incorporation of Entegris*. To consider and vote on the Entegris charter proposal;

*Entegris Proposal 3: Approval, on an Advisory (Non-Binding) Basis, of Certain Compensatory Arrangements with Entegris Named Executive Officers*. To consider and vote on the Entegris compensation proposal; and

*Entegris Proposal 4: Adjournments of the Entegris Special Meeting*. To consider and vote on the Entegris adjournment proposal.

### Recommendation of the Entegris Board of Directors

The Entegris board of directors unanimously recommends that Entegris stockholders vote:

**Entegris Proposal 1: FOR** the Entegris merger agreement proposal;

**Entegris Proposal 2:** **FOR** the Entegris charter proposal;

**Entegris Proposal 3:** **FOR** the Entegris compensation proposal; and

**Entegris Proposal 4:** **FOR** the Entegris adjournment proposal.

After careful consideration, the Entegris board of directors unanimously (1) determined that the merger agreement and the transactions contemplated thereby, including but not limited to the merger, the share issuance and the adoption of the amended and restated certificate of incorporation on the terms set forth in the merger agreement are fair to, and in the best interests of, Entegris and the holders of shares of Entegris common stock; (2) approved and declared advisable the merger agreement and the transactions contemplated thereby, including the merger, on the terms and subject to the conditions set forth in the merger agreement; (3) directed that the share issuance and the merger agreement be submitted to the holders of shares of Entegris common stock for their approval and adoption, and the amended and restated certificate of incorporation be submitted to the holders of shares of Entegris common stock for their adoption; and (4) resolved to recommend that the holders of shares of Entegris common stock vote in favor of the adoption of the merger agreement, including the approval of the share issuance, and the adoption of the amended and restated certificate of incorporation.

Table of Contents

See also the section entitled **The Merger Recommendation of the Entegris Board of Directors; Entegris Reasons for the Merger** beginning on page 87.

**Record Date for the Entegris Special Meeting and Voting Rights**

The record date to determine who is entitled to receive notice of and to vote at the Entegris special meeting or any adjournments or postponements thereof is April 2, 2019. As of the close of business on March 11, 2019, the latest practicable date prior to the date of this joint proxy statement/prospectus, there were 135,513,636 shares of Entegris common stock issued and outstanding, each entitled to vote at the Entegris special meeting. Each Entegris stockholder will have one vote for any matter properly brought before the Entegris special meeting for each share of Entegris common stock such holder owned at the close of business on the Entegris record date. Only Entegris stockholders of record at the close of business on the Entegris record date are entitled to receive notice of and to vote at the Entegris special meeting and any and all adjournments or postponements thereof.

**Quorum; Abstentions and Broker Non-Votes**

A quorum of stockholders is necessary to conduct the Entegris special meeting. The holders of a majority of the shares of Entegris common stock issued and outstanding and entitled to vote at the meeting must be represented at the Entegris special meeting in person or by proxy in order to constitute a quorum. Abstentions will be counted for purposes of determining whether a quorum exists. If a quorum is not present, the Entegris special meeting will be postponed until the holders of the number of shares of Entegris common stock required to constitute a quorum attend.

Banks, brokers or other nominees who hold shares in street name for a beneficial owner of those shares typically have the authority to vote in their discretion on routine proposals when they have not received instructions from beneficial owners. However, banks, brokers or other nominees are not allowed to exercise their voting discretion with respect to the approval of matters that the NASDAQ determines to be non-routine. Generally, a broker non-vote occurs on an item when a bank, broker or other nominee returns a proxy but does not provide instructions as to how shares should be voted on a particular matter. Because none of the proposals to be voted on at the Entegris special meeting are routine matters for which brokers may have discretionary authority to vote, Entegris does not expect any broker non-votes at the Entegris special meeting. As a result, if you hold your shares of Entegris common stock in street name, your shares will not be represented and will not be voted on any matter unless you affirmatively instruct your bank, broker or other nominee how to vote your shares in one of the ways indicated by your bank, broker or other nominee. It is therefore critical that you cast your vote by instructing your bank, broker or other nominee on how to vote.

If you submit a properly executed WHITE proxy card, even if you abstain from voting or vote against the adoption of the merger or the amended and restated certificate of incorporation, your shares of Entegris common stock will be counted for purposes of calculating whether a quorum is present at the Entegris special meeting. Executed but unvoted proxies will be voted in accordance with the recommendations of the Entegris board of directors. If additional votes must be solicited to adopt the merger agreement and the amended and restated certificate of incorporation, it is expected that the meeting will be adjourned to solicit additional proxies.

Table of Contents

**Required Votes; Vote of Entegris Directors and Executive Officers**

Except for the Entegris adjournment proposal, the vote required to approve all of the proposals listed herein assumes the presence of a quorum.

| Proposal | | Votes Necessary |
|---|---|---|
| Entegris Proposal 1 | Entegris merger agreement proposal | Approval requires the affirmative vote of a majority of the outstanding shares of Entegris common stock entitled to vote on the Entegris merger agreement proposal.<br><br>A failure to vote, a broker non-vote or an abstention will have the same effect as a vote **AGAINST** the Entegris merger agreement proposal. |
| Entegris Proposal 2 | Entegris charter proposal | Approval requires the affirmative vote of a majority of the outstanding shares of Entegris common stock entitled to vote on the Entegris charter proposal.<br><br>A failure to vote, a broker non-vote or an abstention will have the same effect as a vote **AGAINST** the Entegris charter proposal. |
| Entegris Proposal 3 | Entegris compensation proposal | Approval requires the affirmative vote of a majority of votes properly cast on the Entegris compensation proposal.<br><br>An abstention, a broker non-vote or other failure to vote will have no effect on the outcome of the Entegris compensation proposal. |
| Entegris Proposal 4 | Entegris adjournment proposal | Approval requires the approval of the holders of a majority of shares present at the Entegris special meeting.<br><br>An abstention will have the same effect as a vote **AGAINST** the Entegris adjournment proposal, while a broker non-vote or other failure to vote will have no effect on the outcome of the Entegris adjournment proposal. |

As of March 11, 2019, the latest practicable date prior to the date of this joint proxy statement/prospectus, Entegris directors and executive officers and their affiliates, as a group, owned and were entitled to vote 1,125,061 shares of

Entegris common stock, or approximately 0.8% of the total outstanding shares of Entegris common stock. Although none of them has entered into any agreement obligating them to do so, Entegris currently expects that all of its directors and executive officers will vote their shares **FOR** the Entegris merger agreement proposal, **FOR** the Entegris charter proposal, **FOR** the Entegris compensation proposal and **FOR** the Entegris adjournment proposal. See also the section entitled **Interests of Entegris Directors and Executive Officers in the Merger** beginning on page 170 and the arrangements described in Part III of Entegris Annual Report on Form 10-K for the fiscal year ended on December 31, 2018 and Entegris Definitive Proxy Statement on Schedule 14A for Entegris 2019 annual meeting filed with the SEC on March 20, 2019, both of which are incorporated into this joint proxy statement/prospectus by reference.

Table of Contents

**Methods of Voting**

If you are a stockholder of record, you may vote by proxy through the Internet, by telephone or by mail, or by voting in person at the Entegris special meeting. For shares held through a bank, broker or other nominee in street name instead of as a registered holder, you may vote by submitting your voting instructions to your bank, broker or other nominee. In most instances, you will be able to do this over the Internet, by telephone or by mail as indicated below. Please refer to the information from your bank, broker or other nominee on how to submit voting instructions. If you do not provide voting instructions to your bank, broker or other nominee, your shares of Entegris common stock will not be voted on any proposal as your bank, broker or other nominee does not have discretionary authority to vote on any of the proposals to be voted on at the Entegris special meeting; see the section entitled **The Entegris Special Meeting Quorum; Abstentions and Broker Non-Votes** beginning on page 60.

*By Internet*: If you are a stockholder of record, you can vote at www.proxyvote.com and follow the instructions, 24 hours a day, seven days a week. You will need the 16-digit control number included on your WHITE proxy card or your paper voting instruction form (if you received a paper copy of the proxy materials).

*By Telephone*: If you are a stockholder of record, you can vote using a touch-tone telephone by calling 1-800-690-6903 and follow the recorded instructions, 24 hours a day, seven days a week. You will need the 16-digit control number included on your WHITE proxy card or your paper voting instruction form (if you received a paper copy of the proxy materials).

*By Mail*: If you have received a paper copy of the proxy materials by mail, you may complete, sign, date and return by mail the paper WHITE proxy card or voting instruction form sent to you in the envelope provided to you with your proxy materials or voting instruction form.

*In Person*: All stockholders of record may vote in person at the Entegris special meeting. If you hold your shares through a bank, broker or other nominee in street name (instead of as a registered holder), you must obtain a legal proxy from your bank, broker or other nominee and bring the legal proxy to the meeting in order to vote in person at the Entegris special meeting. For more information on how to attend in person, see the section entitled **The Entegris Special Meeting Attending the Entegris Special Meeting** beginning on page 63.

If you are a stockholder of record, proxies submitted over the Internet, by telephone or by mail as described above must be received by 11:59 p.m., Eastern Time, on April 25, 2019.

Notwithstanding the above, if your shares are held in street name by a bank, broker or other nominee, you should follow the instructions you receive from your bank, broker or other nominee on how to vote your shares. Registered stockholders who attend the Entegris special meeting may vote their shares personally even if they previously have voted their shares.

If you deliver a proxy pursuant to this joint proxy statement/prospectus, but do not specify a choice with respect to any proposal set forth in this joint proxy statement/prospectus, your underlying shares of Entegris common stock will be voted on such uninstructed proposal in accordance with the recommendation of the Entegris board of directors.

Entegris does not expect that any matter other than the proposals listed above will be brought before the Entegris special meeting and Entegris by-laws provide that the only business that may be conducted at the Entegris special meeting are those proposals brought before the meeting pursuant to this joint proxy statement/prospectus.

Table of Contents

**Revocability of Proxies**

Any stockholder giving a proxy has the right to revoke it before the proxy is voted at the Entegris special meeting by any of the following actions:

- by sending a signed written notice that you revoke your proxy to Entegris corporate secretary, bearing a later date than your original proxy and mailing it so that it is received prior to the Entegris special meeting;
- by subsequently submitting a new proxy (including by submitting a proxy via the Internet or telephone) at a later date than your original proxy so that the new proxy is received by the deadline specified on the accompanying WHITE proxy card; or
- by revoking your proxy and voting in person at the Entegris special meeting.

Execution or revocation of a proxy will not in any way affect the stockholder s right to attend the special meeting and vote in person.

Written notices of revocation and other communications with respect to the revocation of proxies should be addressed to:

Entegris, Inc.

Attn: Corporate Secretary

129 Concord Road

Billerica, Massachusetts 01821

If your shares are held in street name and you previously provided voting instructions to your broker, bank or other nominee, you should follow the instructions provided by your broker, bank or other nominee to revoke or change your voting instructions.

**Proxy Solicitation Costs**

Entegris is soliciting proxies to provide an opportunity to all Entegris stockholders to vote on agenda items, whether or not the stockholders are able to attend the Entegris special meeting or an adjournment or postponement thereof. Entegris will bear the entire cost of soliciting proxies from its stockholders, except that Versum and Entegris have agreed to each pay one half of the costs and expenses of filing, printing and mailing this joint proxy statement/prospectus and all filing and other similar fees payable to the SEC in connection with this joint proxy statement/prospectus. In addition to the solicitation of proxies by mail, Entegris will ask banks, brokers and other custodians, nominees and fiduciaries to forward the proxy solicitation materials to the beneficial owners of shares of Entegris common stock held of record by such nominee holders. Entegris may be required to reimburse these nominee holders for their customary clerical and mailing expenses incurred in forwarding the proxy solicitation materials to the beneficial owners.

Entegris has retained MacKenzie to assist in the solicitation process. Entegris estimates that it will pay MacKenzie a fee of approximately $25,000, plus reimbursement of reasonable expenses. Entegris also has agreed to indemnify MacKenzie against various liabilities and expenses that relate to or arise out of its solicitation of proxies (subject to certain exceptions). Proxies may be solicited on behalf of Entegris or by Entegris directors, officers and other employees in person, by mail, by telephone, by facsimile, by messenger, via the Internet or by other means of communication, including electronic communication. Directors, officers and employees of Entegris will not be paid any additional amounts for their services or solicitation in this regard.

**Attending the Entegris Special Meeting**

You are entitled to attend the Entegris special meeting only if you are a stockholder of record of Entegris at the close of business on April 2, 2019 (the record date for the Entegris special meeting) or you hold your shares

Table of Contents

of Entegris beneficially in the name of a broker, bank or other nominee as of the Entegris record date, or you hold a valid proxy for the Entegris special meeting.

If you are a stockholder of record of Entegris at the close of business on April 2, 2019 and wish to attend the Entegris special meeting, please so indicate on the appropriate WHITE proxy card or as prompted by the Internet or telephone voting system. Your name will be verified against the list of stockholders of record prior to your being admitted to the Entegris special meeting.

If a broker, bank or other nominee is the record owner of your shares of Entegris common stock, you will need to have proof that you are the beneficial owner as of the Entegris record date to be admitted to the Entegris special meeting. A recent statement or letter from your broker, bank or other nominee confirming your ownership as of the Entegris record date, or presentation of a valid proxy from a broker, bank or other nominee that is the record owner of your shares, would be acceptable proof of your beneficial ownership.

You should be prepared to present photo identification for admittance. If you do not provide photo identification or comply with the other procedures outlined above upon request, you might not be admitted to the Entegris special meeting.

**Householding**

SEC rules permit companies and intermediaries such as brokers to satisfy delivery requirements for proxy statements and notices with respect to two or more stockholders sharing the same address by delivering a single proxy statement or a single notice addressed to those stockholders. This process, which is commonly referred to as householding, provides cost savings for companies. Some brokers household proxy materials, delivering a single proxy statement or notice to multiple stockholders sharing an address unless contrary instructions have been received from the affected stockholders. Once you have received notice from your broker that they will be householding materials to your address, householding will continue until you are notified otherwise or until you revoke your consent. If, at any time, you no longer wish to participate in householding and would prefer to receive a separate proxy statement or notice, or if your household is receiving multiple copies of these documents and you wish to request that future deliveries be limited to a single copy, please notify your broker. You can request prompt delivery of a copy of this joint proxy statement/prospectus by writing to: Corporate Secretary, Entegris, Inc., 129 Concord Road, Billerica Massachusetts 01821 or by calling (978) 436-6500.

**Tabulation of Votes**

The Entegris board of directors will appoint an independent inspector of election for the Entegris special meeting. The inspector of election will, among other matters, determine the number of shares of Entegris common stock represented at the Entegris special meeting to confirm the existence of a quorum, determine the validity of all proxies and ballots and certify the results of voting on all proposals submitted to Entegris stockholders.

**Adjournments**

If a quorum is present at the Entegris special meeting but there are not sufficient votes at the time of the Entegris special meeting to approve the Entegris merger agreement proposal and the Entegris charter proposal, then Entegris stockholders may be asked to vote on the Entegris adjournment proposal.

At any subsequent reconvening of the Entegris special meeting at which a quorum is present, any business may be transacted that might have been transacted at the original meeting and all proxies will be voted in the same manner as

they would have been voted at the original convening of the Entegris special meeting, except for any proxies that have been effectively revoked or withdrawn prior to the time the proxy is voted at the reconvened meeting.

Table of Contents

**Assistance**

If you need assistance voting or in completing your WHITE proxy card or have questions regarding the Entegris special meeting, please contact MacKenzie, the proxy solicitation agent for Entegris:

MacKenzie Partners, Inc.

1407 Broadway

New York, New York 10018

Stockholders, banks and brokers call: (800) 322-2885

**ENTEGRIS STOCKHOLDERS SHOULD CAREFULLY READ THIS JOINT PROXY**

**STATEMENT/PROSPECTUS IN ITS ENTIRETY FOR MORE DETAILED INFORMATION CONCERNING THE MERGER AGREEMENT AND THE MERGER. IN PARTICULAR, ENTEGRIS STOCKHOLDERS ARE DIRECTED TO THE MERGER AGREEMENT, WHICH IS ATTACHED AS ANNEX A HERETO.**

Table of Contents

## ENTEGRIS PROPOSAL 1: ADOPTION OF THE MERGER AGREEMENT

This joint proxy statement/prospectus is being furnished to you as a stockholder of Entegris as part of the solicitation of proxies by the Entegris board of directors for use at the Entegris special meeting to consider and vote upon a proposal to adopt the merger agreement and approve the transactions contemplated thereby, including the merger and the issuance of shares of Entegris common stock in the merger pursuant to the merger agreement, which is attached as Annex A to this joint proxy statement/prospectus.

The Entegris board of directors, after due and careful discussion and consideration, unanimously approved and declared advisable the merger agreement, the merger and the other transactions contemplated by the merger agreement and determined that the merger agreement, the merger and the other transactions contemplated by the merger agreement are fair to and in the best interests of Entegris and its stockholders.

The Entegris board of directors accordingly unanimously recommends that Entegris stockholders adopt the merger agreement, as disclosed in this joint proxy statement/prospectus and particularly the related narrative disclosures in the sections of this joint proxy statement/prospectus entitled **The Merger** beginning on page 80 and **The Merger Agreement** beginning on page 127 and as attached as Annex A to this joint proxy statement/prospectus.

The merger between Entegris and Versum cannot be completed without the affirmative vote of a majority of the outstanding shares of Entegris common stock entitled to vote thereon. A failure to vote, a broker non-vote or an abstention will have the same effect as a vote **AGAINST** the proposal to adopt the merger agreement.

**IF YOU ARE AN ENTEGRIS STOCKHOLDER, THE ENTEGRIS BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT YOU VOTE FOR THE ENTEGRIS MERGER AGREEMENT PROPOSAL (ENTEGRIS PROPOSAL 1)**

Table of Contents

## ENTEGRIS PROPOSAL 2: ADOPTION OF THE AMENDED AND RESTATED CERTIFICATE OF INCORPORATION OF ENTEGRIS

The Entegris board of directors has approved and declared advisable, pursuant to the merger agreement, the adoption of the amended and restated certificate of incorporation. The amended and restated certificate of incorporation is attached as Annex B to this joint proxy statement/prospectus. Entegris stockholders should read the amended and restated certificate of incorporation in its entirety.

The key amendments included in the amended and restated certificate of incorporation are as follows:

- with respect to the board of directors:
  - from the closing until the third anniversary of the closing, unless at least 75% of the then-serving directors adopt a resolution to the contrary, the removal of, or the failure to designate, appoint or elect, the chairman of the Versum board of directors as of immediately prior to the effective time to serve as the chairman of the board of directors of the combined company, or the failure to nominate the chairman of the Versum board of directors as of immediately prior to the effective time for election to the board of directors of the combined company at any meeting of the stockholders of the combined company will require the affirmative vote of at least 75% of the then-serving directors;
- with respect to certain executive officers:
  - from the closing and until the third anniversary of the closing, unless at least 75% of the then-serving directors adopt a resolution to the contrary, the removal of, or the failure to appoint, the Entegris CEO (unless he resigns earlier or otherwise permanently ceases his service to the combined company) as the chief executive officer of the combined company will require the affirmative vote of at least 75% of the then-serving directors;
- from the closing until the third anniversary of the closing, certain provisions of the amended and restated certificate of incorporation, including the provisions regarding the chairman of the board of directors and the CEO, may not be modified, amended or repealed without the approval of at least 75% of the then-serving directors; and
- the terms of certain existing provisions of the certificate of incorporation regarding the powers of the board of directors, Entegris ability to amend its certificate of incorporation, and the composition of the board of directors will each be qualified by the conditions listed above.

In addition to the key provisions discussed above, in an attempt to streamline the combined company charter, the Entegris certificate of incorporation will be restated.

The approval of Entegris stockholders to amend and restate the certificate of incorporation is not required in order to complete the merger. If this proposal to adopt the amended and restated certificate of incorporation is approved but the

Entegris merger agreement proposal is not approved, the Entegris board of directors will abandon the amended and restated certificate of incorporation without further action by Entegris stockholders.

**The Entegris board of directors unanimously recommends that Entegris stockholders adopt the amended and restated certificate of incorporation described herein and set forth in full as Annex B.**

Approval of the Entegris charter proposal requires the affirmative vote of a majority of the outstanding shares of Entegris common stock entitled to vote on the proposal. A failure to vote, a broker non-vote or an abstention will have the same effect as a vote **AGAINST** the Entegris charter proposal.

**IF YOU ARE AN ENTEGRIS STOCKHOLDER, THE ENTEGRIS BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT YOU VOTE FOR THE ENTEGRIS CHARTER PROPOSAL (ENTEGRIS PROPOSAL 2)**

Table of Contents

## ENTEGRIS PROPOSAL 3: ADVISORY (NON-BINDING) VOTE ON MERGER-RELATED COMPENSATION FOR NAMED EXECUTIVE OFFICERS

Pursuant to Section 14A of the Exchange Act and Rule 14a-21(c) thereunder, Entegris is seeking a non-binding, advisory stockholder approval of the compensation of Entegris named executive officers that is based on or otherwise relates to the merger as disclosed in the section entitled **Interests of Entegris Directors and Executive Officers in the Merger Quantification of Payments and Benefits to Entegris Named Executive Officers** beginning on page 173. The proposal gives Entegris stockholders the opportunity to express their views on the merger-related compensation of Entegris named executive officers.

Accordingly, Entegris is asking Entegris stockholders to vote **FOR** the adoption of the following resolution, on a non-binding, advisory basis:

RESOLVED, that the compensation that will or may be paid or become payable to Entegris named executive officers, in connection with the merger, and the agreements or understandings pursuant to which such compensation will or may be paid or become payable, in each case as disclosed pursuant to Item 402(t) of Regulation S-K in **Interests of Entegris Directors and Executive Officers in the Merger Quantification of Payments and Benefits to Entegris Named Executive Officers** are hereby APPROVED.

The vote on the advisory compensation proposal is a vote separate and apart from the vote on the proposals to adopt the merger agreement and the amended and restated certificate of incorporation. Accordingly, if you are an Entegris stockholder, you may vote to adopt the Entegris merger agreement proposal and/or the Entegris charter proposal, and vote not to approve the Entegris compensation proposal, and vice versa. If the merger is completed, the merger-related compensation may be paid to Entegris named executive officers to the extent payable in accordance with the terms of the compensation agreements and arrangements even if Entegris stockholders fail to approve the advisory vote regarding merger-related compensation.

Assuming a quorum is present at the Entegris special meeting, approval of the Entegris compensation proposal requires the affirmative vote of a majority of votes properly cast on the proposal at the Entegris special meeting. An abstention, a broker non-vote or other failure to vote (including a failure to instruct your bank, broker or other nominee to vote) will have no effect on the Entegris compensation proposal, assuming a quorum is present.

**The Entegris board of directors unanimously recommends a vote FOR the advisory compensation proposal.**

## IF YOU ARE AN ENTEGRIS STOCKHOLDER, THE ENTEGRIS BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT YOU VOTE FOR THE ENTEGRIS COMPENSATION PROPOSAL (ENTEGRIS PROPOSAL 3)

Table of Contents

## ENTEGRIS PROPOSAL 4: ADJOURNMENT OF THE ENTEGRIS SPECIAL MEETING

The Entegris special meeting may be adjourned to another time and place if necessary to permit solicitation of additional proxies if there are not sufficient votes to approve the Entegris merger agreement proposal and the Entegris charter proposal or to ensure that any supplement or amendment to this joint proxy statement/prospectus is timely provided to Entegris stockholders.

Entegris is asking its stockholders to authorize the holder of any proxy solicited by the Entegris board of directors to vote in favor of any adjournment to the Entegris special meeting to solicit additional proxies if there are not sufficient votes to approve the Entegris merger agreement proposal and the Entegris charter proposal or to ensure that any supplement or amendment to this joint proxy statement/prospectus is timely provided to Entegris stockholders.

**The Entegris board of directors unanimously recommends that Entegris stockholders approve the proposal to adjourn the Entegris special meeting, if necessary.**

Whether or not there is a quorum, approval of the Entegris adjournment proposal requires the approval of the holders of a majority of the voting shares represented at the Entegris special meeting. A stockholder s abstention from voting will have the same effect as a vote **AGAINST** the Entegris adjournment proposal, while a broker non-vote or other failure to vote (including a failure to instruct your bank, broker or other nominee to vote) will have no effect on the outcome of the Entegris adjournment proposal.

**IF YOU ARE AN ENTEGRIS STOCKHOLDER, THE ENTEGRIS BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT YOU VOTE FOR THE ENTEGRIS ADJOURNMENT PROPOSAL (ENTEGRIS PROPOSAL 4)**

Table of Contents

## THE VERSUM SPECIAL MEETING

This joint proxy statement/prospectus is first being mailed on or about March 22, 2019 and constitutes notice of the Versum special meeting in conformity with the requirements of the DGCL and the amended and restated bylaws of Versum, which are referred to as the Versum bylaws.

This joint proxy statement/prospectus is being provided to Versum stockholders as part of a solicitation of proxies by the Versum board of directors for use at the Versum special meeting and at any adjournments or postponements of the Versum special meeting. Versum stockholders are encouraged to read the entire document carefully, including the annexes to and documents incorporated by reference into this document, for more detailed information regarding the merger agreement and the transactions contemplated by the merger agreement.

### Date, Time and Place of the Versum Special Meeting

The Versum special meeting is scheduled to be held at 8555 South River Parkway, Tempe, Arizona 85284, on April 26, 2019, beginning at 9:00 a.m., Mountain Standard Time, unless postponed to a later date.

### Matters to Be Considered at the Versum Special Meeting

The purposes of the Versum special meeting are as follows, each as further described in this joint proxy statement/prospectus:

*Versum Proposal 1: Adoption of the Merger Agreement.* To consider and vote on the Versum merger agreement proposal;

*Versum Proposal 2: Approval, on an Advisory (Non-Binding) Basis of Certain Compensatory Arrangements with Versum s Named Executive Officers.* To consider and vote on the Versum compensation proposal; and

*Versum Proposal 3: Adjournments of the Versum Special Meeting.* To consider and vote on the Versum adjournment proposal.

### Recommendation of the Versum Board of Directors

The Versum board of directors unanimously recommends that Versum stockholders vote:

**Versum Proposal 1**: **FOR** the Versum merger agreement proposal;

**Versum Proposal 2**: **FOR** the Versum compensation proposal; and

**Versum Proposal 3**: **FOR** the Versum adjournment proposal.

After careful consideration, the Versum board of directors unanimously (1) determined that the merger agreement, the merger and the other transactions contemplated by the merger agreement are fair to, and in the best interests of, Versum and its stockholders; (2) approved and declared advisable the merger agreement, the merger and the other transactions contemplated by the merger agreement; (3) directed that the merger agreement be submitted for adoption at a meeting of Versum stockholders; and (4) resolved to recommend that Versum stockholders vote in favor of the adoption of the merger agreement.

See also the section entitled **The Merger Recommendation of the Versum Board of Directors; Versum s Reasons for the Merger** beginning on page 91.

**Record Date for the Versum Special Meeting and Voting Rights**

The record date to determine who is entitled to receive notice of and to vote at the Versum special meeting or any adjournments or postponements thereof is April 2, 2019. As of the close of business on March 11, 2019,

Table of Contents

the latest practicable date prior to the date of this joint proxy statement/prospectus, there were 109,143,954 shares of Versum common stock issued and outstanding and entitled to vote at the Versum special meeting. Each Versum stockholder is entitled to one vote for any matter properly brought before the Versum special meeting for each share of Versum common stock such holder owned at the close of business on the Versum record date. Only Versum stockholders of record at the close of business on the Versum record date are entitled to receive notice of and to vote at the Versum special meeting and any and all adjournments or postponements thereof.

**Quorum; Abstentions and Broker Non-Votes**

A quorum of stockholders is necessary to conduct the Versum special meeting. The presence, in person or by proxy, of the holders of a majority of the shares of Versum common stock entitled to vote at the Versum special meeting is necessary to constitute a quorum. Shares of Versum common stock represented at the Versum special meeting and entitled to vote, but not voted, including shares for which a stockholder directs an abstention from voting and broker non-votes, will be counted for purposes of determining a quorum. If a quorum is not present, the Versum special meeting will be postponed until the holders of the number of shares of Versum common stock required to constitute a quorum attend.

Under the NYSE rules, banks, brokers or other nominees who hold shares in street name for a beneficial owner of those shares typically have the authority to vote in their discretion on routine proposals when they have not received instructions from beneficial owners. However, banks, brokers or other nominees are not allowed to exercise their voting discretion with respect to the approval of matters that the NYSE determines to be non-routine. Generally, a broker non-vote occurs on an item when (a) a bank, broker or other nominee has discretionary authority to vote on one or more routine proposals to be voted on at a meeting of stockholders, but is not permitted to vote on other non-routine proposals without instructions from the beneficial owner of the shares and (b) the beneficial owner fails to provide the bank, broker or other nominee with such instructions. Under the NYSE rules, non-routine matters include the Versum merger agreement proposal (Versum Proposal 1), the Versum compensation proposal (Versum Proposal 2) and the Versum adjournment proposal (Versum Proposal 3). Because none of the proposals to be voted on at the Versum special meeting are routine matters for which brokers may have discretionary authority to vote, Versum does not expect any broker non-votes at the Versum special meeting. As a result, if you hold your shares of Versum common stock in street name, your shares will not be represented and will not be voted on any matter unless you affirmatively instruct your bank, broker or other nominee how to vote your shares in one of the ways indicated by your bank, broker or other nominee. It is therefore critical that you cast your vote by instructing your bank, broker or other nominee on how to vote. **The NYSE rules governing brokers discretionary authority will not permit brokers to exercise discretionary authority regarding any of the proposals to be voted on at the Versum special meeting.**

**Required Votes; Vote of Versum s Directors and Executive Officers**

Except for the Versum adjournment proposal, the vote required to approve all of the proposals listed herein assumes the presence of a quorum.

| Proposal | | Votes Necessary |
|---|---|---|
| Versum Proposal 1 | Versum merger agreement proposal | Approval requires the affirmative vote of a majority of the outstanding shares of Versum common stock entitled to vote on the Versum merger agreement proposal. |

A failure to vote, a broker non-vote or an abstention will have the same effect as a vote **AGAINST** the Versum merger agreement proposal.

Table of Contents

| Proposal | | Votes Necessary |
|---|---|---|
| Versum Proposal 2 | Versum compensation proposal | Approval requires the affirmative vote of a majority of the votes cast at the Versum special meeting on the Versum compensation proposal (meaning the number of votes cast **FOR** this proposal must exceed the votes cast **AGAINST** ). A failure to vote, a broker non-vote or an abstention will have no effect on the outcome of the Versum compensation proposal. |
| Versum Proposal 3 | Versum adjournment proposal | Approval requires the affirmative vote of a majority of the votes entitled to be cast who are present in person or represented by proxy at the Versum special meeting on the Versum adjournment proposal. An abstention will have the same effect as a vote **AGAINST** the Versum adjournment proposal, while a broker non-vote or other failure to vote will have no effect on the outcome of the Versum adjournment proposal. |

As of March 11, 2019, the latest practicable date prior to the date of this joint proxy statement/prospectus, Versum directors and executive officers, and their affiliates, as a group, owned and were entitled to vote 679,695 shares of Versum common stock, or approximately 0.62% of the total outstanding shares of Versum common stock. Although none of them has entered into any agreement obligating them to do so, Versum currently expects that all of its directors and executive officers will vote their shares **FOR** the Versum merger agreement proposal, **FOR** the Versum compensation proposal and **FOR** the Versum adjournment proposal. See also the section entitled **Interests of Versum s Directors And Executive Officers In The Merger** beginning on page 176 and the arrangements described in Part III of Versum s Annual Report on Form 10-K for the year ended September 30, 2018 and Versum s Definitive Proxy Statement on Schedule 14A for Versum s annual meeting filed with the SEC on December 20, 2018, both of which are incorporated into this joint proxy statement/prospectus by reference.

**Methods of Voting**

If you are a stockholder of record, you may vote by proxy through the Internet, by telephone or by mail, or by voting in person at the Versum special meeting. For shares held through a bank, broker or other nominee in street name instead of as a registered holder, you may vote by submitting your voting instructions to your bank, broker or other nominee. In most instances, you will be able to do this over the Internet, by telephone or by mail as indicated below. Please refer to the information from your bank, broker or other nominee on how to submit voting instructions. If you do not provide voting instructions to your bank, broker or other nominee, your shares of Versum common stock will not be voted on any proposal as your bank, broker or other nominee does not have discretionary authority to vote on any of the proposals to be voted on at the Versum special meeting; see the section entitled **The Versum Special Meeting Quorum; Abstentions and Broker Non-Votes** beginning on page 71.

*By Internet*: If you are a stockholder of record, you can vote by accessing the website indicated on your WHITE proxy card or voting instruction form and following the instructions, 24 hours a day, seven days a week. You will need the control number included on your WHITE proxy card or voting instruction form.

*By Telephone*: If you are a stockholder of record, you can vote using a touch-tone telephone by calling the number indicated on your WHITE proxy card or voting instruction form and following the recorded instructions, 24 hours a day, seven days a week. You will need the control number included on your WHITE proxy card or voting instruction form.

Table of Contents

*By Mail*: You may complete, sign, date and return by mail the WHITE proxy card or voting instruction form in the postage-paid envelope provided.

*In Person*: All stockholders of record may vote in person at the Versum special meeting. If you hold your shares through a bank, broker or other nominee in street name (instead of as a registered holder), you must obtain a legal proxy from your bank, broker or other nominee and bring the legal proxy to the meeting in order to vote in person at the Versum special meeting. For more information on how to attend in person, see the section entitled **The Versum Special Meeting Attending the Versum Special Meeting** beginning on page 74.

Unless revoked, all proxies representing shares entitled to vote that are delivered pursuant to this solicitation will be voted at the Versum special meeting and, where a choice has been specified on the WHITE proxy card, will be voted in accordance with such specification. To reduce administrative costs and help the environment by conserving natural resources, Versum asks that you vote through the Internet or by telephone, both of which are available 24 hours a day.

Notwithstanding the above, if you hold your shares in street name and you submit voting instructions to your bank, broker or other nominee, your instructions must be received by the bank, broker or other nominee prior to the deadline set forth in the information from your bank, broker or other nominee on how to submit voting instructions.

If you deliver a proxy pursuant to this joint proxy statement/prospectus, but do not specify a choice with respect to any proposal set forth in this joint proxy statement/prospectus, your underlying shares of Versum common stock will be voted on such uninstructed proposal in accordance with the recommendation of the Versum board of directors. Versum does not expect that any matter other than the proposals listed above will be brought before the Versum special meeting and the Versum bylaws provide that the only business that may be conducted at the Versum special meeting are those proposals brought before the meeting pursuant to this joint proxy statement/prospectus.

**Revocability of Proxies**

Any stockholder giving a proxy has the right to revoke it, including any green proxy card you may have previously submitted, before the proxy is voted at the Versum special meeting by any of the following actions:

by sending a signed written notice of revocation to Versum s corporate secretary, provided such statement is received prior to the Versum special meeting;

by voting again by Internet or telephone at a later time before the closing of the polls;

by submitting a properly signed proxy card, including a WHITE proxy card, with a later date; or

by attending the Versum special meeting, revoking your proxy and voting in person.

Only your last submitted proxy card will be considered. You do not need to contact Versum to revoke any previously granted proxy you may have given by submitting a green proxy card, your submission of your vote via the instructions on your WHITE proxy card is sufficient to revoke your green proxy card.

Execution or revocation of a proxy will not in any way affect the stockholder s right to attend the Versum special meeting and vote in person.

Table of Contents

Written notices of revocation and other communications with respect to the revocation of proxies should be addressed to:

Versum Materials, Inc.

Attn: Corporate Secretary

8555 South River Parkway

Tempe, Arizona 85284

If your shares are held in street name and you previously provided voting instructions to your broker, bank or other nominee, you should follow the instructions provided by your broker, bank or other nominee to revoke or change your voting instructions.

We urge you to discard any green proxy cards and disregard any related solicitation materials, which may have been sent to you by Merck, who is soliciting proxies from Versum stockholders in opposition to the merger. If you previously submitted a green proxy card, we urge you to cast your vote as instructed on your WHITE proxy card, which will revoke any earlier dated proxy card that you may have submitted, including any green proxy card. Only the latest dated proxy you submit will be counted.

**Proxy Solicitation Costs**

Versum is soliciting proxies to provide an opportunity to all Versum stockholders to vote on agenda items, whether or not the stockholders are able to attend the Versum special meeting or an adjournment or postponement thereof. Versum will bear the entire cost of soliciting proxies from its stockholders, except that Versum and Entegris have agreed to each pay one half of the costs and expenses of filing, printing and mailing this joint proxy statement/prospectus and all filing and other similar fees payable to the SEC in connection with this joint proxy statement/prospectus. In addition to the solicitation of proxies by mail, Versum will request that banks, brokers and other nominee record holders send proxies and proxy material to the beneficial owners of Versum common stock and secure their voting instructions, if necessary. Versum may be required to reimburse those banks, brokers and other nominees on request for their reasonable expenses in taking those actions.

Versum has also retained Innisfree to assist in soliciting proxies and in communicating with Versum stockholders and estimates that it will pay them a fee of approximately $750,000 plus reimbursement for certain out-of-pocket fees and expenses. Versum also has agreed to indemnify Innisfree against various liabilities and expenses that relate to or arise out of its solicitation of proxies (subject to certain exceptions). Proxies may be solicited on behalf of Versum or by Versum directors, officers and other employees in person, by mail, by telephone, by facsimile, by messenger, via the Internet or by other means of communication, including electronic communication. Directors, officers and employees of Versum will not be paid any additional amounts for their services or solicitation in this regard.

**Attending the Versum Special Meeting**

If you wish to attend the Versum special meeting, you must be a stockholder of record of Versum at the close of business on April 2, 2019 (the record date for the Versum special meeting), hold your shares of Versum beneficially in the name of a broker, bank or other nominee as of the Versum record date or hold a valid proxy for the Versum special meeting. If you hold your shares through a broker, bank or other nominee in street name (instead of as a registered holder) and you wish to vote in person at the Versum special meeting, you must obtain a legal proxy from your bank,

broker or other nominee and bring the legal proxy to the meeting in order to vote in person at the Versum special meeting.

You will need to bring identification along with either your notice of special meeting or proof of stock ownership to enter the Versum special meeting. If your Versum shares are beneficially held in the name of a broker, bank or other nominee and you wish to be admitted to attend the Versum special meeting, you must

Table of Contents

present proof of your ownership of Versum shares, such as a bank or brokerage statement. The use of video, still photography or audio recording at the Versum special meeting is not permitted. For the safety of attendees, all bags, packages and briefcases are subject to inspection. If you do not provide photo identification or comply with the other procedures outlined above, you might not be admitted to the Versum special meeting.

If you plan to attend the Versum special meeting and vote in person, Versum still encourages you to vote in advance by the Internet, telephone or (if you received a paper copy of the proxy materials) by mail so that your vote will be counted even if you later decide not to attend the Versum special meeting. Voting your proxy by the Internet, telephone or mail will not limit your right to vote at the Versum special meeting if you later decide to attend in person.

**Householding**

SEC rules permit companies and intermediaries such as brokers to satisfy delivery requirements for proxy statements and notices with respect to two or more stockholders sharing the same address by delivering a single proxy statement or a single notice addressed to those stockholders. This process, which is commonly referred to as householding, provides cost savings for companies. Some brokers household proxy materials, delivering a single proxy statement or notice to multiple stockholders sharing an address unless contrary instructions have been received from the affected stockholders. Once you have received notice from your broker that they will be householding materials to your address, householding will continue until you are notified otherwise or until you revoke your consent. If, at any time, you no longer wish to participate in householding and would prefer to receive a separate proxy statement or notice, or if your household is receiving multiple copies of these documents and you wish to request that future deliveries be limited to a single copy, please notify your broker. You can request prompt delivery of a copy of this joint proxy statement/prospectus by writing to: Corporate Secretary, Versum Materials, Inc., 8555 South River Parkway, Tempe, Arizona 85284 or by calling (602) 282-1000.

**Tabulation of Votes**

The Versum board of directors will appoint an independent inspector of election for the Versum special meeting. The inspector of election will, among other matters, determine the number of shares of Versum common stock represented at the Versum special meeting to confirm the existence of a quorum, determine the validity of all proxies and ballots and certify the results of voting on all proposals submitted to Versum stockholders.

**Adjournments**

If a quorum is present at the Versum special meeting but there are not sufficient votes at the time of the Versum special meeting to approve the Versum merger agreement proposal, then Versum stockholders may be asked to vote on the Versum adjournment proposal.

At any subsequent reconvening of the Versum special meeting at which a quorum is present, any business may be transacted that might have been transacted at the original meeting and all proxies will be voted in the same manner as they would have been voted at the original convening of the Versum special meeting, except for any proxies that have been effectively revoked or withdrawn prior to the time the proxy is voted at the reconvened meeting.

Table of Contents

**Assistance**

If you need assistance voting or in completing your proxy card or have questions regarding the Versum special meeting, please contact Innisfree, the proxy solicitation agent for Versum:

Innisfree M&A Incorporated

501 Madison Avenue, 20th Floor

New York, New York 10022

Stockholders may call toll free: (877) 456-3463

Banks and brokers may call collect: (212) 750-5833

**VERSUM STOCKHOLDERS SHOULD CAREFULLY READ THIS JOINT PROXY STATEMENT/PROSPECTUS IN ITS ENTIRETY FOR MORE DETAILED INFORMATION CONCERNING THE MERGER AGREEMENT AND THE MERGER. IN PARTICULAR, VERSUM STOCKHOLDERS ARE DIRECTED TO THE MERGER AGREEMENT, WHICH IS ATTACHED AS ANNEX A HERETO.**

Table of Contents

## VERSUM PROPOSAL 1: ADOPTION OF THE MERGER AGREEMENT

This joint proxy statement/prospectus is being furnished to you as a stockholder of Versum as part of the solicitation of proxies by the Versum board of directors for use at the Versum special meeting to consider and vote upon a proposal to adopt the merger agreement and approve the transactions contemplated thereby, including the merger, which is attached as Annex A to this joint proxy statement/prospectus.

The Versum board of directors, after due and careful discussion and consideration, unanimously approved and declared advisable the merger agreement, the merger and the other transactions contemplated by the merger agreement and determined that the merger agreement, the merger and the other transactions contemplated by the merger agreement are fair to and in the best interests of Versum and its stockholders.

The Versum board of directors accordingly unanimously recommends that Versum stockholders adopt the merger agreement, as disclosed in this joint proxy statement/prospectus and particularly the related narrative disclosures in the sections of this joint proxy statement/prospectus entitled **The Merger** beginning on page 80 and **The Merger Agreement** beginning on page 127 and as attached as Annex A to this joint proxy statement/prospectus.

The merger between Versum and Entegris cannot be completed without the affirmative vote of a majority of the outstanding shares of Versum common stock entitled to vote thereon. A failure to vote, a broker non-vote or an abstention will have the same effect as a vote **AGAINST** the proposal to adopt the merger agreement.

**IF YOU ARE A VERSUM STOCKHOLDER, THE VERSUM BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT YOU VOTE FOR THE VERSUM MERGER AGREEMENT PROPOSAL (VERSUM PROPOSAL 1)**

Table of Contents

## VERSUM PROPOSAL 2: ADVISORY (NON-BINDING) VOTE ON MERGER-RELATED COMPENSATION FOR NAMED EXECUTIVE OFFICERS

Pursuant to Section 14A of the Exchange Act and Rule 14a-21(c) thereunder, Versum is seeking a non-binding, advisory stockholder approval of the compensation of Versum s named executive officers that is based on or otherwise relates to the merger as disclosed in the section entitled **Interests of Versum s Directors and Executive Officers in the Merger Quantification of Payments and Benefits to Versum s Named Executive Officers Golden Parachute Compensation** beginning on page 179. The Versum compensation proposal gives Versum stockholders the opportunity to express their views on the merger-related compensation of Versum s named executive officers.

Accordingly, Versum is asking Versum stockholders to vote **FOR** the adoption of the following resolution, on a non-binding, advisory basis:

RESOLVED, that the compensation that will or may be paid or become payable to Versum s named executive officers, in connection with the merger, and the agreements or understandings pursuant to which such compensation will or may be paid or become payable, in each case as disclosed pursuant to Item 402(t) of Regulation S-K in **Interests of Versum s Directors and Executive Officers in the Merger Quantification of Payments and Benefits to Versum s Named Executive Officers Golden Parachute Compensation** are hereby APPROVED.

The vote on the advisory compensation proposal is a vote separate and apart from the vote to adopt the merger agreement. Accordingly, if you are a Versum stockholder, you may vote to approve the Versum merger agreement proposal, and vote not to approve the Versum compensation proposal, and vice versa. If the merger is completed, the merger-related compensation may be paid to Versum s named executive officers to the extent payable in accordance with the terms of the compensation agreements and arrangements even if Versum stockholders fail to approve the advisory vote regarding merger-related compensation.

The affirmative vote of a majority of the votes cast at the Versum special meeting on the Versum compensation proposal is required to approve the Versum compensation proposal (meaning the number of votes cast at the Versum special meeting **FOR** the Versum compensation proposal must exceed votes cast **AGAINST** in order for the Versum compensation proposal to be approved). A failure to vote, a broker non-vote or an abstention will have no effect on the outcome of the Versum compensation proposal.

**The Versum board of directors unanimously recommends a vote FOR the advisory compensation proposal.**

**IF YOU ARE A VERSUM STOCKHOLDER, THE VERSUM BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT YOU VOTE FOR THE VERSUM COMPENSATION PROPOSAL**

**(VERSUM PROPOSAL 2)**

Table of Contents

## VERSUM PROPOSAL 3: ADJOURNMENT OF THE VERSUM SPECIAL MEETING

The Versum special meeting may be adjourned to another time and place if necessary to permit solicitation of additional proxies if there are not sufficient votes to approve the Versum merger agreement proposal or to ensure that any supplement or amendment to this joint proxy statement/prospectus is timely provided to Versum stockholders.

Versum is asking its stockholders to authorize the holder of any proxy solicited by the Versum board of directors to vote in favor of any adjournment of the Versum special meeting to solicit additional proxies if there are not sufficient votes to approve the Versum merger agreement proposal or to ensure that any supplement or amendment to this joint proxy statement/prospectus is timely provided to Versum stockholders.

**The Versum board of directors unanimously recommends that Versum stockholders approve the proposal to adjourn the Versum special meeting, if necessary.**

Whether or not a quorum is present, the affirmative vote of a majority of the votes entitled to be cast who are present in person or represented by proxy at the Versum special meeting on the Versum adjournment proposal is required to approve the Versum adjournment proposal. An abstention will have the same effect as a vote **AGAINST** the Versum adjournment proposal, while a broker non-vote or other failure to vote will have no effect on the outcome of the Versum adjournment proposal.

Under the Versum bylaws, the chairman of the Versum special meeting may adjourn the Versum special meeting regardless of the outcome of the Versum adjournment proposal.

**IF YOU ARE A VERSUM STOCKHOLDER, THE VERSUM BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT YOU VOTE FOR THE VERSUM ADJOURNMENT PROPOSAL**

**(VERSUM PROPOSAL 3)**

Table of Contents

## THE MERGER

*The following is a description of material aspects of the merger. While Entegris and Versum believe that the following description covers the material terms of the merger, the description may not contain all of the information that is important to you. You are encouraged to read carefully this entire joint proxy statement/prospectus, including the text of the merger agreement attached to this joint proxy statement/prospectus as Annex A, for a more complete understanding of the merger. In addition, important business and financial information about each of Entegris and Versum is included in or incorporated by reference into this joint proxy statement/prospectus. See* ***Where You Can Find More Information*** *beginning on page 213.*

### General

Entegris and Versum have entered into the merger agreement, which provides for the merger of Versum with and into Entegris. As a result of the merger, the separate existence of Versum will cease and Entegris will continue its existence under the laws of the State of Delaware as the surviving corporation. The combined company will be named Entegris, Inc.

### Exchange Ratio

At the effective time, each share of Versum common stock (other than Versum excluded shares) will be converted into the right to receive 1.120 shares of Entegris common stock.

No fractional shares of Entegris common stock will be issued upon the conversion of shares of Versum common stock pursuant to the merger agreement. All fractional shares of Entegris common stock that a holder of shares of Versum common stock would be otherwise entitled to receive pursuant to the merger agreement will be aggregated, and such holder will be entitled to receive a cash payment, without interest, in lieu of any such fractional share, equal to the product (rounded to the nearest whole cent) of (a) the amount of such fractional share interest in a share of Entegris common stock to which such holder would be entitled pursuant to the merger agreement and (b) an amount equal to the average of the daily volume weighted average price per share of Entegris common stock on NASDAQ calculated for the ten consecutive trading days ending on the second full trading day immediately prior to (and not including) the closing date.

The exchange ratio is fixed, which means that it will not change between now and the date of the merger, regardless of whether the market price of either Entegris common stock or Versum common stock changes. Therefore, the value of the merger consideration will depend on the market price of Entegris common stock at the effective time. The market price of Entegris common stock has fluctuated since the date of the announcement of the merger agreement and will continue to fluctuate from the date of this joint proxy statement/prospectus to the date of the special meetings, the date the merger is completed and thereafter. The market price of Entegris common stock, when received by Versum stockholders after the merger is completed, could be greater than, less than or the same as the market price of Entegris common stock on the date of this joint proxy statement/prospectus or at the time of the special meeting. Accordingly, you should obtain current market quotations for Entegris common stock and Versum common stock before deciding how to vote with respect to any of the proposals described in this joint proxy statement/prospectus. Entegris common stock is traded on NASDAQ under the symbol ENTG and Versum common stock is traded on the NYSE under the symbol VSM.

### Background of the Merger

The Versum board of directors and Versum senior management regularly review and assess Versum s operations and financial performance, industry conditions and related developments as they may impact Versum s long-term strategic plans and objectives. As part of this ongoing evaluation, following Versum s spin-off from Air Products in 2016, the Versum board of directors, together with Versum s senior management team, has from time to time considered various potential financial and strategic opportunities to enhance

stockholder value, including the possibility of a combination with Entegris. Versum s senior management and the Versum board of directors were therefore generally familiar with Entegris, its business and its management team, and believed that a potential combination of the two companies on appropriate terms and at the right time could be an opportunity to enhance stockholder value.

In furtherance of Versum s consideration of its strategic direction, Versum has periodically consulted with Lazard over the years, including without any formal engagements, for a number of reasons that include Lazard s experience and expertise as a financial advisor in a wide variety of transactions and its familiarity with Versum s business.

The Entegris board of directors regularly evaluates the strategic direction of Entegris with a view towards strengthening Entegris business and enhancing stockholder value. As part of that evaluation, Entegris has considered, from time to time, various potential strategic transactions, including potential strategic alliances and other commercial arrangements, strategic mergers, acquisitions and divestitures, and other business combinations, including, prior to and following Versum s spin off from Air Products in 2016, the possibility of a combination with Versum. As a result, the Entegris senior management and the Entegris board of directors were generally familiar with Versum, its management and its businesses, and believed that a combination of the two companies could be a value enhancing opportunity for the stockholders of both companies at the right time and on appropriate terms.

On December 8, 2018, Guillermo Novo, Versum s president and chief executive officer, and Bertrand Loy, Entegris president and chief executive officer, met, at Mr. Novo s invitation, in Tokyo, Japan. During this meeting, Mr. Novo raised the possibility of an all-stock merger of equals between Versum and Entegris. The two executives discussed generally the complementary nature and size of the two companies and some of the potential benefits and challenges that could result from a combination. No specific transaction terms were proposed at this meeting, but the parties discussed that the terms of the transaction and the governance of the combined company should generally be consistent with a merger of equals.

Following the December 8, 2018 meeting, Messrs. Novo and Loy spoke telephonically on two occasions to discuss the logistics of potential subsequent meetings.

On December 18, 2018, the Entegris board of directors met telephonically, together with representatives of Morgan Stanley, Entegris financial advisor, to discuss the potential transaction with Versum, and the potential benefits and challenges of such a transaction. The Entegris board of directors authorized Mr. Loy to continue to engage with Versum to determine if a transaction could be achieved on acceptable terms.

On December 20, 2018, Mr. Loy contacted Mr. Novo to express Entegris interest in continuing to discuss a potential merger transaction. Mr. Loy and Mr. Novo discussed the signing of a confidentiality agreement and beginning mutual due diligence and confirmed a meeting including Mr. Novo and Seifi Ghasemi, the chairman of the Versum board of directors, and Mr. Loy and Paul Olson, the chairman of the Entegris board of directors, in New York City on January 4, 2019.

On January 3, 2019, the parties entered into a mutual non-disclosure and standstill agreement allowing for confidential negotiations and due diligence investigations.

On January 4, 2019, Messrs. Novo, Ghasemi, Loy and Olson met in New York City to continue to discuss a potential merger. At the meeting, the parties discussed Versum s and Entegris respective business philosophies, the parties mutual desire for an all-stock merger, potential transaction structures and potential governance and management of the combined company that would result from a merger. During this meeting, Messrs. Loy and Olson proposed that Mr. Ghasemi would serve as the chairman of the board of the combined company, that Mr. Loy would serve as the

chief executive officer of the combined company and that Gregory Graves, Entegris chief financial officer, would serve as the chief financial officer of the combined company. Both parties indicated

a belief that the combined company would benefit from significant potential synergies, increased scale and a strong balance sheet, and a strengthened strategic position. The parties agreed, pending authorization from the Versum board of directors, to commence due diligence with mutual management presentations to take place on January 9, 2019, with a potential second meeting among Messrs. Novo, Ghasemi, Loy and Olson to take place on January 17, 2019 in Scottsdale, Arizona, at which the parties would discuss key proposed terms for the potential transaction, including the proposed exchange ratio.

On January 5, 2019, Messrs. Novo and Loy traveled together to attend a conference in northern California. During this time, Mr. Novo and Mr. Loy discussed their respective management and organizational philosophies and business models, and identified areas in which the combined company could grow and reach new customers and also compared the cultures of the respective companies. No specific transaction terms were discussed during these conversations.

On January 7, 2019, the Versum board of directors met via a telephonic meeting, at which representatives of Versum s senior management, Lazard and Simpson Thacher & Bartlett LLP, Versum s legal counsel, which is referred to as Simpson Thacher, were present. Mr. Novo updated the Versum board of directors on the recent discussions with representatives of Entegris, including the January 4 meeting among Messrs. Novo, Ghasemi, Loy and Olson and the fact that Entegris and Versum had entered into a mutual non-disclosure and standstill agreement in advance of such January 4 meeting. Representatives of Lazard reviewed with the Versum board of directors Lazard s preliminary financial view regarding a potential transaction with Entegris, and the Versum board of directors discussed the possible risks, benefits and potential terms of a potential transaction with representatives of Versum s senior management, Lazard and Simpson Thacher. A representative of Simpson Thacher then reviewed with the Versum board of directors their fiduciary duties under applicable law. The Versum board of directors authorized and instructed Messrs. Ghasemi and Novo to proceed with the proposed subsequent meeting with representatives of Entegris, and instructed Versum s senior management, Lazard and Simpson Thacher to proceed with due diligence.

On January 9, 2019, Mr. Novo, George Bitto, Versum s chief financial officer, and other members of Versum s senior management team met in Menlo Park, California with Messrs. Loy and Graves, and other members of Entegris senior management team, to discuss Versum s and Entegris respective businesses, the potential synergies that might be achieved in the proposed combination and related matters. Representatives of each party s financial advisor were in attendance. No specific transaction terms were discussed at this meeting. From January 9 through January 27, 2019, the parties engaged in mutual due diligence investigations of one another.

On January 12, 2019, at a telephonic meeting of the Versum board of directors, at which representatives of Versum s senior management, Lazard and Simpson Thacher were present, Mr. Novo updated the Versum board of directors on further developments with respect to the discussions with Entegris, including that the parties had discussed an exchange of their respective management team s financial projections. The Versum board of directors then discussed potential terms of a potential transaction with Entegris, including preliminary views on trading multiples, the potential exchange ratio and certain social issues. The Versum board of directors subsequently authorized Messrs. Novo and Ghasemi to negotiate the potential exchange ratio with representatives of Entegris based on historical trading multiple averages. Representatives of Versum s senior management then reviewed with the Versum board of directors Versum management s view on Versum s financial projections, including macro forecasts, growth drivers and other assumptions, and including an update on first quarter performance for fiscal year 2019. Following such presentation, a representative of Simpson Thacher reviewed with the Versum board of directors their fiduciary duties under applicable law.

On January 15, 2019, representatives of Lazard and Morgan Stanley spoke telephonically to discuss potential valuation methodologies with respect to a potential transaction between Entegris and Versum, in preparation for a meeting of Messrs. Novo, Ghasemi, Loy and Olson that had been scheduled for January 17, 2019.

82

Table of Contents

On January 16, 2019, the Entegris board of directors met telephonically, together with members of Entegris senior management and representatives of Morgan Stanley and Wachtell, Lipton, Rosen & Katz, counsel to Entegris, to receive an update on the status of the proposed transaction and to provide guidance to Messrs. Olson and Loy in advance of their meeting with Messrs. Novo and Ghasemi, Versum s chief executive officer and chairman, respectively, scheduled for January 17, 2019. The directors authorized Mr. Loy to propose to Messrs. Novo and Ghasemi an exchange ratio of 1.097, meaning Versum stockholders would receive 1.097 shares of Entegris common stock for each share of Versum common stock held, which was the average of the exchange ratios implied by comparing the six calendar-month and one calendar-year volume weighted average trading prices of the two companies as of January 16, 2019, and authorized Mr. Loy to negotiate the exchange ratio further should the proposed 1.097 ratio not prove to be acceptable to Versum.

Based on the Entegris board of directors guidance, Entegris senior management determined to propose to Versum that the transaction be structured as an all-stock merger that would be intended to be tax-free to the stockholders of both companies, at an exchange ratio of 1.097 Entegris shares for each outstanding Versum share. On January 17, 2019, prior to the meeting of Messrs. Ghasemi, Novo, Loy and Olson, representatives of Morgan Stanley provided representatives of Lazard with a summary of Entegris proposed key terms, including, as had been previously discussed between the parties, that Mr. Ghasemi serve as chairman of the board of directors of the combined company, that Mr. Loy and Mr. Graves serve as the chief executive officer and chief financial officer of the combined company, respectively, and that the board of directors of the combined company include nine members, with four to be designated by Versum, four to be designated by Entegris, in addition to Mr. Loy as chief executive officer of the combined company.

Later that day, on January 17, 2019, Messrs. Novo, Ghasemi, Loy and Olson met in Scottsdale to discuss the potential transaction and certain key terms. The parties confirmed their continued belief that a merger of the two companies would be beneficial to both Entegris, Versum and their respective stockholders, and reached agreement, subject in both cases to board approval, as to certain terms regarding the governance of the combined company. After negotiation during the meeting, the participants agreed to recommend to their respective boards of directors an exchange ratio of 1.120 shares of Entegris common stock to be exchanged for each share of Versum common stock. The parties determined to proceed expeditiously to negotiate definitive transaction agreements and to complete due diligence, subject to further review and approval by the Entegris board of directors and the Versum board of directors.

On January 18, 2019, a meeting of the Versum board of directors, at which representatives of Versum s senior management, Lazard, Simpson Thacher and Skadden, Arps, Slate, Meagher & Flom LLP, Versum s antitrust counsel, which is referred to as Skadden (telephonically), were present, was held in Scottsdale, Arizona. At this meeting, Mr. Ghasemi provided the Versum board of directors with an update on the ongoing discussions and negotiations regarding the potential transaction with Entegris, including the proposed exchange ratio of 1.120 discussed by the parties on the previous day, and certain governance terms. Mr. Bitto then presented to the Versum board of directors an update on Versum s financial performance in the first quarter of 2019 and discussion ensued. Following discussion, a representative of Simpson Thacher reviewed with the Versum board of directors their fiduciary duties under applicable law. Subsequently, representatives of Lazard reviewed with the Versum board of directors Lazard s preliminary financial analysis of a potential transaction with Entegris. Members of the Versum board of directors then discussed with representatives of Versum senior management, Lazard and Simpson Thacher the due diligence process and the material terms of a merger agreement with Entegris, and representatives of Skadden reviewed with the Versum board of directors Skadden s preliminary analysis of certain regulatory aspects of the proposed transaction.

On January 19, 2019, at the instruction of the Versum board of directors, Simpson Thacher provided an initial draft of a merger agreement to Wachtell Lipton.

From January 19 through January 27, 2019, Entegris, Versum and their respective financial and legal advisors continued to conduct due diligence on each other and the parties negotiated the terms of the merger

Table of Contents

agreement and ancillary documents and confirmed that Mr. Ghasemi would serve as the chairman of the board of the combined company, Mr. Loy would serve as the chief executive officer of the combined company, Mr. Graves would serve as the chief financial officer of the combined company and Michael Valente, the general counsel of Versum, would serve as the general counsel of the combined company.

On January 24, 2019, at a telephonic meeting of the Versum board of directors, at which representatives of Versum s senior management, Lazard and Simpson Thacher were present, Messrs. Novo and Ghasemi updated the Versum board of directors on the status of the discussions with Entegris, the due diligence process, and the negotiations concerning material provisions of the merger agreement. A representative of Simpson Thacher then reviewed with the Versum board of directors their fiduciary duties under applicable law. Subsequently, representatives of Lazard reviewed with the Versum board of directors Lazard s updated financial analysis of a potential transaction with Entegris based upon the proposed exchange ratio. Representatives of Simpson Thacher next discussed the revised merger agreement received from Entegris counsel, including certain remaining open issues. Mr. Novo then reviewed with the Versum board of directors the proposed communications plan with respect to the announcement of the potential transaction.

On January 25, 2019, the Entegris board of directors met in Boston, together with members of Entegris senior management and representatives of Morgan Stanley and Wachtell Lipton, to discuss and deliberate on the proposed combination of Entegris and Versum, and to receive presentations from Entegris senior management and advisors. Mr. Loy and representatives of Morgan Stanley and Wachtell Lipton briefed the directors on the status of negotiations with Versum, and members of Entegris senior management reviewed the results of Entegris business, synergy potential and due diligence review of Versum. Representatives of Morgan Stanley provided an updated preliminary financial analysis with respect to the potential transaction. A representative of Wachtell Lipton reviewed the directors fiduciary duties and presented a detailed summary of the terms of the draft merger agreement and proposed financing commitment related to the transaction. After discussion among the directors, including as to the matters described in the section entitled **Recommendation of the Entegris Board of Directors; Entegris Reasons for the Merger** beginning on page 87, it was the unanimous view of the Entegris board of directors that Entegris should seek to finalize the merger agreement and related documents with Versum, subject to final review and approval by the Entegris board of directors.

Between January 25 and January 27, 2019, Entegris and Versum and their respective legal advisors continued to negotiate the merger agreement and related documents and to finalize due diligence. On January 26 and 27, 2019, Messrs. Loy, Graves, Novo and Ghasemi and certain representatives of the parties respective financial and communications advisors met in person at the offices of Wachtell Lipton to plan for the public announcement of the transaction, subject to approval of the transaction by the parties respective boards of directors.

In the afternoon of January 27, 2019, the Entegris board of directors met telephonically, together with members of Entegris senior management and representatives of Morgan Stanley and Wachtell Lipton. Mr. Loy and a representative of Wachtell Lipton provided an update on developments since the previous meeting of the Entegris board of directors. The representatives of Wachtell Lipton summarized the minimal changes to the draft merger agreement since the January 25 meeting of the Entegris board of directors, and representatives of Morgan Stanley provided directors with its financial analysis with respect to the potential transaction with Versum. Morgan Stanley rendered for the benefit of the Entegris board of directors its oral opinion, subsequently confirmed in writing, on January 27, 2019 that as of such date and based upon and subject to the various assumptions made, procedures followed, matters considered, and qualifications and limitations on the scope of the review undertaken by Morgan Stanley as set forth in the written opinion, the exchange ratio pursuant to the merger agreement was fair from a financial point of view to Entegris. See the section entitled **Opinion of Entegris Financial Advisor** beginning on page 96 for more information.

After discussions, including as to the matters discussed below in the section entitled **Recommendation of the Entegris Board of Directors; Entegris Reasons for the Merger** beginning on page 87 the Entegris

Table of Contents

board of directors, by unanimous vote of all of its members, (1) determined that the merger agreement and the transactions contemplated thereby, including but not limited to the merger, the share issuance and the adoption of the amended and restated certificate of incorporation on the terms set forth in the merger agreement were fair to, and in the best interests of, Entegris and the holders of shares of Entegris common stock, (2) approved and declared advisable the merger agreement and the transactions contemplated thereby, including the merger, on the terms and subject to the conditions set forth in the merger agreement, (3) directed that the share issuance and the merger agreement be submitted to the holders of shares of Entegris common stock for their approval and adoption, and the amended and restated certificate of incorporation be submitted to the holders of shares of Entegris common stock for their adoption and (4) resolved to recommend that the holders of shares of Entegris common stock vote in favor of the adoption of the merger agreement and the approval of the share issuance and in favor of the adoption of the amended and restated certificate of incorporation.

On January 27, 2019, a meeting of the Versum board of directors, at which representatives of Versum s senior management, Lazard (telephonically) and Simpson Thacher (telephonically) were present, was held in Scottsdale, Arizona. Messrs. Ghasemi and Novo participated telephonically from Lazard s offices in New York. Mr. Ghasemi updated the Versum board of directors on the status of the negotiations with Entegris, including that the parties had substantially finalized the merger agreement and resolved all significant open substantive issues with respect to the terms of the potential transaction. Mr. Ghasemi reported that the Entegris board of directors had met earlier on January 27, 2019 and had unanimously resolved to approve the potential transaction. A representative of Simpson Thacher then reviewed with the Versum board of directors their fiduciary duties under applicable law and the terms of the draft merger agreement. Representatives of Lazard then reviewed with the Versum board of directors Lazard s financial analysis of the potential transaction with Entegris. Following further discussion, representatives of Lazard then delivered to the Versum board of directors Lazard s oral opinion, subsequently confirmed in writing by delivery of Lazard s opinion dated as of the same date, to the effect that, as of such date, and based upon and subject to the assumptions, procedures, factors, qualifications and limitations set forth in Lazard s written opinion, the exchange ratio of 1.120 shares of Entegris common stock per share of Versum common stock was fair, from a financial point of view, to the Versum stockholders (other than the holders of Versum excluded shares), as further described in the section entitled **Opinion of Versum s Financial Advisor** beginning on page 107.

After discussions, including as to the matters discussed below in the section entitled **Recommendation of the Versum Board of Directors; Versum s Reasons for the Merger** beginning on page 91, the Versum board of directors unanimously determined that the merger agreement, the merger and the other transactions contemplated by the merger agreement were fair to, and in the best interests of, Versum and its stockholders, approved and declared advisable the merger agreement, the merger and the other transactions contemplated by the merger agreement, directed that the merger agreement be submitted for adoption at a meeting of Versum stockholders and resolved to recommend that the Versum stockholders vote in favor of the adoption of the merger agreement.

Following the approval of the merger and the merger agreement by the Entegris board of directors and the Versum board of directors, Entegris and Versum finalized and executed the merger agreement on January 27, 2019, and in the morning of January 28, 2019, prior to the opening of trading, issued a joint press release announcing the execution of the merger agreement.

On February 27, 2019, Dr. Stefan Oschmann, Chief Executive Officer of Merck, placed a call to Mr. Ghasemi to inform him of Merck s interest in acquiring Versum. Mr. Ghasemi responded that he would discuss the call with the members of the Versum board of directors. Within minutes after such call, on February 27, 2019, Merck sent a letter to the Versum board of directors setting forth a non-binding unsolicited proposal to acquire Versum for $48.00 per share in cash, which is referred to as the Merck proposal.

Later that morning on February 27, 2019, Versum issued a press release that acknowledged receipt of the Merck proposal and stated that Versum continues to believe in the strategic and financial rationale of the proposed merger of equals with Entegris and that the Versum board of directors intends to thoroughly review the Merck proposal consistent with its fiduciary duties.

Table of Contents

On February 27, 2019, the Versum board of directors met telephonically, together with members of Versum s senior management and representatives of Lazard and Simpson Thacher, to discuss next steps in connection with the review of the Merck proposal. Also on February 27, 2019, Entegris issued a press release in response to the Merck proposal, stating that Entegris believes the merger of Versum and Entegris will deliver meaningful value to Versum stockholders and Entegris stockholders.

On February 27, 2019, the Entegris board of directors held an update call, together with members of Entegris senior management and representatives of Morgan Stanley and Wachtell Lipton, to discuss developments as well as potential public disclosure of additional potential synergies identified during ongoing integration-planning discussions between Entegris and Versum.

On February 28, 2019, the Versum board of directors met via a telephonic meeting, at which representatives of Versum s senior management, Lazard and Simpson Thacher were present. Following discussion of the Merck proposal and, in light of recent unusual trading activity in the stock of Versum, the Versum board of directors resolved to adopt a limited duration shareholder rights plan, which the Versum board of directors had previously reviewed with outside counsel and which was available to be implemented quickly in response to a specific threat to corporate policymaking, such as the decision to pursue the Entegris merger. Later on February 28, 2019, the Versum board of directors authorized and declared a dividend of one preferred share purchase right for each outstanding share of Versum common stock, payable to Versum stockholders of record on March 11, 2019, pursuant to the Versum rights plan (as defined in the section entitled **Comparison of Stockholders Rights Stockholder Rights Plans** beginning on page 190).

On March 1, 2019, the Versum board of directors met telephonically, together with members of Versum s senior management and representatives of Lazard and Simpson Thacher, to discuss the Merck proposal. Representatives of Lazard reviewed with the Versum board of directors Lazard s financial analysis of the Merck proposal. Members of the Versum board of directors then discussed the terms of the Merck proposal and the merger agreement with Entegris, consulted with representatives of Versum senior management, Lazard and Simpson Thacher, and concluded, after careful review and consideration, that the Merck proposal was not a superior proposal for purposes of the merger agreement with Entegris. Later that day on March 1, 2019, Versum issued a press release announcing the determination by the Versum board of directors, and stating that Versum remains committed to completing the merger with Entegris, which the Versum board of directors believes will create significant long-term value, and is in the best interests of the Versum stockholders.

On March 2, 2019, the Versum board of directors met telephonically with members of Versum s senior management and representatives of Simpson Thacher to discuss the desirability of obtaining advice from an additional financial advisor in connection the Merck proposal. Following discussion, the Versum board of directors instructed Versum s senior management to seek to engage Citigroup Global Markets, which is referred to as Citi, to advise the Versum board of directors with respect to a financial analysis of the Merck proposal. Citi was selected on the basis of its experience in the industries in which Versum operates and its familiarity with Versum.

On March 4, 2019, representatives of Merck and its financial advisor proposed to arrange a telephone call between Dr. Oschmann of Merck and Mr. Ghasemi, which Mr. Ghasemi declined following consultation with members of Versum s senior management and representatives of Simpson Thacher, consistent with the terms of the merger agreement.

On March 5, 2019, Merck issued an open letter to the Versum stockholders, stating that Merck remains fully committed to pursuing the Merck proposal and requesting that the Versum board of directors engage with Merck.

On March 6, 2019, the Versum board of directors met telephonically, together with members of Versum s senior management and representatives of Citi and Simpson Thacher, to discuss the Merck proposal. At the meeting, representatives of Versum s senior management updated the Versum board of directors on the status of

Table of Contents

the integration planning meetings between the management teams of Versum and Entegris and the identification of potential additional synergies resulting from the merger. Representatives of Citi presented to the Versum board of directors Citi s preliminary financial analysis. Following discussion of the Merck proposal and the merger with representatives of Versum s senior management, Citi and Simpson Thacher, the Versum board of directors reaffirmed, after careful review and consideration, its previous determination that the Merck proposal was not a superior proposal for purposes of the merger agreement with Entegris.

On March 8, 2019, Versum and Entegris issued a joint open letter to Versum stockholders and Entegris stockholders, reiterating the value-creation potential and strategic benefits of the merger and announcing additional expected synergies resulting from the merger. See the section entitled **Certain Estimated Synergies** beginning on page 121 for a summary of such additional expected synergies.

Also on March 8, 2019, the Versum board of directors issued a statement reiterating its determination that the Merck proposal was not a superior proposal for purposes of the merger agreement with Entegris, and reaffirming its commitment to completing the merger with Entegris.

On March 11, 2019, Entegris and Versum announced the expiration of the waiting period under the Hart-Scott-Rodino Antitrust Improvements Act of 1976, as amended, in connection with the merger, which occurred at 11:59 p.m. EST on March 8, 2019 and satisfied one of the conditions to closing of the merger.

On March 12, 2019, Merck filed a preliminary proxy statement with the SEC with respect to the solicitation of proxies by Merck in opposition to the merger.

On March 14, 2019, Versum announced that it had entered into an amendment to the Versum rights plan to remove references to the defined concept of Acting in Concert from the Versum rights plan.

**Recommendation of the Entegris Board of Directors; Entegris Reasons for the Merger**

At a special meeting held on January 27, 2019, the Entegris board of directors unanimously: (1) determined that the merger agreement and the transactions contemplated thereby, including but not limited to the merger, the share issuance and the adoption of the amended and restated certificate of incorporation of Entegris on the terms set forth in the merger agreement, are fair to, and in the best interests of, Entegris and the holders of shares of Entegris common stock; (2) approved and declared advisable the merger agreement and the transactions contemplated thereby, including the merger, on the terms and subject to the conditions set forth in the merger agreement; (3) directed that the share issuance and the merger agreement be submitted to the holders of shares of Entegris common stock for their approval and adoption, and the amended and restated certificate of incorporation of Entegris be submitted to the holders of shares of Entegris common stock for their adoption; and (4) resolved to recommend that the holders of shares of Entegris common stock vote in favor of the adoption of the merger agreement, including the approval of the share issuance, and the adoption of the amended and restated certificate of incorporation of Entegris. **Accordingly, the Entegris board of directors unanimously recommends that Entegris stockholders vote FOR the Entegris merger agreement proposal, FOR the Entegris charter proposal, FOR the Entegris compensation proposal and FOR the Entegris adjournment proposal.**

Table of Contents

In reaching its determinations and recommendations, the Entegris board of directors consulted with Entegris senior management and its outside legal and financial advisors, and considered a number of factors, including the following factors that weighed in favor of the merger.

*Benefits of a Combined Company*. The belief of the Entegris board of directors that the combined company would be well positioned to achieve future growth and generate additional returns for Entegris stockholders, including due to:

- the Entegris board of directors positive view of the ability of the combined company to achieve scale with a well-balanced and complementary portfolio of products, solutions and services in high-growth areas;

- the Entegris board of directors view that the cultures of Entegris and Versum are aligned, including shared values and commitment to integrity, operational excellence, customer satisfaction, safety, innovation and stockholder value;

- the expectation that the combined company will have increased financial strength and flexibility, with an estimated $3 billion in revenue and approximately $1 billion in adjusted EBITDA (inclusive of annualized synergies) on a pro forma basis for calendar year 2018;

- the expectation that the combined company will be well-capitalized with a strong balance sheet and a pro forma net leverage ratio of 1.1x, based on adjusted EBITDA (inclusive of annualized synergies) over the twelve months ending December 31, 2018 and on cash and debt balances as of December 31, 2018, as well as flexibility to invest, make acquisitions, and return capital to stockholders while enjoying greater earnings stability and margin growth potential;

- the expectation that the combined company would generate approximately $75 million of annualized cost synergies by the end of the first year following completion of the merger, including synergies related to selling, general and administrative expenses and supply chain synergies;

- the expectation that the combined company will realize revenue growth synergies from cross-selling and product co-optimization, with further potential synergies relating to capital expenditures, such as the optimization of manufacturing and laboratory expansions and improvements to fleet management;

- the expectation that, because of the companies highly complementary portfolio of products, solutions and services, the combined company will be able to provide enhanced offerings to customers across the entire semiconductor manufacturing process, be better able to address customers evolving needs for new materials as device architectures become more complex and be able to capitalize on the increasing demand for purity;

the expectation that the combined company will be better able to accelerate the development and time to market of new technologies;

the Entegris board of directors positive view of the ability of the combined company to expand its local presence in key geographies to better support a global customer base due to the combined company s broader scale; and

the expectation that the combined company s integrated global manufacturing network will be able to improve delivery times, drive operational efficiencies and lower costs.

Table of Contents

*Exchange Ratio and Merger Consideration*. The Entegris board of directors considered the relative favorability of the exchange ratio relative to the exchange ratios historically implied by the relative trading prices of Entegris and Versum common stock over various periods and relative to the current assessment of the valuation of each company and of the synergies and other benefits of the merger, in addition to:

the fact that, upon completion of the merger, Entegris stockholders will own 52.5% and former Versum stockholders will own 47.5% of the combined company (based on fully diluted shares outstanding of the combined company including exercisable options only); and

the oral opinion of Morgan Stanley, subsequently confirmed in writing, rendered to the Entegris board of directors that, as of January 27, 2019, and based upon and subject to the various assumptions made, procedures followed, matters considered, and qualifications and limitations on the scope of the review undertaken by Morgan Stanley as set forth in the written opinion, the exchange ratio pursuant to the merger agreement was fair from a financial point of view to Entegris. Such opinion is more fully described below under the section entitled **Opinion of Entegris Financial Advisor** beginning on page 96, and the full text of the written opinion of Morgan Stanley, which is attached as Annex C to this joint proxy statement/prospectus.

*Governance Terms for the Combined Company*. The Entegris board of directors considered the structure of the transaction as a merger of equals and also considered the governance terms agreed between the parties and reflected in the merger agreement providing that:

the board of directors of the combined company will include five directors from Entegris, including the Entegris CEO, and four directors from Versum;

Messrs. Loy and Graves, Entegris current chief executive officer and current chief financial officer, will be, respectively, the chief executive officer and chief financial officer of the combined company following the merger; and

Mr. Ghasemi, the current chairman of the Versum board, will be the chairman of the board of the combined company following the merger. The Entegris board noted that Mr. Ghasemi has a strong reputation as a leader in the industry and in similar other industries.

*Other Factors Considered by the Entegris Board of Directors*. In addition to considering the factors described above, the Entegris board of directors considered the following additional factors that weighed in favor of the merger:

the past experience the Entegris management team has had in timely and effective corporate integration following significant combinations and acquisitions, including a prior merger of equals ;

historical information concerning Entegris and Versum s respective businesses, financial condition, results of operations, earnings, trading prices, technology positions, managements, competitive positions and prospects on a stand-alone basis and forecasted combined basis; and

the current and prospective business environment in which Entegris and Versum operate, including international, national and local economic conditions and the competitive and regulatory environment, and the likely effect of these factors on Entegris and the combined company.

*Terms of the Merger Agreement*. The Entegris board of directors considered that the terms of the merger agreement, taken as a whole, including the parties representations, warranties and covenants, and the circumstances under which the merger agreement may be terminated, in its belief, are reasonable. The Entegris board of directors also reviewed and considered the conditions to the completion of the merger, and concluded that while the completion of the merger is subject to various regulatory approvals, such approvals were likely to be satisfied on a timely basis.

Table of Contents

The Entegris board of directors weighed these advantages and opportunities against a number of potentially negative factors in its deliberations concerning the merger agreement and the merger, including:

- the risk that, because the exchange ratio under the merger agreement would not be adjusted for changes in the market price of Entegris common stock or Versum common stock, the then-current trading price of the shares of Entegris common stock to be issued to holders of shares of Versum common stock upon the consummation of the merger could be significantly higher than the trading price prevailing at the time the merger agreement was entered into;

- the risk that Versum s financial performance may not meet Entegris expectations;

- the potential challenges and difficulties in integrating the operations of Entegris and Versum and the risk that anticipated cost savings and operational efficiencies between the two companies, or other anticipated cost benefits of the merger, might not be realized or might take longer to realize than expected;

- the difficulties and management challenges inherent in completing the merger and integrating the businesses, operations and workforce of Versum with those of Entegris and the possibility of encountering difficulties in achieving expected revenue growth and other non-cost synergies;

- the possible diversion of management attention for an extended period of time during the pendency of the merger and, following closing, the integration of the two companies;

- the substantial costs to be incurred in connection with the merger, including those incurred regardless of whether the merger is consummated;

- the ability of the Versum board of directors, in certain circumstances, to terminate the merger agreement or change its recommendation that Versum stockholders approve the Versum merger agreement proposal;

- that Entegris would be required to pay to Versum a termination fee of $155 million in the event the Entegris board of directors were to terminate the merger agreement in order for Entegris to enter into a superior proposal, should one be made, or if the merger agreement were to be terminated by Versum in connection with a change in the recommendation by the Entegris board of directors to its stockholders with respect to approval of the merger agreement; and

- the risks of the type and nature described in the section entitled **Risk Factors** beginning on page 43 and the matters described in the section entitled **Cautionary Statement Regarding Forward-Looking Statements** beginning on page 41.

The Entegris board of directors considered all of these factors as a whole and, on balance, concluded that the potential benefits of the merger outweighed the risks and uncertainties of the merger.

In addition, the Entegris board of directors was aware of and considered the interests of its directors and executive officers that are different from, or in addition to, the interests of Entegris stockholders generally described in the section entitled **Interests of Entegris Directors and Executive Officers in the Merger** beginning on page 170.

The foregoing discussion of the information and factors that the Entegris board of directors considered is not intended to be exhaustive, but rather is meant to include the material factors that the Entegris board of directors considered. The Entegris board of directors collectively reached the conclusion to adopt the merger agreement and approve the amended and restated certificate of incorporation of Entegris, the merger and the other transactions contemplated by the merger agreement in light of the various factors described above and other factors that the members of the Entegris board of directors believed were appropriate. In view of the complexity and wide variety of factors, both positive and negative, that the Entegris board of directors considered in connection with its evaluation of the merger, the Entegris board of directors did not find it practical, and did not

Table of Contents

attempt, to quantify, rank or otherwise assign relative or specific weights or values to any of the factors it considered in reaching its decision and did not undertake to make any specific determination as to whether any particular factor, or any aspect of any particular factor, was favorable or unfavorable to the ultimate determination of the Entegris board of directors. In considering the factors discussed above, individual directors may have given different weights to different factors.

The foregoing description of Entegris consideration of the factors supporting the merger is forward-looking in nature. This information should be read in light of the factors discussed in the section entitled **Cautionary Statement Regarding Forward-Looking Statements** beginning on page 41.

**Recommendation of the Versum Board of Directors; Versum s Reasons for the Merger**

At a meeting held on January 27, 2018, the Versum board of directors unanimously:

- determined that the merger agreement, the merger and the other transactions contemplated by the merger agreement are fair to, and in the best interests of, Versum and its stockholders;
- approved and declared advisable the merger agreement, the merger and the other transactions contemplated by the merger agreement;
- directed the merger agreement be submitted for adoption at a meeting of Versum stockholders; and
- recommended that Versum stockholders vote in favor of the adoption of the merger agreement.

**ACCORDINGLY, THE VERSUM BOARD OF DIRECTORS HAS APPROVED THE MERGER AGREEMENT AND UNANIMOUSLY RECOMMENDS THAT VERSUM STOCKHOLDERS VOTE FOR THE PROPOSAL TO ADOPT THE MERGER AGREEMENT.**

In reaching its decision to approve and declare advisable the merger agreement, the merger and the other transactions contemplated by the merger agreement, the Versum board of directors, as described in the section entitled **Background of the Merger** beginning on page 80, held a number of meetings, consulted with Versum s senior management and its outside legal and financial advisors, Simpson Thacher and Lazard, respectively, and considered the business, assets and liabilities, results of operations, financial performance, strategic direction and prospects of Versum and Entegris. At its meeting held on January 27, 2018, after due consideration and consultation with Versum s senior management and outside legal and financial advisors, the Versum board of directors unanimously approved and declared advisable the merger agreement, the merger and the other transactions contemplated by the merger agreement and recommended that Versum stockholders vote in favor of the adoption of the merger agreement.

In making its determination, the Versum board of directors focused on a number of factors, including the following:

- the opportunity to combine two complementary businesses with complementary product and technology portfolios which would enhance the scale and scope of the combined company to create a leading materials

and chemicals supplier to the semiconductor and other high-tech industries that will bring customers enhanced technical capabilities;

the cultural alignment between Versum and Entegris, including shared values and commitment to integrity, operational excellence, customer satisfaction, innovation and stockholder value;

that Mr. Ghasemi will be the chairman of the board of directors of the combined company following the merger;

that Mr. Loy will become the chief executive officer of the combined company following the merger, and the Versum board of directors view of Mr. Loy s strong track record as chief executive officer of Entegris;

Table of Contents

the expectation that the combined company will have flexibility to invest, make acquisitions, and return capital to stockholders, while enjoying greater earnings stability and margin growth potential;

the importance of scale in the competitive market environments in which Versum and Entegris operate, and the potential for the merger to enhance the combined company s ability to compete effectively in those environments;

the expectation that the combined company would generate more than $75 million of annual cost synergies in manufacturing, logistics, procurement and selling, general and administrative expense rationalization within 12 months following the closing of the merger;

the expectation that the combined company will be well-capitalized with a strong balance sheet, a pro forma net leverage ratio of approximately 1.1x Adjusted EBITDA (inclusive of annualized cost synergies) and an estimated $3 billion in revenue;

the expectation that the combined company will realize revenue growth synergies from cross-selling opportunities, with further potential upside from capex and revenue synergies;

the fact that the exchange ratio, based on the closing price of the Versum common stock and the Entegris common stock as of January 25, 2019, the last trading day prior to the announcement of the merger agreement, represented an implied premium of approximately 10.8% to the closing price of the Versum common stock on January 25, 2019;

the opportunity to combine resources and expertise to better meet the evolving needs of customers of both companies;

the expectation that the combined company would have a diversified product and technology portfolio and an increased number of growth platforms within high-growth end-markets, and would be able to better collaborate with customers and accelerate the development of new technologies;

the Versum board of directors view of the combined company s ability to expand local presence in certain key geographies to better support a global customer base;

the expectation that the merger would enhance the resilience of the combined company s business model, improving predictability of earnings streams and mitigating potential downside risks;

the structure of the transaction as a merger of equals, including the governance terms in the merger agreement providing that:

the board of directors of the combined company will include four designees from each of Entegris and Versum and the chief executive officer of Entegris immediately prior to the effective time;

Entegris chief executive officer prior to the effective time of the merger will serve as the chief executive officer of the combined company as of the effective time;

Versum s chairman of the board of directors prior to the effective time of the merger will serve as the chairman of the board of directors of the combined company as of the effective time;

subject to the approval by Entegris stockholders of the Entegris charter proposal, changes to the governance provisions described in the two immediately preceding bullets during the three years after the closing of the merger would require the affirmative vote of at least 75% of the members of the board of directors of the combined company, and the belief of the Versum board of directors that these arrangements would reasonably assure the continuity of the management and oversight of the combined company following completion of the merger and allow a strong management team drawn from both Versum and Entegris to work together to integrate the two companies;

the initial composition of the audit and finance committee, compensation committee and nominating and governance committee will be mutually agreed upon by Versum and Entegris prior to the closing;

Table of Contents

the combined company s name will be Entegris, Inc. ; and

as of the effective time, the headquarters of the combined company will be in Billerica, Massachusetts;

that the exchange ratio of 1.120 shares of Entegris common stock for each share of Versum common stock is fixed, consistent with the principles underlying the merger of equals structure for the transaction;

the fact that Versum and Entegris have historically had comparable market capitalization and trading multiples;

that the merger agreement permits Versum to continue to make its regular quarterly cash dividends in each fiscal quarter in an amount per share of up to $0.08 per quarter;

the historical and projected financial information concerning Versum s business, financial performance and condition, results of operations, earnings, competitive position and prospects as a stand-alone company;

the information and discussions with Versum s senior management and outside advisors regarding Entegris business, assets, financial condition, results of operations, current business strategy and prospects, including the projected long-term financial results of Entegris as a stand-alone company, the size and scale of the combined company and the expected pro forma effect of the proposed merger on the combined company;

the current and prospective business environment in which Versum and Entegris operate, including international, national and local economic conditions, the competitive and regulatory environment, and the likely effect of these factors on Versum and the combined company;

the recommendation of Versum s senior management in favor of the merger;

that the merger and the all-stock consideration offered in connection therewith will provide Versum stockholders with ownership of approximately 47.5% of the combined company (based on fully diluted shares outstanding of the combined company including exercisable options only) and therefore allow Versum stockholders to participate in the equity value of the combined company, including future growth and the expected cost synergies resulting from the merger;

the ability of Versum stockholders to approve or reject the merger by voting on the adoption of the merger agreement;

the impact of the merger on the customers and employees of Versum;

the Versum board of directors view, after consultation with Versum s senior management and its legal counsel, concerning the likelihood that regulatory approvals and clearances necessary to consummate the mergers would be obtained, without the imposition of conditions sufficiently material to preclude the merger;

the anticipated customer, supplier and stakeholder reaction to the merger;

the analyses and presentations of Lazard and its oral opinion, subsequently confirmed in writing, to the Versum board of directors that, as of January 27, 2019, and based upon and subject to the assumptions, procedures, factors, qualifications and limitations set forth in its written opinion, the exchange ratio in the merger was fair, from a financial point of view, to Versum stockholders (other than the holders of Versum excluded shares), as more fully described under the section entitled **Opinion of Versum s Financial Advisor** beginning on page 107 and the full text of the written opinion of Lazard, which is attached as Annex D to this joint proxy statement/prospectus;

the expected treatment of the merger as a tax-free reorganization under Section 368(a) of the Code for U.S. federal income tax purposes, as more fully described in the section entitled **Material U.S. Federal Income Tax Consequences** beginning on page 183;

Table of Contents

the review by the Versum board of directors with its advisors of the structure of the proposed merger and the financial and other terms of the merger agreement, including the parties representations, warranties and covenants, the conditions to their respective obligations and the termination provisions as well as the likelihood of consummation of the proposed transactions and the evaluation of the Versum board of directors of the likely time period necessary to complete the merger. The Versum board of directors also considered the following specific aspects of the merger agreement:

- the nature of the closing conditions included in the merger agreement, including the reciprocal exceptions to the events that would constitute a material adverse effect on either Versum or Entegris for purposes of the merger agreement, as well as the likelihood of satisfaction of all conditions to completion of the transactions;

- that the representations and warranties of Versum or Entegris, as well as the interim operating covenants requiring the parties to conduct their respective businesses in the ordinary course prior to completion of the merger, subject to specific limitations, are generally reciprocal;

- the requirement to use reasonable best efforts to obtain approvals or clearances by applicable competition authorities, including by divesting assets, holding separate assets or otherwise taking any other action that would limit Versum s or Entegris freedom of action, except to the extent that such action would reasonably be expected to be materially adverse to Versum and its subsidiaries, taken as a whole, Entegris and its subsidiaries, taken as a whole, or the combined company and its subsidiaries, taken as a whole, in each case, from and after the effective time;

- the restrictions in the merger agreement on Entegris ability to respond to and negotiate certain alternative transaction proposals from third parties, and the requirement that Entegris pay Versum a $155 million termination fee if the merger agreement is terminated under certain circumstances;

- Versum s right to engage in negotiations with, and provide information to, a third party that makes an unsolicited written bona fide proposal relating to an alternative proposal, if the Versum board of directors has determined in good faith, after consultation with its outside legal counsel and financial advisors, that such proposal constitutes or could reasonably be expected to result in a transaction that is superior to the merger with Entegris; and

- the right of the Versum board of directors to change its recommendation to Versum stockholders to vote **FOR** the Versum merger agreement proposal if a superior proposal is available or an intervening event has occurred, subject to certain conditions.

The Versum board of directors weighed these advantages and opportunities against a number of potentially negative factors in its deliberations concerning the merger agreement and the merger, including:

- the risk that Entegris financial performance may not meet Versum s expectations;

the difficulties and management challenges inherent in completing the merger and integrating the business, operations and workforce of Versum and Entegris and the risk of not capturing all of the anticipated cost synergies and the risk that other anticipated benefits of the merger might not be realized;

the amount of time it could take to complete the merger, including that completion of the merger depends on factors outside of Versum s or Entegris control, and the risk that the pendency of the merger for an extended period of time following the announcement of the execution of the merger agreement could have an adverse impact on Versum or Entegris, including their respective customer, supplier and other business relationships;

the possible diversion of management attention for an extended period of time during the pendency of the merger;

the risk that, despite the retention efforts of Versum and Entegris prior to the consummation of the merger, the combined company may lose key personnel;

Table of Contents

the risk that changes in the regulatory landscape or new industry developments, including changes in customer preferences, may adversely affect the business benefits anticipated to result from the merger;

the provisions of the merger agreement which prohibit Versum from soliciting or entertaining other acquisition offers and the potential payment to Entegris by Versum of a termination fee of $140 million, as described in the section entitled **The Merger Agreement Termination Fees** beginning on page 155;

the risk that the $155 million termination fee to which Versum may be entitled, subject to the terms and conditions of the merger agreement, in the event Entegris terminates the agreement in certain circumstances may not be sufficient to compensate Versum for the harm that it might suffer as a result of such termination;

the potential for litigation relating to the proposed merger and the associated costs, burden and inconvenience involved in defending those proceedings;

that certain provisions of the merger agreement, although reciprocal, may have the effect of discouraging alternative proposals involving Versum;

the restrictions in the merger agreement on the conduct of Versum s business during the period between execution of the merger agreement and the consummation of the merger, including that Versum must conduct its business only in the ordinary course, subject to specific limitations, which (although reciprocal) could negatively impact Versum s ability to pursue certain business opportunities or strategic transactions;

the risk that Versum stockholders or Entegris stockholders, as applicable, may not approve the proposals at the Versum special meeting or Entegris special meeting;

the risk that Entegris stockholders may not approve the Entegris charter proposal, which is not a condition to the closing of the merger, and that the merger may be consummated without the amended and restated certificate of incorporation of Entegris becoming effective;

the risk that regulatory agencies may delay, object to and challenge the merger or may impose terms and conditions in order to resolve those objections that adversely affect the financial results of Versum, Entegris or the combined company; see the section entitled **Regulatory Approvals** beginning on page 122;

the fact that the exchange ratio is fixed under the merger agreement, meaning that the trading value of the merger consideration, consisting of 1.120 shares of Entegris common stock for each share of Versum common stock, upon consummation of the merger might be more or less than the trading value of such consideration on the date of the execution of the merger agreement;

the substantial transaction costs to be incurred in connection with the proposed merger; and

the risks of the type and nature described in the section entitled **Risk Factors** beginning on page 43 and the matters described in the section entitled **Cautionary Statement Regarding Forward-Looking Statements** beginning on page 41.

The Versum board of directors considered all of these factors as a whole and, on balance, concluded that it supported a favorable determination to approve the merger agreement and to make its recommendations to Versum stockholders.

In addition, the Versum board of directors was aware of and considered the interests of its directors and executive officers that are different from, or in addition to, the interests of Versum stockholders generally, including the treatment of equity awards held by such directors and executive officers in the merger described in the section entitled **Interests of Versum s Directors and Executive Officers in the Merger** beginning on page 176 and the obligation of the combined company to indemnify Versum directors and officers against certain claims and liabilities.

Table of Contents

The foregoing discussion of the information and factors that the Versum board of directors considered is not intended to be exhaustive, but rather is meant to include the material factors that the Versum board of directors considered. The Versum board of directors collectively reached the conclusion to approve the merger agreement, the merger and the other transactions contemplated by the merger agreement in light of the various factors described above and other factors that the members of the Versum board of directors believed were appropriate. In view of the complexity and wide variety of factors, both positive and negative, that the Versum board of directors considered in connection with its evaluation of the merger, the Versum board of directors did not find it practical, and did not attempt, to quantify, rank or otherwise assign relative or specific weights or values to any of the factors it considered in reaching its decision and did not undertake to make any specific determination as to whether any particular factor, or any aspect of any particular factor, was favorable or unfavorable to the ultimate determination of the Versum board of directors. In considering the factors discussed above, individual directors may have given different weights to different factors.

The foregoing description of Versum s consideration of the factors supporting the merger is forward-looking in nature. This information should be read in light of the factors discussed in the section entitled **Cautionary Statement Regarding Forward-Looking Statements** beginning on page 41.

**Opinion of Entegris Financial Advisor**

Entegris retained Morgan Stanley to act as financial advisor to the Entegris board of directors in connection with the proposed merger of Entegris and Versum. The Entegris board of directors selected Morgan Stanley to act as its financial advisor based on Morgan Stanley s qualifications, expertise and reputation, its knowledge of and involvement in recent transactions in the industry, and its knowledge of Entegris business and affairs. At the meeting of the Entegris board of directors on January 27, 2019, Morgan Stanley rendered its oral opinion, subsequently confirmed in writing, that as of such date, and based upon and subject to the various assumptions made, procedures followed, matters considered, and qualifications and limitations on the scope of the review undertaken by Morgan Stanley as set forth in the written opinion, the exchange ratio pursuant to the merger agreement was fair from a financial point of view to Entegris.

**The full text of the written opinion of Morgan Stanley, dated as of January 27, 2019, which sets forth, among other things, the assumptions made, procedures followed, matters considered and qualifications and limitations on the scope of the review undertaken by Morgan Stanley in rendering its opinion, is attached to this joint proxy statement/prospectus as Annex C. You are encouraged to read the entire opinion carefully and in its entirety. Morgan Stanley s opinion was rendered for the benefit of the Entegris board of directors, in its capacity as such, and addressed only the fairness from a financial point of view of the exchange ratio pursuant to the merger agreement to Entegris as of the date of the opinion. Morgan Stanley s opinion did not address any other aspect of the merger or related transactions, including the relative merits of the merger as compared to any other alternative business transaction, or other alternatives, the prices at which shares of Entegris common stock or Versum common stock would trade at any time in the future, or any compensation or compensation agreements arising from (or relating to) the merger which benefit any officer, director or employee of any party to the merger, or any class of such persons. The opinion was addressed to, and rendered for the benefit of, the Entegris board of directors and was not intended to, and does not, constitute advice or a recommendation to any holder of shares of Entegris common stock or any holder of shares of Versum common stock as to how to vote or act on any matter with respect to the merger or related transactions or any other action with respect to the transactions contemplated by the merger agreement, including the merger.**

In connection with rendering its opinion, Morgan Stanley, among other things:

reviewed certain publicly available financial statements and other business and financial information of Versum and Entegris, respectively;

reviewed certain internal financial statements and other financial and operating data concerning Versum and Entegris, respectively;

Table of Contents

reviewed certain financial projections prepared by the management of (i) Versum relating to the business and operations of Versum, (ii) Versum relating to the business and operations of Versum, as modified by the management of Entegris, and (iii) Entegris relating to the business and operations of Entegris;

reviewed information relating to certain strategic, financial and operational benefits anticipated from the merger, prepared by the managements of Versum and Entegris, respectively;

discussed the past and current operations and financial condition and the prospects of Versum, including information relating to certain strategic, financial and operational benefits anticipated from the merger, with senior executives of Versum;

discussed the past and current operations and financial condition and the prospects of Entegris, including information relating to certain strategic, financial and operational benefits anticipated from the merger, with senior executives of Entegris;

reviewed the pro forma impact of the merger on Entegris earnings per share, cash flow, consolidated capitalization and certain financial ratios;

reviewed the reported prices and trading activity for Versum common stock and Entegris common stock;

compared the financial performance of Versum and Entegris and the prices and trading activity of Versum common stock and Entegris common stock with that of certain other publicly-traded companies comparable with Versum and Entegris, respectively, and their securities;

reviewed the financial terms, to the extent publicly available, of certain comparable transactions;

participated in certain discussions and negotiations among representatives of Versum and Entegris and their financial and legal advisors;

reviewed the merger agreement and certain related documents; and

performed such other analyses and considered such other factors as Morgan Stanley deemed appropriate. In arriving at its opinion, Morgan Stanley assumed and relied upon, without independent verification, the accuracy and completeness of the information that was publicly available or supplied, or otherwise made available to Morgan Stanley by Versum and Entegris, and formed a substantial basis for its opinion. With respect to the financial projections, including information relating to certain strategic, financial and operational benefits anticipated from the merger, Morgan Stanley assumed that they had been reasonably prepared on bases reflecting the best currently available estimates and judgments of the respective managements of Versum and Entegris of the future financial

performance of Versum and Entegris. In addition, Morgan Stanley assumed that the merger will be consummated in accordance with the terms set forth in the merger agreement without any waiver, amendment or delay of any terms or conditions, including, among other things, that the merger will be treated as a tax-free reorganization, pursuant to the Internal Revenue Code of 1986, as amended, and that the definitive merger agreement would not differ in any material respect from the draft thereof furnished to Morgan Stanley. Morgan Stanley assumed that, in connection with the receipt of all the necessary governmental, regulatory or other approvals and consents required for the proposed merger, no delays, limitations, conditions or restrictions will be imposed that would have a material adverse effect on the contemplated benefits expected to be derived in the proposed merger. Morgan Stanley relied upon, without independent verification, the assessment by the managements of Versum and Entegris of: (i) the strategic, financial and other benefits expected to result from the merger; (ii) the timing and risks associated with the integration of Versum and Entegris; (iii) their ability to retain key employees of Versum and Entegris, respectively and (iv) the validity of, and risks associated with, Versum s and Entegris existing and future technologies, intellectual property, products, services and business models. Morgan Stanley is not a legal, tax or regulatory advisor. Morgan Stanley is a financial advisor only and relied upon, without independent verification, the assessment of Entegris and Versum and their legal, tax or regulatory

Table of Contents

advisors with respect to legal, tax, or regulatory matters. Morgan Stanley expressed no opinion with respect to the fairness of the amount or nature of the compensation to any officers, directors or employees of any party to the merger, or any class of such persons, relative to the exchange ratio. Morgan Stanley did not make any independent valuation or appraisal of the assets or liabilities of Versum or Entegris, nor was Morgan Stanley furnished with any such valuations or appraisals. Morgan Stanley s opinion was necessarily based on financial, economic, market and other conditions as in effect on, and the information made available to Morgan Stanley as of, January 27, 2019. Events occurring after January 27, 2019 may affect Morgan Stanley s opinion and the assumptions used in preparing it, and Morgan Stanley did not assume any obligation to update, revise or reaffirm its opinion.

***Summary of Financial Analyses***

The following is a brief summary of the material financial analyses performed by Morgan Stanley in connection with its oral opinion and the preparation of its written opinion dated January 27, 2019. The following summary is not a complete description of Morgan Stanley s opinion or the financial analyses performed and factors considered by Morgan Stanley in connection with its opinion, nor does the order of analyses described represent the relative importance or weight given to those analyses. In connection with arriving at its opinion, Morgan Stanley considered all of its analyses as a whole and did not attribute any particular weight to any analysis described below. Considering any portion of such analyses and factors considered, without considering all analyses and factors, could create a misleading or incomplete view of the process underlying Morgan Stanley s opinion. Some of these summaries of financial analyses include information presented in tabular format. In order to fully understand the financial analyses used by Morgan Stanley, the tables must be read together with the text of each summary. The tables alone do not constitute a complete description of the financial analyses. Furthermore, mathematical analysis (such as determining the average or median) is not in itself a meaningful method of using the data referred to below.

In performing the financial analyses summarized below and in arriving at its opinion, Morgan Stanley utilized and relied upon certain financial projections provided by Entegris and Versum s managements and referred to below. For further information regarding the financial projections, see the section entitled **Entegris Unaudited Financial Projections** beginning on page 115.

On January 27, 2019, Versum and Entegris entered into the merger agreement pursuant to which each share of Versum common stock (other than Versum excluded shares), would be exchanged for 1.120 shares of Entegris common stock. This exchange ratio represented an implied price of $35.08 per share of Versum common stock. Based on the exchange ratio, Morgan Stanley calculated that, as a result of the merger, Entegris stockholders would own approximately 52.7% of the fully diluted shares of Entegris common stock based on each of Versum s and Entegris fully diluted shares including equity awards (using the treasury method) (such information provided by the managements of Entegris and Versum), and Versum stockholders would own the remaining approximately 47.3% of Entegris following completion of the merger pursuant to the merger agreement.

***Relative Public Trading Multiples***

Morgan Stanley performed a public trading comparables analysis, which attempts to provide an implied value of a company by comparing it to similar companies that are publicly traded. Morgan Stanley reviewed and compared certain financial estimates for each of Entegris and Versum with comparable publicly available consensus equity analyst research estimates for selected companies that share similar business characteristics and have certain comparable operating characteristics including, among other things, similar revenue growth rates, profitability, scale and/or other similar operating characteristics (which companies are referred to as the comparable companies). These companies were the following:

Platform Specialty Products Corp. (now known as Element Solutions)

Cabot Microelectronics Corporation

Table of Contents

In the case of applying the analysis to Entegris, Versum was included in the group of comparable companies. In the case of applying the analysis to Versum, Entegris was included in the group of comparable companies.

For purposes of this analysis, Morgan Stanley analyzed the ratio of (i) aggregate value, which Morgan Stanley defined as fully diluted market capitalization plus total debt, plus non-controlling interest, less cash and cash equivalents, to EBITDA, which Morgan Stanley defined as net income excluding net interest expense, income tax expense and certain other non-cash and non-recurring items, principally depreciation and amortization, (ii) price to earnings, which Morgan Stanley defined as the ratio of price per share to estimated earnings per share, and (iii) equity value, which Morgan defined as fully diluted market capitalization, to levered free cash flow, which Morgan Stanley defined as net income plus depreciation and amortization less capital expenditures, for calendar years 2019 and 2020, of each of these comparable companies based on publicly available financial information compiled by Thomson Reuters for comparison purposes. For the purposes of this analysis and certain other analyses described below, Morgan Stanley utilized (i) publicly available financial information for each of Entegris and Versum available as of January 25, 2019 (the last full trading day prior to the meeting of the Entegris board of directors to approve and adopt the merger agreement and approve the transactions contemplated thereby, including the merger), which is referred to as the Entegris street case and the Versum Street case, as applicable, (ii) financial projections prepared by Entegris relating to the business and operations of Entegris, which is referred to as the Entegris management case, and (iii) financial projections prepared by Versum relating to the business and operations of Versum, as modified by Entegris, which is referred to as the Versum growth sensitivity case. For further information regarding the financial projections, see the section entitled **Entegris Unaudited Financial Projections** beginning on page 115.

Based on its analysis of the relevant metrics for each of the comparable companies and upon the application of its professional judgment and experience, Morgan Stanley selected representative ranges of aggregate value to EBITDA multiples, price to earnings multiples, and equity value to levered free cash flow multiples and applied these ranges of multiples to the estimated relevant metric for each of Entegris and Versum, as applicable.

Table of Contents

Based on each of Versum s and Entegris fully diluted shares, including equity awards (using the treasury method), as provided by Entegris and Versum, as applicable, Morgan Stanley calculated the estimated implied exchange ratio range as set forth in the table below. Morgan Stanley calculated the high end of the exchange ratio range by dividing the highest per share price for Versum resulting from the application of the relevant multiples described above by the lowest per share price for Entegris resulting from the application of the relevant multiples described above. Morgan Stanley calculated the low end of the exchange ratio range by dividing the lowest per share price for Versum resulting from the application of the relevant multiples described above by the highest per share price for Entegris resulting from the application of the relevant multiples described above.

| Public Trading Multiples | Implied Transaction Exchange Ratio Range | |
|---|---|---|
| CY2019E AV / EBITDA | | |
| Entegris street case to Versum street case | 0.973x | 1.622x |
| Entegris management case to Versum growth sensitivity case | 0.926x | 1.540x |
| CY2020E AV / EBITDA | | |
| Entegris street case to Versum street case | 0.951x | 1.445x |
| Entegris management case to Versum growth sensitivity case | 0.922x | 1.395x |
| CY2019E Price / EPS | | |
| Entegris street case to Versum street case | 1.039x | 1.414x |
| Entegris management case to Versum growth sensitivity case | 1.004x | 1.367x |
| CY2020E Price / EPS | | |
| Entegris street case to Versum street case | 0.987x | 1.378x |
| Entegris management case to Versum growth sensitivity case | 0.982x | 1.371x |
| CY2019E Equity Value / LFCF | | |
| Entegris street case to Versum street case | 0.768x | 1.363x |
| Entegris management case to Versum growth sensitivity case | 0.765x | 1.357x |
| CY2020E Equity Value / LFCF | | |
| Entegris street case to Versum street case | 0.892x | 1.321x |
| Entegris management case to Versum growth sensitivity case | 0.818x | 1.210x |

Morgan Stanley noted that the exchange ratio pursuant to the merger agreement was 1.120x, which implied Entegris stockholder ownership of approximately 52.7% of the fully diluted shares of Entegris common stock based on each of Versum s and Entegris fully diluted shares, including equity awards (using the treasury method), as provided by Versum and Entegris.

No company utilized in the public trading comparables analysis is identical to either Entegris or Versum. In evaluating the comparable companies, Morgan Stanley made numerous assumptions with respect to industry performance, general business, regulatory, economic, market and financial conditions and other matters, many of which are beyond the control of Entegris, Versum or Morgan Stanley. These include, among other things, the impact of competition on Entegris or Versum s business and the industry generally, industry growth, and the absence of any adverse material change in the financial condition and prospects of Entegris, or Versum and the industry, and in the financial markets in general. Mathematical analysis (such as determining the average or median) is not in and of itself a meaningful method of using comparable company data.

***Relative Discounted Equity Value***

Morgan Stanley performed a discounted equity value analysis, which is designed to provide insight into the potential future equity value of a company as a function of the company s estimated future earnings. The resulting equity value is subsequently discounted to arrive at an estimate of the implied present value for such company s potential future equity value. In connection with this analysis, Morgan Stanley calculated a range of

Table of Contents

implied present equity values per share on a stand-alone basis for each of Entegris and Versum. To calculate the discounted equity value, Morgan Stanley utilized estimated fiscal year 2021 EBITDA from the Versum growth sensitivity case, in the case of Versum, and the estimated calendar year 2021 EBITDA from the Entegris management case, in the case of Entegris. Based upon the application of its professional judgment and experience, Morgan Stanley applied a range of EBITDA multiples (based on the range of EBITDA multiples for the comparable companies described above under **Opinion of Entegris Financial Advisor Relative Public Trading Multiples** beginning on page 98 and the growth profile of each of Entegris and Versum, as applicable) to these estimates and applied a discount rate of 11.3%, in the case of Versum, and 11.4%, in the case of Entegris, which rates were selected based on each company s estimated cost of equity.

Based on the implied present equity values per share determined as described above for Entegris relative to those determined for Versum, Morgan Stanley calculated the following implied exchange ratio reference range:

| Entegris management case to Versum growth sensitivity case | Implied Transaction Exchange Ratio Range |
|---|---|
| | 0.896x 1.412x |

Morgan Stanley noted that the exchange ratio pursuant to the merger agreement was 1.120x, which implied Entegris stockholder ownership of approximately 52.7% of the fully diluted shares of Entegris common stock based on each of Versum s and Entegris fully diluted shares, including equity awards (using the treasury method), as provided by Versum and Entegris.

***Relative Discounted Cash Flow Analysis***

Morgan Stanley performed a discounted cash flow analysis, which is designed to provide an implied value of a company by calculating the present value of the estimated future cash flows and terminal value of such company. Morgan Stanley calculated the estimated present value of the stand-alone unlevered after-tax free cash flows that Entegris and Versum were each forecasted to generate during calendar years 2019 through 2023, in the case of Entegris, and Versum s fiscal years 2019 through 2023, in the case of Versum. For purposes of this analysis, unlevered after-tax free cash flows were calculated as EBITDA, less taxes, plus change in net working capital and less capital expenditures. Financial data used in this analysis were based on the Entegris management case for calendar years 2019 through 2021, and the estimates for calendar years 2022 and 2023 were developed at the direction, and approval, of the management of Entegris by an extrapolation of the relevant 2021 estimates, in the case of Entegris, and the Versum growth sensitivity case for Versum s fiscal years 2019 through 2021, and the estimates for Versum s fiscal years 2022 and 2023 were developed at the direction and approval of the management of Entegris by an extrapolation of the relevant fiscal year 2021 estimates, in the case of Versum.

Morgan Stanley then estimated the terminal values of each of Entegris and Versum at the end of the forecast period by using perpetual growth rates ranging from 2.0% to 3.0%, which perpetual growth rates were selected upon the application of Morgan Stanley s professional judgment and experience. The cash flows and terminal values were then discounted to present value as of December 31, 2018 using discount rates ranging from 9.4% to 11.0%, in the case of Entegris, and 9.0% to 10.6%, in the case of Versum, which discount rates were selected, upon the application of Morgan Stanley s professional judgment and experience, to reflect a weighted average cost of capital calculation for Entegris and Versum, respectively. The resulting aggregate values were then adjusted for net debt and non-controlling interest. This analysis resulted in an implied per share equity value reference range for Entegris of $30.98 to $43.83 and an implied per share equity value reference range for Versum common stock of $36.42 to $53.03.

101

Table of Contents

Based on the implied per share equity value reference range for Entegris relative to the per share reference range for Versum described above, Morgan Stanley calculated the following implied exchange ratio reference range:

| Relative Discounted Cash Flow | Implied Transaction Exchange Ratio Range |
|---|---|
| As of January 25, 2019 | 0.831x 1.712x |

Morgan Stanley noted that the exchange ratio pursuant to the merger agreement was 1.120x, which implied an Entegris stockholder ownership of approximately 52.7% of the fully diluted shares of Entegris common stock based on each of Versum s and Entegris fully diluted shares including equity awards (using the treasury method) as provided by Versum and Entegris.

***Other Information***

Morgan Stanley observed additional factors that were not considered part of Morgan Stanley s financial analysis with respect to its opinion, but which were noted as reference data for the Entegris board of directors, including the following information described under the sections titled **Opinion of Entegris Financial Advisor Relative Precedent Merger of Equals Transactions Analysis**, **Opinion of Entegris Financial Advisor Relative Historical Exchange Ratio**, **Opinion of Entegris Financial Advisor Relative Equity Research Analysts Future Price Targets**, **Opinion of Entegris Financial Advisor Relative Contribution Analysis**, beginning on pages 102, 103, 104 and 105, respectively.

***Relative Precedent Merger of Equals Transactions Analysis***

Morgan Stanley performed a precedent merger of equals transactions analysis, which is designed to imply a range of exchange ratios for Entegris and Versum stockholders, based on a premium paid on selected transactions that share some characteristics with the merger.

In connection with its analysis, Morgan Stanley compared premiums for 23 publicly announced selected merger of equals transactions with transaction values between $1 billion and $5 billion from May 12, 2009 to January 25, 2019 (the last full trading day prior to the meeting of the Entegris board of directors to approve the merger agreement and approve the transactions contemplated thereby, including the merger), in which the consideration received was 100% stock and the target stockholders percentage ownership of the merged entity was between 40% and 50%. The following is a list of these transactions:

Aldar Properties PJSC / Sorouh Real Estate PJSC

Lam Research Corporation / Novellus Systems, Inc.

Fidelity National Information Services, Inc. / Metavante Technologies, Inc.

The Stanley Works Limited / The Black & Decker Corporation

Sterling Bancorp / Astoria Financial Corporation

SandRidge Energy, Inc. / Arena Resources, Inc.

Cyberonics, Inc. / Sorin S.p.A.

BBCN Bancorp, Inc. / Wilshire Bancorp, Inc.

Anatolia Minerals Development Limited / Avoca Resources Limited

London Stock Exchange Group PLC / TMX Group Inc.

RF Micro Devices, Inc. / TriQuint Semiconductor, Inc.

Envision Healthcare Holdings, Inc. / AmSurg Corp.

Table of Contents

Shinsei Bank, Limited / Aozora Bank, Ltd.

Office Depot, Inc. / OfficeMax Incorporated

McDermott International, Inc. / Chicago Bridge & Iron Company N.V.

Cloudera, Inc. / Hortonworks, Inc.

Henderson Group plc / Janus Capital Group Inc.

United Airlines, Inc. / Continental Airlines, Inc.

Carphone Warehouse Limited / Dixons Retail plc

Standard Pacific Corp. / The Ryland Group, Inc.

Holly Corporation / Frontier Oil Corporation

Valeant Pharmaceuticals International / Biovail Corporation

Drogasil S.A. / Raia S.A.

Based on the transactions listed above, Morgan Stanley selected a representative range of implied exchange ratio premiums to the spot and 30-trading day average exchange ratios applicable to such transactions, and applied such representative premiums to the spot exchange ratio of Entegris and Versum of 1.011 and the 30-trading day average exchange ratio for Entegris and Versum of 1.014. The following table summarizes Morgan Stanley s analysis:

| Relevant Period | Implied Transaction Exchange Ratio Range | |
|---|---|---|
| Spot Exchange Ratio Premium | 1.027x | 1.167x |
| 30 Trading Day Average Exchange Ratio Premium | 1.021x | 1.156x |

Morgan Stanley noted that the exchange ratio pursuant to the merger agreement was 1.120x, which implied Entegris stockholder ownership of approximately 52.7% of the fully diluted shares of Entegris common stock based on each of Versum s and Entegris fully diluted shares including equity awards (using the treasury method) as provided by Versum and Entegris.

No company or transaction utilized in the precedent transactions analysis is identical to Entegris, Versum or the merger. In evaluating the precedent transactions, Morgan Stanley made judgments and assumptions with regard to industry performance, general business, regulatory, economic, market and financial conditions and other matters, which are beyond the control of Entegris and Versum, such as the impact of competition on the business of Entegris, Versum or the industry generally, industry growth and the absence of any material adverse change in the financial condition of Entegris, Versum or the industry or in the financial markets in general, which could affect the public trading value of the companies and the aggregate value and equity value of the transactions to which they were being compared.

***Relative Historical Exchange Ratio***

Morgan Stanley reviewed the range of the ratio of closing prices of Versum common stock divided by the corresponding closing prices of Entegris common stock over the 52-week period ended on January 25, 2019 (the last full trading day prior to the meeting of the Entegris board of directors to adopt the merger agreement and approve the transactions contemplated thereby, including the merger). For the 52-week period reviewed, Morgan Stanley observed the relevant range of low and high exchange ratios.

| Period Ending January 25, 2019 | Implied Transaction Exchange Ratio Range | |
|---|---|---|
| 52-Week Trading Range | 0.633x | 1.768x |

Table of Contents

Morgan Stanley noted that the exchange ratio pursuant to the merger agreement was 1.120x, which implied Entegris stockholder ownership of approximately 52.7% of the fully diluted shares of Entegris common stock based on each of Versum s and Entegris fully diluted shares including equity awards (using the treasury method) as provided by Versum and Entegris.

***Relative Equity Research Analysts Future Price Targets***

Morgan Stanley reviewed future public market trading price targets for Entegris common stock and Versum common stock prepared and published by equity research analysts prior to January 25, 2019 (the last full trading day prior to the meeting of the Entegris board of directors to adopt the merger agreement and approve the transactions contemplated thereby, including the merger). These forward targets reflected each analyst s estimate of the 12-month future public market trading price of Entegris common stock and Versum common stock. Morgan Stanley also discounted such 12 month future market trading price estimates by the cost of equity for Entegris (11.4%) and Versum (11.3%), respectively.

The public market trading price targets published by equity research analysts do not necessarily reflect current market trading prices for Entegris common stock or Versum common stock, as applicable, and these estimates are subject to uncertainties, including the future financial performance of Entegris and Versum, and future financial market conditions.

| 12 Month Research Estimates | Implied Transaction Exchange Ratio Range | |
|---|---|---|
| As of January 25, 2019 | 0.591x | 1.567x |
| Discounted at respective cost of equity | 0.591x | 1.568x |

Morgan Stanley noted that the exchange ratio pursuant to the merger agreement was 1.120x, which implied Entegris stockholder ownership of approximately 52.7% of the fully diluted shares of Entegris common stock based on each of Versum s and Entegris fully diluted shares, including equity awards (using the treasury method), as provided by Versum and Entegris.

Table of Contents

***Relative Contribution Analysis***

Morgan Stanley compared Entegris and Versum s respective percentage contributions for certain financial metrics described below to the combined company and determined the implied exchange ratio based on such contributions. Morgan Stanley utilized the Versum street case and the Entegris street case, as applicable, for EBIDTA, net income and levered free cash flow for calendar years 2019 and 2020 for each of Entegris and Versum, as well as estimates of EBIDTA, net income and levered free cash flow for calendar years 2018, 2019 and 2020 set forth in the Entegris management case and the Versum growth sensitivity case, as applicable. The following table summarizes Morgan Stanley s analysis:

| **Implied Transaction Exchange Ratios** | |
|---|---|
| **Entegris Management / Versum Growth Sensitivity Cases (2018E 2020E)** | |
| EBITDA (2018E) | 1.233x |
| EBITDA (2019E) | 1.194x |
| EBITDA (2020E) | 1.133x |
| Net Income (2018E) | 1.087x |
| Net Income (2019E) | 1.170x |
| Net Income (2020E) | 1.158x |
| Levered FCF (2018E) | 1.094x |
| Levered FCF (2019E) | 1.019x |
| Levered FCF (2020E) | 0.995x |
| | |
| **Street Cases (2019E 2020E)** | |
| EBITDA (2019E) | 1.258x |
| EBITDA (2020E) | 1.174x |
| Net Income (2019E) | 1.200x |
| Net Income (2020E) | 1.125x |
| Levered FCF (2019E) | 1.021x |
| Levered FCF (2020E) | 1.086x |

Morgan Stanley noted that the exchange ratio pursuant to the merger agreement was 1.120x, which implied Entegris stockholders ownership of approximately 52.7% of the fully diluted shares of Entegris common stock based on each of Versum s and Entegris fully diluted shares including equity awards (using the treasury method) as provided by Versum and Entegris.

***General***

In connection with the review of the merger by the Entegris board of directors, Morgan Stanley performed a variety of financial and comparative analyses for purposes of rendering its opinion. The preparation of a financial opinion is a complex process and is not necessarily susceptible to a partial analysis or summary description. In arriving at its opinion, Morgan Stanley considered the results of all of its analyses as a whole and did not attribute any particular weight to any analysis or factor it considered. Morgan Stanley believes that selecting any portion of its analyses, without considering all analyses as a whole, would create an incomplete view of the process underlying its analyses and opinion. In addition, Morgan Stanley may have given various analyses and factors more or less weight than other analyses and factors, and may have deemed various assumptions more or less probable than other assumptions. As a result, the ranges of valuations resulting from any particular analysis described above should not be taken to be

Morgan Stanley s view of the actual value of Entegris or Versum. In performing its analyses, Morgan Stanley made judgments and assumptions with regard to industry performance, general business, regulatory, economic, market and financial conditions and other matters, which are beyond the control of Entegris or Versum. Any estimates contained in Morgan Stanley s analyses are not necessarily indicative of future results or actual values, which may be significantly more or less favorable than those suggested by such estimates.

Table of Contents

Morgan Stanley conducted the analyses described above solely as part of its analysis of the fairness from a financial point of view of the exchange ratio pursuant to the merger agreement to Entegris and in connection with the delivery of its opinion, dated January 27, 2019, to the Entegris board of directors. These analyses do not purport to be appraisals or to reflect the prices at which shares of Entegris common stock or Versum common stock might actually trade.

The exchange ratio was determined by Entegris and Versum through arm s-length negotiations between Entegris and Versum and was approved by the Entegris board of directors. Morgan Stanley provided advice to the Entegris board of directors during these negotiations. Morgan Stanley did not, however, recommend any specific exchange ratio to Entegris or the Entegris board of directors or that any specific exchange ratio constituted the only appropriate exchange ratio for the merger.

Morgan Stanley s opinion and its presentation to the Entegris board of directors was one of many factors taken into consideration by the Entegris board of directors in deciding to approve the merger agreement and approve the transactions contemplated thereby, including the merger. Consequently, the analyses as described above should not be viewed as determinative of the opinion of the Entegris board of directors with respect to the exchange ratio pursuant to the merger agreement or of whether the Entegris board of directors would have been willing to agree to a different exchange ratio. Morgan Stanley s opinion was approved by a committee of Morgan Stanley investment banking and other professionals in accordance with Morgan Stanley s customary practice.

Morgan Stanley s opinion was not intended to, and does not, constitute advice or a recommendation to any holder of shares of Entegris common stock or Versum common stock as to how to vote or act on any matter with respect to the merger or related transactions or any other action with respect to the transactions contemplated by the merger agreement. Morgan Stanley s opinion did not address any other aspect of the merger or related transactions, including the relative merits of the merger as compared to any other alternative business transaction, or other alternatives, the prices at which shares of Entegris common stock or Versum common stock would trade at any time in the future, or any compensation or compensation agreements arising from (or relating to) the merger which benefit any officer, director or employee of any party to the merger, or any class of such persons.

The Entegris board of directors retained Morgan Stanley based upon Morgan Stanley s qualifications, experience and expertise. Morgan Stanley is a global financial services firm engaged in the securities, investment management and individual wealth management businesses. Its securities business is engaged in securities underwriting, trading and brokerage activities, foreign exchange, commodities and derivatives trading, and prime brokerage, as well as providing investment banking, financing and financial advisory services. Morgan Stanley, its affiliates, directors and officers may at any time invest on a principal basis or manage funds that invest, hold long or short positions, finance positions, and may trade or otherwise structure and effect transactions, for their own account or for the accounts of their customers, in debt or equity securities or loans of Entegris, Versum or any other company, or any currency or commodity, that may be involved in the transactions contemplated by the merger agreement, or any related derivative instrument.

Under the terms of its engagement letter, Morgan Stanley provided Entegris with financial advisory services and a financial opinion in connection with the merger, described in this section and attached to this statement as Annex C, and Entegris has agreed to pay Morgan Stanley a fee of approximately $25 million for its services, $20 million of which is contingent upon the closing of the merger and $5 million of which was paid upon the delivery by Morgan Stanley of the financial opinion described in this section. In addition, if the proposed merger is consummated, Entegris may (but will not be obligated to) pay up to an additional $5 million to Morgan Stanley as a discretionary bonus for its contributions in connection with the merger. Entegris has also agreed to reimburse Morgan Stanley for its reasonable expenses, including reasonable fees of outside counsel and other professional advisors, incurred in connection with its

engagement. In addition, Entegris has agreed to indemnify Morgan Stanley and its affiliates, their respective directors, officers, agents and employees and each other person, if any, controlling Morgan Stanley or any of its affiliates against certain liabilities and expenses relating to or arising out of Morgan Stanley s engagement. At the time of the execution of the merger agreement, one of Morgan Stanley s

Table of Contents

affiliates entered into a financing commitment letter with Entegris to provide financing under certain circumstances. Entegris does not need to access the capital contemplated by the commitment letter. In the two years prior to the date of its opinion, Morgan Stanley and its affiliates have provided financing services to Entegris and have received aggregate fees of approximately $2 million from Entegris in connection with such services. During the two-year period prior to the date of Morgan Stanley s opinion, Morgan Stanley and its affiliates have not been engaged on any financial advisory or financing assignments for Versum and have not received any fees for such services from Versum during such time. Morgan Stanley may also seek to provide financial advisory and financing services to Entegris and Versum and their respective affiliates in the future and would expect to receive fees for the rendering of these services.

**Opinion of Versum s Financial Advisor**

Versum retained Lazard to act as its financial advisor in connection with the merger. As part of this engagement, Versum requested that Lazard evaluate the fairness, from a financial point of view, to Versum stockholders (other than holders of Versum excluded shares) of the exchange ratio. At a meeting of the Versum board of directors held to evaluate the merger on January 27, 2019, Lazard rendered an oral opinion to the Versum board of directors, subsequently confirmed in writing by delivery of Lazard s opinion dated as of the same date, to the effect that, as of such date, and based upon and subject to the assumptions, procedures, factors, qualifications and limitations set forth in Lazard s written opinion, the exchange ratio was fair, from a financial point of view, to Versum stockholders (other than the holders of Versum excluded shares).

**The full text of Lazard s written opinion, dated January 27, 2019, which sets forth the assumptions made, procedures followed, factors considered and qualifications and limitations on the review undertaken by Lazard in connection with its opinion, is attached as Annex D to this joint proxy statement/prospectus and is incorporated herein by reference. We encourage you to read Lazard s opinion carefully and in its entirety. Lazard s opinion was provided for the use and benefit of the Versum board of directors (in its capacity as such) in its evaluation of the merger, and addressed only the fairness, as of the date of the opinion, from a financial point of view, to Versum stockholders of the exchange ratio provided for in the merger. Lazard s opinion is not intended to and does not constitute a recommendation to any stockholder as to how such stockholder should vote or act with respect to the merger or any matter relating thereto.**

Lazard s opinion was necessarily based on economic, monetary, market and other conditions as in effect on, and the information made available to Lazard as of, the date of Lazard s opinion. Lazard assumed no responsibility for updating or revising its opinion based on circumstances or events occurring after the date of Lazard s opinion. Lazard s opinion did not express any opinion as to the price at which shares of Versum common stock or Entegris common stock may trade at any time subsequent to the announcement of the merger. In connection with its engagement, Lazard was not authorized to, and Lazard did not, solicit indications of interest from third parties regarding a potential transaction with Versum. In addition, Lazard s opinion does not address the relative merits of the merger as compared to any other transaction or business strategy in which Versum might engage or the merits of the underlying decision by Versum to engage in the merger.

In connection with its opinion, Lazard:

reviewed the financial terms and conditions of a draft, dated January 26, 2019, of the merger agreement;

reviewed certain publicly available historical business and financial information relating to Versum and Entegris;

reviewed various financial forecasts and other data provided to Lazard by Versum relating to the business of Versum, and extrapolations thereto based on the guidance of management of Versum and approved by Versum for Lazard s use;

Table of Contents

reviewed various financial forecasts and other data provided to Lazard by Entegris relating to the business of Entegris, and extrapolations thereto based on the guidance of management of Versum and approved by Versum for Lazard s use;

reviewed the projected synergies and other benefits, including the amount and timing thereof, anticipated by the managements of Versum and Entegris to be realized from the merger;

held discussions with members of the senior managements of Versum and Entegris with respect to the businesses and prospects of Versum and Entegris, respectively, and the projected synergies and other benefits anticipated by the managements of Versum and Entegris to be realized from the merger;

reviewed public information with respect to other companies in lines of business Lazard believed to be generally relevant in evaluating the businesses of Versum and Entegris;

reviewed historical stock prices and trading volumes of Versum common stock and Entegris common stock;

reviewed the potential pro forma financial impact of the merger on the combined company based on the financial forecasts referred to above relating to Versum and Entegris; and

conducted such other financial studies, analyses and investigations as Lazard deemed appropriate.

Lazard assumed and relied upon the accuracy and completeness of the foregoing information, without independent verification of such information. Lazard has not conducted any independent valuation or appraisal of any of the assets or liabilities (contingent or otherwise) of Versum or Entegris or concerning the solvency or fair value of Versum or Entegris, and Lazard has not been furnished with any such valuation or appraisal. With respect to the financial forecasts utilized in Lazard s analyses, including the extrapolations and the forecasts related to projected synergies and other benefits anticipated by the managements of Versum and Entegris to be realized from the merger, Lazard assumed, with the consent of Versum, that they have been reasonably prepared on bases reflecting the best currently available estimates and judgments as to the future financial performance of Versum and Entegris, respectively. In addition, Lazard assumed, with the consent of Versum, that such projected synergies and other benefits will be realized in the amounts and at the times contemplated thereby. Lazard assumed no responsibility for and expressed no view as to any such forecasts or the assumptions on which they are based.

In rendering its opinion, Lazard assumed, with the consent of Versum, that the merger will be consummated on the terms described in the merger agreement, without any waiver or modification of any material terms or conditions. Representatives of Versum have advised Lazard, and Lazard assumed, that the executed merger agreement conforms to the draft reviewed by Lazard in all material respects. Lazard also assumed, with the consent of Versum, that obtaining the necessary governmental, regulatory or third party approvals and consents for the merger will not have an adverse effect on Versum, Entegris or the merger that is material in any respect to Lazard s analysis in connection with its opinion. Lazard further assumed, with the consent of Versum, that the merger will qualify for U.S. federal income tax purposes as a reorganization within the meaning of Section 368(a) of the Internal Revenue Code of 1986, as amended. Lazard did not express any opinion as to any tax or other consequences that might result from the merger, nor does Lazard s opinion address any legal, tax, regulatory or accounting matters, as to which Lazard understood that

Versum obtained such advice as it deemed necessary from qualified professionals. Lazard expressed no view or opinion as to any terms or other aspects (other than the exchange ratio to the extent expressly specified herein) of the merger, including, without limitation, the form or structure of the merger or any agreements or arrangements entered into in connection with, or contemplated by, the merger. In addition, Lazard expressed no view or opinion as to the fairness of the amount or nature of, or any other aspects relating to, the compensation to any officers, directors or employees of any parties to the merger, or class of such persons, relative to the exchange ratio or otherwise.

Table of Contents

***Summary of Lazard s Financial Analyses***

The following is a summary of the material financial analyses reviewed with the Versum board of directors in connection with Lazard s opinion, dated January 27, 2019. The summary of Lazard s analyses and reviews provided below is not a complete description of the analyses and reviews underlying Lazard s opinion. The preparation of a fairness opinion is a complex process involving various determinations as to the most appropriate and relevant methods of analysis and review and the application of those methods to particular circumstances, and, therefore, is not readily susceptible to summary description.

In arriving at its opinion, Lazard did not draw, in isolation, conclusions from or with regard to any particular factor or analysis considered by it. Rather, Lazard made its determination as to fairness on the basis of its experience and professional judgment after considering the results of all of the analyses. Considering selected portions of the analyses and reviews in the summary set forth below, without considering the analyses and reviews as a whole, could create an incomplete or misleading view of the analyses and reviews underlying Lazard s opinion.

For purposes of its analyses and reviews, Lazard considered industry performance, general business, economic, market and financial conditions and other matters, many of which are beyond the control of Versum and Entegris. No company or business used in Lazard s analyses and reviews as a comparison is identical to Versum, Entegris or the combined company, and an evaluation of the results of those analyses and reviews is not entirely mathematical. Rather, the analyses and reviews involve complex considerations and judgments concerning financial and operating characteristics and other factors that could affect the acquisition, public trading or other values of the companies or businesses used in Lazard s analyses and reviews. The estimates contained in Lazard s analyses and reviews and the ranges of valuations resulting from any particular analysis or review are not necessarily indicative of actual values or predictive of future results or values, which may be significantly more or less favorable than those suggested by Lazard s analyses and reviews. In addition, analyses and reviews relating to the value of companies, businesses or securities do not purport to be appraisals or to reflect the prices at which companies, businesses or securities actually may be sold. Accordingly, the estimates used in, and the results derived from, Lazard s analyses and reviews are inherently subject to substantial uncertainty.

The summary of the analyses and reviews provided below includes information presented in tabular format. In order to fully understand Lazard s analyses and reviews, the tables must be read together with the full text of each summary. The tables alone do not constitute a complete description of Lazard s analyses and reviews. Considering the data in the tables below without considering the full description of the analyses and reviews, including the methodologies and assumptions underlying the analyses and reviews, could create a misleading or incomplete view of Lazard s analyses and reviews.

Except as otherwise noted, the following quantitative information, to the extent that it is based on market data, is based on market data as it existed on or before January 25, 2019, and is not necessarily indicative of current market conditions.

***Public Trading Valuation Analysis***

*Versum and Entegris*

Lazard reviewed and analyzed certain financial information, valuation multiples and market trading data related to Cabot Microelectronics Corporation, which is referred to as Cabot Microelectronics, Entegris and Versum. Lazard reviewed and analyzed such information because it believed, based on its judgment and experience, Cabot Microelectronics to be similar to Versum s and Entegris respective operations for purposes of these analyses. Although

Cabot Microelectronics is not identical or directly comparable to either Versum or Entegris, it was chosen because it is a publicly traded company with certain operations, results, business mixes or product profiles that, for the purposes of analysis, may be considered similar to certain operations, results, business mixes or product profiles of Versum and Entegris.

Table of Contents

The following table represents the results of Lazard s analysis of EV / EBITDA multiples of such companies as of January 25, 2019 based on (1) trading prices on January 25, 2019, (2) 10-trading day volume-weighted average prices and (3) 20-trading day volume-weighted average prices:

| | EV / CY 2019E EBITDA on January 25, 2019 | EV / CY 2019E EBITDA based on 10-Trading Day VWAP | EV / CY 2019E EBITDA based on 20-Trading Day VWAP |
|---|---|---|---|
| **Cabot Microelectronics** | 10.3x | 10.0x | 9.9x |
| **Entegris** | 10.2x | 9.7x | 9.5x |
| **Versum** | 8.4x | 8.1x | 7.8x |

Based on the above analysis and Lazard s professional judgment, Lazard selected ranges of multiples to estimated 2019 management-adjusted EBITDA for Versum included in the projections provided by Versum management and approved for Lazard s use by Versum management. Lazard applied a selected range of multiples of 8.0x to 9.5x to the estimated 2019 management-adjusted EBITDA of Versum. The results of the foregoing analysis implied an equity value per share range for Versum on a stand-alone basis of approximately $32.65 to $39.80.

Based on the above analysis and Lazard s professional judgment, Lazard selected ranges of multiples to estimated 2019 management-adjusted EBITDA for Entegris included in the projections provided by Entegris management and approved for Lazard s use by Versum management. Lazard applied a selected range of multiples of 8.0x to 9.5x to the estimated 2019 management-adjusted EBITDA of Entegris. The results of the foregoing analysis implied an equity value per share range for Entegris on a stand-alone basis of approximately $25.65 to $31.15.

*Implied Exchange Ratio*

Lazard then calculated an implied exchange ratio reference range by dividing the low end of the implied per share equity value reference range for Versum, by the high end of the implied per share equity value reference range for Entegris, in each case as determined by the public trading valuation analysis described above, and by dividing the high end of the implied per share equity value reference range for Versum, by the low end of the implied per share equity value reference range for Entegris, in each case as determined by the public trading valuation analysis described above. This analysis indicated a range of implied exchange ratios of 1.0482x to 1.5517x, as compared to the exchange ratio of 1.1200x provided for in the merger.

***Discounted Cash Flow Analysis***

*Versum*

Lazard performed a discounted cash flow analysis of Versum to calculate the estimated present value of the standalone unlevered, after-tax free cash flows that Versum projected to generate through 2023 based on the projections provided by Versum management and extrapolated by Lazard based on discussions with, and guidance from, Versum management and approved for Lazard s use by Versum management. Lazard also calculated estimated terminal values for Versum by applying a perpetual growth rate of 1.5% to 2.5%. The standalone unlevered, after-tax free cash flows and terminal values were discounted to present value using discount rates ranging from 9.5% to 10.5%. The discount rates applicable to Versum were based, among other things, on Lazard s judgment of the

estimated range of weighted average cost of capital based on an analysis of the following three companies: Cabot Microelectronics, Entegris and Versum. A range of implied equity values for Versum was then calculated by reducing the range of implied enterprise values by the amount of Versum s net debt and noncontrolling interest as of December 31, 2018. Using the weighted average cost of capital range and the range of perpetual growth rates, the analysis indicated an equity value per share range for Versum on a stand-alone basis of approximately $35.05 to $45.40.

Table of Contents

*Entegris*

Lazard performed a discounted cash flow analysis of Entegris to calculate the estimated present value of the standalone unlevered, after-tax free cash flows that Entegris projected to generate through 2023 based on the projections provided by Entegris management and extrapolated by Lazard based on discussions with, and guidance from, Versum management and approved for Lazard s use by Versum management. Lazard also calculated estimated terminal values for Entegris by applying a perpetual growth rate of 1.5% to 2.5%. The standalone unlevered, after-tax free cash flows and terminal values were discounted to present value using discount rates ranging from 9.5% to 10.5%. The discount rates applicable to Entegris were based, among other things, on Lazard s judgment of the estimated range of weighted average cost of capital based on an analysis of the following three companies: Cabot Microelectronics, Entegris and Versum. A range of implied equity values for Entegris was then calculated by reducing the range of implied enterprise values by the amount of Entegris net debt and noncontrolling interest as of December 31, 2018, with Entegris cash balance calculated pro forma for its share repurchases between January 1, 2019 and January 18, 2019. Using the weighted average cost of capital range and the range of perpetual growth rates, the analysis indicated an equity value per share range for Entegris on a stand-alone basis of approximately $29.80 to $38.05.

*Implied Exchange Ratio*

Lazard then calculated an implied exchange ratio reference range by dividing the low end of the implied per share equity value reference range for Versum, by the high end of the implied per share equity value reference range for Entegris, in each case as determined by the discounted cash flow analysis described above, and by dividing the high end of the implied per share equity value reference range for Versum, by the low end of the implied per share equity value reference range for Entegris, in each case as determined by the discounted cash flow analysis described above. This analysis indicated a range of implied exchange ratios of 0.9212x to 1.5235x, as compared to the exchange ratio of 1.1200x provided for in the merger.

***Has-Gets Analysis From the Perspective of Versum Stockholders***

*Assumptions*

Utilizing the financial information described above, Lazard compared the stand-alone per share value of Versum to the pro forma per share value of the combined company after giving effect to the merger, (1) including realization of a range of projected synergies of $75 million to $100 million as provided to Lazard by Versum management and Entegris management, (2) including a 47.5% / 52.5% ownership split of the combined company by former Versum stockholders and former Entegris stockholders, respectively, and (3) excluding fees and expenses related to the merger.

*Public Trading Value Analysis*

Lazard used the above assumptions and calculated estimated premiums to Versum stockholders using an EV / EBITDA multiple analysis and an estimated 2019 management-adjusted EBITDA multiple. In addition to the assumptions described above, Lazard calculated the estimated premium to Versum stockholders (1) using the midpoints of the valuation ranges of 8.0x to 9.5x EV / EBITDA (based on 10-trading day and 20-trading day volume-weighted average prices of Entegris and Versum as further discussed above, and Lazard s professional judgment), and 9.0x to 10.5x EV / EBITDA (based on an illustrative 1.0x multiple expansion to the 8.0x to 9.5x valuation range, selected by Lazard based on Lazard s professional judgment), (2) adjusting the level of run-rate cost synergies (with the range of such cost synergies provided to Lazard by Versum management) and (3) adjusting the

base stock price on which the premium was calculated.

The following table sets forth the results of such analyses. The analyses and data described in the below table were presented to the Versum board of directors for informational purposes only and did not provide the basis for the rendering of Lazard s opinion.

Table of Contents

**Midpoint of EV / EBITDA Multiple Range of 8.0x to 9.5x:**

| Versum Stock Price | Run-Rate Synergies ($ million) | Premium to Versum Stockholders[1] |
|---|---|---|
| As of January 25, 2019 | $ 75 | 14.5% |
| | $ 85 | 15.6% |
| | $ 100 | 17.1% |
| 10-Trading Day Volume-Weighted Average Price | $ 75 | 20.7% |
| | $ 85 | 21.7% |
| | $ 100 | 23.3% |
| 20-Trading Day Volume-Weighted Average Price | $ 75 | 26.1% |
| | $ 85 | 27.2% |
| | $ 100 | 28.9% |

**Midpoint of EV / EBITDA Multiple Range of 9.0x to 10.5x:**

| Versum Stock Price | Run-Rate Synergies ($ million) | Premium to Versum Stockholders[2] |
|---|---|---|
| As of January 25, 2019 | $ 75 | 28.6% |
| | $ 85 | 29.5% |
| | $ 100 | 31.0% |
| 10-Trading Day Volume-Weighted Average Price | $ 75 | 35.5% |
| | $ 85 | 36.5% |
| | $ 100 | 38.1% |
| 20-Trading Day Volume-Weighted Average Price | $ 75 | 41.5% |
| | $ 85 | 42.6% |
| | $ 100 | 44.2% |

(1) Premiums calculated based on the midpoint of the value per share of Versum common stock that was calculated using the above-described public trading value analysis and the EV / EBITDA multiple range of 8.0x to 9.5x.

(2) Premiums calculated based on the midpoint of the value per share of Versum common stock that was calculated using the above-described public trading value analysis and the EV / EBITDA multiple range of 9.0x to 10.5x.

*Discounted Cash Flow Analysis*

Lazard used the above assumptions and calculated estimated premiums to Versum stockholders using a discounted cash flow analysis to determine the value of the combined company and projected synergies, discounted to a present value utilizing a weighted average cost of capital range of 9.5% to 10.5%. In addition to the assumptions described above, Lazard calculated the estimated premium to Versum stockholders (1) using the applicable midpoints of the

value per share of Versum common stock that were calculated using the discounted cash flow analysis, (2) adjusting for the level of run-rate cost synergies (with the range of such cost synergies provided to Lazard by Versum management) and (3) adjusting for base stock price on which the premium was calculated.

Table of Contents

The following table sets forth the results of such analyses. The analyses and data described in the below table were presented to the Versum board of directors for informational purposes only and did not provide the basis for the rendering of Lazard s opinion.

| Versum Stock Price | Run-Rate Synergies ($ million) | Premium to Versum Stockholders[1] |
|---|---|---|
| As of January 25, 2019 | $ 75 | 30.9% |
| | $ 85 | 31.8% |
| | $ 100 | 33.3% |
| 10-Trading Day Volume-Weighted Average Price | $ 75 | 37.9% |
| | $ 85 | 38.9% |
| | $ 100 | 40.5% |
| 20-Trading Day Volume-Weighted Average Price | $ 75 | 44.1% |
| | $ 85 | 45.1% |
| | $ 100 | 46.8% |

(1) Premiums calculated based on the applicable midpoints of the value per share of Versum common stock that were calculated using the above-described discounted cash flow analysis.

***Other Analyses***

The analyses and data described below were presented to the Versum board of directors for informational purposes only and did not provide the basis for the rendering of Lazard s opinion.

*Present Value of Future Share Price*

Lazard performed an illustrative analysis of the implied present value of Versum s future value per Versum common stock and Entegris future value per Entegris common stock. This analysis is designed to provide an indication of the present value of a theoretical future value of a company s equity as a function of such company s estimated EBITDA and its assumed EV / EBITDA multiple. For this analysis, Lazard utilized projected net debt and noncontrolling interest and included the value of cumulative dividends received.

To calculate the range of the present value of future share prices for Versum, Lazard used the projections provided by Versum management and extrapolated by Lazard based on discussions with, and guidance from, Versum management and approved for Lazard s use by Versum management. Lazard applied a range of illustrative EV / NTM EBITDA multiples of 8.0x to 9.5x to forward EBITDA from fiscal year 2019 to fiscal year 2022, and then discounted such figures to present value using a discount rate of 12.2%, which reflects an estimate of Versum s cost of equity that was calculated by Lazard. This analysis resulted in a range of implied present values of approximately $33.10 to $42.60 per share of Versum common stock.

To calculate the range of the present value of future share prices for Entegris, Lazard used the projections provided by Entegris management and extrapolated by Lazard based on discussions with, and guidance from, Versum management and approved for Lazard s use by Versum management. Lazard applied a range of illustrative EV / NTM EBITDA

multiples of 8.0x to 9.5x to forward EBITDA from fiscal year 2019 to fiscal year 2022, and then discounted such figures to present value using a discount rate of 12.3%, which reflects an estimate of Entegris cost of equity that was calculated by Lazard. This analysis resulted in a range of implied present values of approximately $27.85 to $35.60 per share of Entegris common stock.

Lazard then calculated an implied exchange ratio reference range by dividing the low end of the implied per share equity value reference range for Versum, by the high end of the implied per share equity value reference range for Entegris, in each case as determined by the present value of future share price analysis described above, and by dividing the high end of the implied per share equity value reference range for Versum, by the low end of the implied per share equity value reference range for Entegris, in each case as determined by the present value of future share price analysis described above. The resulting range of the implied exchange ratio was calculated to be 0.9298x to 1.5296x, as compared to the exchange ratio of 1.1200x provided for in the merger.

Table of Contents

*Equity Analyst Price Targets Analysis (12 Months Target)*

Lazard reviewed publicly available equity analyst 12-month price targets based on Wall Street equity research reports prepared by nine equity analysts covering Versum and six equity analysts covering Entegris. Lazard observed target prices that ranged from $26.00 to $47.00 per share for Versum and $30.00 to $44.00 per share for Entegris.

Lazard then calculated an implied exchange ratio reference range by dividing the low end of the implied per share equity value reference range for Versum, by the high end of the implied per share equity value reference range for Entegris, in each case as determined by the equity analyst 12-month price targets analysis described above, and by dividing the high end of the implied per share equity value reference range for Versum, by the low end of the implied per share equity value reference range for Entegris, in each case as determined by the equity analyst 12-month price targets analysis described above. The resulting range of the implied exchange ratio was calculated to be 0.5909x to 1.5667x, as compared to the exchange ratio of 1.1200x provided for in the merger.

*Equity Analyst Price Targets Analysis (Discounted to Present Value)*

Lazard also discounted the observed 12-month price targets described above for Versum to present value by using an estimate of Versum s cost of equity of 12.2% that was calculated by Lazard to calculate a range of approximately $23.20 to $41.90 per share, and the observed 12-month price targets described above for Entegris to present value by using an estimate of Entegris cost of equity of 12.3% that was calculated by Lazard to calculate a range of approximately $26.70 to $39.20 per share.

Lazard then calculated an implied exchange ratio reference range by dividing the low end of the implied per share equity value reference range for Versum, by the high end of the implied per share equity value reference range for Entegris, in each case as determined by the discounted equity analyst price targets analysis described above, and by dividing the high end of the implied per share equity value reference range for Versum, by the low end of the implied per share equity value reference range for Entegris, in each case as determined by the discounted equity analyst price targets analysis described above. The resulting range of the implied exchange ratio was calculated to be 0.5918x to 1.5693x, as compared to the exchange ratio of 1.1200x provided for in the merger.

*52-Week Trading Range Analysis*

Lazard reviewed the range of trading prices for Versum common stock and Entegris common stock for the 52-week period ended January 25, 2019. Lazard observed that, during this period, the intraday prices of Versum common stock ranged from $25.02 to $41.35 per share, and the intraday prices of Entegris common stock ranged from $23.39 to $39.55 per share.

Lazard then calculated an implied exchange ratio reference range by dividing the low end of the implied per share equity value reference range for Versum, by the high end of the implied per share equity value reference range for Entegris, in each case as determined by the 52-week trading range analysis described above, and by dividing the high end of the implied per share equity value reference range for Versum, by the low end of the implied per share equity value reference range for Entegris, in each case as determined by the 52-week trading range analysis described above. The resulting range of the implied exchange ratio was calculated to be 0.6326x to 1.7678x, as compared to the exchange ratio of 1.1200x provided for in the merger.

***Miscellaneous***

In connection with Lazard s services as financial advisor, Versum agreed to pay Lazard an aggregate fee for such services of $20 million, $2 million of which was paid upon the rendering of Lazard s opinion, and the remainder of which is contingent upon the consummation of the merger. In the event that Versum or its affiliates is paid the Entegris termination fee or any other break-up, termination, topping or similar fee in connection with a potential transaction, Versum has agreed to pay Lazard a fee equal to 20% of such amount net of Versum s fees

Table of Contents

and expenses in connection with such potential transaction, provided that the amount payable shall (1) not exceed $15 million and (2) be credited (without duplication) against any amount that may be subsequently paid pursuant to the immediately preceding sentence. Versum also agreed to reimburse Lazard for certain reasonable expenses incurred in connection with Lazard s engagement and to indemnify Lazard and certain related persons under certain circumstances against certain liabilities that may arise from or relate to Lazard s engagement.

The financial advisory business of Lazard has in the past provided certain investment banking services to Versum, for which it has received compensation in the past two years in the aggregate amount of approximately $250,000 (excluding any compensation in connection with the merger), including having advised Versum with respect to corporate preparedness matters. The financial advisory business of Lazard has not been retained by or paid fees by Entegris during the past two years.

Lazard, as part of its investment banking business, is continually engaged in valuations of businesses and securities in connection with mergers and acquisitions, negotiated underwritings, secondary distributions of listed and unlisted securities, private placements, leveraged buyouts and valuations for other purposes. In addition, in the ordinary course, Lazard and its affiliates and employees may trade securities of Versum, Entegris and certain of their respective affiliates for their own accounts and for the accounts of their customers, may at any time hold a long or short position in such securities, and may also trade and hold securities on behalf of Versum, Entegris and certain of their respective affiliates. The issuance of Lazard s opinion was approved by the opinion committee of Lazard.

Lazard prepared these analyses solely for purposes of, and the analyses were delivered to the Versum board of directors in connection with, the provision of its opinion to the Versum board of directors as to the fairness from a financial point of view of the exchange ratio to Versum stockholders (other than holders of Versum excluded shares). Lazard did not recommend any specific exchange ratio to the Versum board or directors or that any given exchange ratio constituted the only appropriate exchange ratio for the merger. Lazard s opinion and analyses were only one of many factors taken into consideration by the Versum board of directors in its evaluation of the merger. Consequently, the analyses described above should not be viewed as determinative of the views of the Versum board of directors or Versum s management with respect to the exchange ratio provided for in the merger or as to whether the Versum board of directors would have been willing to determine that a different exchange ratio or consideration was fair.

Lazard is an internationally recognized investment banking firm providing a full range of financial advisory and other services. Lazard was selected to act as investment banker to Versum because of its qualifications, expertise and reputation in investment banking and mergers and acquisitions generally and in the chemicals industry specifically, as well as its familiarity with the business of Versum.

**Entegris Unaudited Financial Projections**

Other than quarterly financial guidance provided to investors, which may be updated from time to time, Entegris does not as a matter of course make other public projections as to future sales, earnings, or other results, and forecasts for extended periods of time are of particular concern to Entegris due to the unpredictability of the underlying assumptions and estimates. However, as part of Entegris annual three-year strategic planning process completed in October 2018 and its 2019 annual operating planning process completed in December 2018, Entegris management prepared certain unaudited prospective financial information for fiscal years 2019 through 2021 for its board of directors, Morgan Stanley, Lazard and Versum, and Morgan Stanley prepared, based on discussions with and under the guidance of Entegris management, extrapolations thereto, which were not made available to Lazard and Versum, for fiscal years 2022 through 2023, which are referred to collectively as the financial projections by Entegris. The financial projections by Entegris were prepared treating Entegris on a stand-alone basis, without giving effect to the merger including the impact of negotiating or executing the merger, the expenses that may be incurred in connection

with consummating the merger, the potential synergies that may be achieved by the combined company as a result of the merger, the effect of any business or strategic decision or action that has been or will be taken as a result of the merger agreement having been executed, or the effect of any business or strategic decisions or actions which would likely have been taken if the merger

Table of Contents

agreement had not been executed but which were instead altered, accelerated, postponed or not taken in anticipation of the merger. In January 2019, Entegris management also independently and collaboratively prepared with Versum s management certain estimates of annual cost synergies expected to be realized following the closing, which are referred to as the estimated synergies. The estimated synergies are not reflected in the financial projections by Entegris or the financial projections by Versum, but are summarized in the section entitled **Certain Estimated Synergies** beginning on page 121.

The accompanying financial projections by Entegris (including the estimated synergies) were not prepared with a view toward public disclosure or with a view toward compliance with the published guidelines established by the SEC or the American Institute of Certified Public Accountants for preparation or presentation of prospective financial information, or GAAP, but, in the view of Entegris management, were prepared on a reasonable basis, reflected the best available estimates and judgments at the time of preparation, and presented as of the time of preparation, to the best of management s knowledge and belief, the expected course of action and the expected future financial performance of Entegris. However, this information is not fact and should not be relied upon as being necessarily indicative of future results, and readers of this joint proxy statement/prospectus are cautioned not to place undue reliance on the financial projections by Entegris or the estimated synergies. Although Entegris management believes there is a reasonable basis for the financial projections by Entegris and the estimated synergies, Entegris cautions stockholders that future results could be materially different from the financial projections by Entegris and the estimated synergies. This summary of the financial projections by Entegris and the estimated synergies is not being included in this joint proxy statement/prospectus to influence your decision whether to vote for the Entegris merger agreement proposal, but because these financial projections by Entegris and the estimated synergies were shared between Entegris and Versum and provided to Entegris and Versum s respective financial advisors and boards of directors for purposes of considering and evaluating the merger and the merger agreement. Entegris independent registered public accounting firm has not audited, reviewed, examined, compiled nor applied agreed-upon procedures with respect to the financial projections by Entegris and, accordingly, does not express an opinion or any other form of assurance with respect thereto.

The financial projections by Entegris and the estimated synergies are subject to estimates and assumptions in many respects and, as a result, subject to interpretation. While presented with numerical specificity, the financial projections by Entegris and the estimated synergies are based upon a variety of estimates and assumptions that are inherently uncertain, though considered reasonable by Entegris management as of the date of their preparation. These estimates and assumptions may prove to be inaccurate for any number of reasons, including general economic conditions, semiconductor industry capital spending and unit production trends, competition, and the risks discussed in this joint proxy statement/prospectus under the sections entitled **Cautionary Statement Regarding Forward-Looking Statements** and **Risk Factors** beginning on pages 41 and 43, respectively. See also **Where You Can Find More Information** beginning on page 213 of this joint proxy statement/prospectus. The financial projections by Entegris and the estimated synergies also reflect assumptions as to certain business decisions that are subject to change. Because the financial projections by Entegris were developed for Entegris on a stand-alone basis without giving effect to the merger, they do not reflect any divestitures or other restrictions that may be imposed in connection with the receipt of any necessary governmental or regulatory approvals, any synergies that may be realized as a result of the merger or any changes to Entegris operations or strategy that may be implemented after completion of the merger. There can be no assurance that the financial projections by Entegris or the estimated synergies will be realized, and actual results may differ materially from those shown. Generally, the further out the period to which financial projections by Entegris and the estimated synergies relate, the less predictable and more unreliable the information becomes.

The financial projections by Entegris contain certain non-GAAP financial measures that Entegris believes are helpful in understanding its past financial performance and future results. Entegris management regularly uses a variety of

financial measures that are not in accordance with GAAP, including Adjusted EBITDA (defined as net income excluding certain items which Entegris does not believe to be indicative of underlying business trends, including income tax expense, interest expense, interest income, other expense (income), net, integration

Table of Contents

and transaction related costs, amortization of intangible assets and depreciation). The non-GAAP financial measures are not meant to be considered in isolation or as a substitute for comparable GAAP measures. While Entegris believes that these non-GAAP financial measures provide meaningful information to help investors understand the operating results and to analyze Entegris financial and business trends on a period-to-period basis, there are limitations associated with the use of these non-GAAP financial measures. These non-GAAP financial measures are not prepared in accordance with GAAP, are not reported by all of Entegris competitors (including Versum) and may not be directly comparable to similarly titled measures of Entegris competitors due to potential differences in the exact method of calculation.

Neither Entegris nor Versum has provided reconciliations of the non-GAAP financial measures included in these projections to the comparable GAAP measure due to no reasonably accessible or reliable comparable GAAP measures for these measures and the inherent difficulty in forecasting and quantifying the measures that are necessary for such reconciliation.

None of Entegris, Versum, the combined company or their respective affiliates, advisors, officers, directors or other representatives can provide any assurance that actual results will not differ from the financial projections by Versum or the estimated synergies, and none of them undertakes any obligation to update, or otherwise revise or reconcile, the financial projections by Entegris or the estimated synergies to reflect circumstances existing after the date the financial projections by Entegris or the estimated synergies were generated or to reflect the occurrence of future events even in the event that any or all of the assumptions underlying financial projections by Entegris or the estimated synergies, as applicable, are shown to be in error. Except as required by applicable securities laws, Entegris does not intend to make publicly available any update or other revision to the financial projections by Entegris or the estimated synergies, even in the event that any or all assumptions are shown to be in error. Entegris has made publicly available its actual results of operations for the year ended December 31, 2018 on Entegris Annual Report on Form 10-K filed with the SEC on February 11, 2019. None of Entegris or its affiliates, advisors, officers, directors or other representatives has made or makes any representation to any Entegris stockholder or other person regarding Entegris ultimate performance compared to the information contained in the financial projections by Entegris, the estimated synergies or that forecasted results will be achieved. Entegris has made no representation to Versum, in the merger agreement or otherwise, concerning the financial projections by Entegris or the estimated synergies.

**Summary of the Financial Projections by Entegris**

The following table presents certain unaudited prospective financial information of Entegris prepared by Entegris management for fiscal years 2019 through 2021, and extrapolated by Morgan Stanley, based on discussions with and guidance from Entegris management, for fiscal years 2022 through 2023, and approved for Morgan Stanley s use by Entegris management.

| | Fiscal Year Ended December 31, | | | | |
|---|---|---|---|---|---|
| **($ in millions)** | **2019E** | **2020E** | **2021E** | **2022E** | **2023E** |
| Sales | $ 1,698 | $ 1,870 | $ 2,034 | $ 2,115 | $ 2,200 |
| Adjusted EBITDA[(1)] | $ 496 | $ 567 | $ 635 | $ 661 | $ 687 |
| Adjusted EBITA[(2)] | $ 427 | $ 486 | $ 546 | $ 568 | $ 590 |

(1) Adjusted EBITDA, a non-GAAP term, is defined by Entegris as net income excluding certain items which Entegris does not believe to be indicative of underlying business trends, including income tax expense,

interest expense, interest income, other expense (income), net, integration and transaction related costs, amortization of intangible assets and depreciation.

(2) Adjusted EBITA, a non-GAAP term, is defined by Entegris as net income excluding certain items which Entegris does not believe to be indicative of underlying business trends, including income tax expense, interest expense, interest income, other expense (income), net, integration and transaction related costs and amortization of intangible assets.

Table of Contents

In addition (as described in the section entitled **Versum Unaudited Financial Projections** beginning on page 118), Versum management prepared certain unaudited prospective financial information for fiscal years 2019 through 2021 for its board of directors, Lazard, Morgan Stanley and Entegris, which Entegris adjusted to primarily reflect slightly more conservative assumptions regarding semiconductor industry capital spending, and Morgan Stanley extrapolated, based on discussions with and guidance from Entegris management, for fiscal years 2022 through 2023, which information was approved for Morgan Stanley s use by Entegris management, and is presented, as so adjusted, in the following table (and is referred to as the Versum growth sensitivity case in the section entitled **Opinion of Entegris Financial Advisor** beginning on page 96).

| | Fiscal Year Ended September 30, | | | | |
|---|---|---|---|---|---|
| **($ in millions)** | **2019E** | **2020E** | **2021E** | **2022E** | **2023E** |
| Sales | $ 1,426 | $ 1,532 | $ 1,699 | $ 1,801 | $ 1,873 |
| Adjusted EBITDA[(1)] | $ 482 | $ 516 | $ 592 | $ 627 | $ 653 |
| Adjusted EBIT[(2)] | $ 420 | $ 457 | $ 528 | $ 559 | $ 582 |

(1) Adjusted EBITDA, a non-GAAP term, is net income excluding certain disclosed items which Versum does not believe to be indicative of underlying business trends, including interest expense, the write-off of financing costs, non-service components of net periodic pension cost, income tax provision, depreciation and amortization expense, non-controlling interests, and business separation, restructuring and cost reduction actions.

(2) Adjusted EBIT, a non-GAAP term, is net income excluding certain disclosed items which Versum does not believe to be indicative of underlying business trends, including interest expense, the write-off of financing costs, non-service components of net periodic pension cost, income tax provision, non-controlling interests, and business separation, restructuring and cost reduction actions.

**Versum Unaudited Financial Projections**

Versum has historically prepared and provided public guidance as to its projected financial and operational results for its then-current fiscal year in its press releases announcing its financial results for the then-current quarter or year, as applicable. Other than the financial guidance discussed above, Versum does not as a matter of course make other public projections as to future sales, earnings, or other results, and forecasts for extended periods of time are of particular concern to Versum due to the unpredictability of the underlying assumptions and estimates. However, in connection with the discussions regarding the proposed merger, Versum management prepared certain unaudited prospective financial information for fiscal years 2019 through 2021 for its board of directors, Lazard, Morgan Stanley and Entegris, and Lazard prepared, based on discussions with and under the guidance of Versum management, extrapolations thereto, which were not made available to Morgan Stanley and Entegris, for fiscal years 2022 through 2023, which are referred to collectively as the financial projections by Versum. The financial projections by Versum were prepared treating Versum on a stand-alone basis, without giving effect to the merger including the impact of negotiating or executing the merger, the expenses that may be incurred in connection with consummating the merger, the potential synergies that may be achieved by the combined company as a result of the merger, the effect of any business or strategic decision or action that has been or will be taken as a result of the merger agreement having been executed, or the effect of any business or strategic decisions or actions which would likely have been taken if the merger agreement had not been executed but which were instead altered, accelerated, postponed or not taken in anticipation of the merger. In January 2019, Versum s management also independently and collaboratively prepared with Entegris management the estimated synergies. The estimated synergies are not reflected in the financial projections by Versum or the financial projections by Entegris, but are summarized in the section entitled **Certain Estimated Synergies** beginning on page 121.

The accompanying financial projections by Versum (including the estimated synergies) were not prepared with a view toward public disclosure or with a view toward compliance with the published guidelines established by the SEC or the American Institute of Certified Public Accountants for preparation or presentation of

prospective financial information, or GAAP, but, in the view of Versum s management, were prepared on a reasonable basis, reflected the best available estimates and judgments at the time of preparation, and presented as of the time of preparation, to the best of management s knowledge and belief, the expected course of action and the expected future financial performance of Versum. However, this information is not fact and should not be relied upon as being necessarily indicative of future results, and readers of this joint proxy statement/prospectus are cautioned not to place undue reliance on the financial projections by Versum or the estimated synergies. Although Versum s management believes there is a reasonable basis for the financial projections by Versum and the estimated synergies, Versum cautions stockholders that future results could be materially different from the financial projections by Versum and the estimated synergies. This summary of the financial projections by Versum and the estimated synergies is not being included in this joint proxy statement/prospectus to influence your decision whether to vote for the Versum merger agreement proposal, but because these financial projections by Versum and the estimated synergies were shared between Versum and Entegris and provided to Versum s and Entegris respective financial advisors and boards of directors for purposes of considering and evaluating the merger and the merger agreement. Versum s independent registered public accounting firm has not audited, reviewed, examined, compiled nor applied agreed-upon procedures with respect to the financial projections by Versum and, accordingly, does not express an opinion or any other form of assurance with respect thereto.

The financial projections by Versum and the estimated synergies are subject to estimates and assumptions in many respects and, as a result, subject to interpretation. While presented with numerical specificity, the financial projections by Versum and the estimated synergies are based upon a variety of estimates and assumptions that are inherently uncertain, though considered reasonable by Versum s management as of the date of their preparation. These estimates and assumptions may prove to be inaccurate for any number of reasons, including general economic conditions, competition, and the risks discussed in this joint proxy statement/prospectus under the sections entitled **Cautionary Statement Regarding Forward-Looking Statements** and **Risk Factors** beginning on pages 41 and 43, respectively. See also **Where You Can Find More Information** beginning on page 213 of this joint proxy statement/prospectus. The financial projections by Versum and the estimated synergies also reflect assumptions as to certain business decisions that are subject to change. Because the financial projections by Versum were developed for Versum on a stand-alone basis without giving effect to the merger, they do not reflect any divestitures or other restrictions that may be imposed in connection with the receipt of any necessary governmental or regulatory approvals, any synergies that may be realized as a result of the merger or any changes to Versum s operations or strategy that may be implemented after completion of the merger. There can be no assurance that the financial projections by Versum or the estimated synergies will be realized, and actual results may differ materially from those shown. Generally, the further out the period to which financial projections by Versum and the estimated synergies relate, the less predictable and more unreliable the information becomes.

The financial projections by Versum contain certain non-GAAP financial measures that Versum believes are helpful in understanding its past financial performance and future results. Versum management regularly uses a variety of financial measures that are not in accordance with GAAP, including Adjusted EBITDA (defined as net income excluding certain items which Versum does not believe to be indicative of underlying business trends, including interest expense, the write-off of financing costs, non-service components of net periodic pension cost, income tax provision, depreciation and amortization expense, non-controlling interests, and business separation, restructuring and cost reduction actions) for forecasting, budgeting and measuring operating performance. The non-GAAP financial measures are not meant to be considered in isolation or as a substitute for comparable GAAP measures. While Versum believes that these non-GAAP financial measures provide meaningful information to help investors understand the operating results and to analyze Versum s financial and business trends on a period-to-period basis, there are limitations associated with the use of these non-GAAP financial measures. These non-GAAP financial measures are not prepared in accordance with GAAP, are not reported by all of Versum s competitors (including Entegris) and may not be directly comparable to similarly titled measures of Versum s competitors due to potential differences in the

exact method of calculation.

Table of Contents

Neither Versum nor Entegris has provided reconciliations of the non-GAAP financial measures included in these projections to the comparable GAAP measure due to no reasonably accessible or reliable comparable GAAP measures for these measures and the inherent difficulty in forecasting and quantifying the measures that are necessary for such reconciliation.

None of Versum, Entegris, the combined company or their respective affiliates, advisors, officers, directors or other representatives can provide any assurance that actual results will not differ from the financial projections by Versum or the estimated synergies, and none of them undertakes any obligation to update, or otherwise revise or reconcile, the financial projections by Versum or the estimated synergies to reflect circumstances existing after the date the financial projections by Versum or the estimated synergies were generated or to reflect the occurrence of future events even in the event that any or all of the assumptions underlying financial projections by Versum or the estimated synergies, as applicable, are shown to be in error. Except as required by applicable securities laws, Versum does not intend to make publicly available any update or other revision to the financial projections by Versum or the estimated synergies, even in the event that any or all assumptions are shown to be in error. Versum has made publicly available its actual results of operations for the year ended September 30, 2018 on Versum s Annual Report on Form 10-K filed with the SEC on November 21, 2018 and for the quarterly period ended December 31, 2018 on Versum s Quarterly Report on Form 10-Q filed with the SEC on February 7, 2019. None of Versum or its affiliates, advisors, officers, directors or other representatives has made or makes any representation to any Versum stockholder or other person regarding Versum s ultimate performance compared to the information contained in the financial projections by Versum, the estimated synergies or that forecasted results will be achieved. Versum has made no representation to Entegris, in the merger agreement or otherwise, concerning the financial projections by Versum or the estimated synergies.

**Summary of the Financial Projections by Versum**

The following table presents certain unaudited prospective financial information of Versum prepared by Versum management for fiscal years 2019 through 2021, and extrapolated by Lazard, based on discussions with and guidance from Versum management, for fiscal years 2022 through 2023, and approved for Lazard s use by Versum management.

| | Fiscal Year Ended September 30, | | | | |
|---|---|---|---|---|---|
| **($ in millions)** | **2019E** | **2020E** | **2021E** | **2022E** | **2023E** |
| Sales | $ 1,470 | $ 1,647 | $ 1,812 | $ 1,921 | $ 2,017 |
| Adjusted EBITDA[(1)] | $ 495 | $ 554 | $ 630 | $ 668 | $ 701 |
| Adjusted EBIT[(2)] | $ 433 | $ 492 | $ 563 | $ 596 | $ 626 |

(1) Adjusted EBITDA, a non-GAAP term, is net income excluding certain disclosed items which Versum does not believe to be indicative of underlying business trends, including interest expense, the write-off of financing costs, non-service components of net periodic pension cost, income tax provision, depreciation and amortization expense, non-controlling interests, and business separation, restructuring and cost reduction actions.

(2) Adjusted EBIT, a non-GAAP term, is net income excluding certain disclosed items which Versum does not believe to be indicative of underlying business trends, including interest expense, the write-off of financing costs, non-service components of net periodic pension cost, income tax provision, non-controlling interests, and business separation, restructuring and cost reduction actions.

120

Table of Contents

The following table presents certain unaudited prospective financial information of Entegris prepared by Entegris management for fiscal years 2019 through 2021 and provided to Versum, and extrapolated by Lazard, based on discussions with and guidance from Versum management, for fiscal years 2022 through 2023, and approved for Lazard s use by Versum management.

| | Fiscal Year Ended December 31, | | | | |
|---|---|---|---|---|---|
| **($ in millions)** | **2019E** | **2020E** | **2021E** | **2022E** | **2023E** |
| Sales | $ 1,698 | $ 1,870 | $ 2,034 | $ 2,156 | $ 2,264 |
| Adjusted EBITDA[(1)] | $ 496 | $ 567 | $ 635 | $ 673 | $ 707 |
| Adjusted EBITA[(2)] | $ 427 | $ 486 | $ 546 | $ 578 | $ 607 |

(1) Adjusted EBITDA, a non-GAAP term, is defined by Entegris as net income excluding certain items which Entegris does not believe to be indicative of underlying business trends, including income tax expense, interest expense, interest income, other expense (income), net, integration and transaction related costs, amortization of intangible assets and depreciation.

(2) Adjusted EBITA, a non-GAAP term, is defined by Entegris as net income excluding certain items which Entegris does not believe to be indicative of underlying business trends, including income tax expense, interest expense, interest income, other expense (income), net, integration and transaction related costs and amortization of intangible assets.

**Certain Estimated Synergies**

In January 2019, Versum s management and Entegris management both independently and collaboratively prepared and provided to their respective boards of directors and to their respective financial advisors certain estimates of annual cost synergies estimated to be potentially realizable by the combined company within 12 months after closing. The initial estimated synergies included approximately $75 million of annual gross pre-tax cost synergies estimated to be potentially realizable within 12 months after closing. The estimated synergies assumed that the expected benefits of the merger would be realized, including that no restrictions, terms or other conditions would be imposed in connection with the receipt of any necessary governmental, regulatory or other approvals or consents in connection with the consummation of the merger. In addition, the analysis for estimated synergies assumes an aggregate pre-tax cash investment of approximately $60-75 million (excluding transaction related costs and change in control related payments that may be payable) to achieve the estimated synergies, with cost savings to come primarily from general and administrative expenses and supply chain (manufacturing, procurement and logistics), commercial operations and research and development rationalization.

On March 8, 2019, Entegris and Versum issued an open letter to Entegris stockholders and Versum stockholders indicating that the integration teams of both companies had worked closely over the prior month, and as a result of those detailed efforts, the combined company now expects to achieve more than $125 million in cost synergies from general and administrative expenses, such as facilities optimization, administrative functions and rationalization of public company costs, as well as efficiencies in commercial operations, manufacturing, logistics and procurement. The open letter also indicated that, given the strength of the two companies, the enhanced offerings and the positive receptivity from customers, over the next three years the combined company also expects revenue synergies to contribute at least $50 million of additional EBITDA annually, which will result initially from cross-selling across major customers and geographies and eventually through the opportunity to develop co-optimized products and solutions. The open letter further stated that the merger is expected to generate tax synergies reflecting the combined company s ability to benefit from Entegris more efficient tax structure.

See the sections above entitled **Entegris Unaudited Financial Projections** and **Versum Unaudited Financial Projections** beginning on pages 115 and 118, respectively, for further information regarding the uncertainties underlying the estimated synergies as well as the sections entitled **Cautionary Statement Regarding Forward-Looking Statements** and **Risk Factors** beginning on pages 41 and 43,

Table of Contents

respectively, for further information regarding the uncertainties and factors associated with realizing the synergies in connection with the merger.

**Closing and Effective Time of the Merger**

The closing of the merger will take place on the third business day following the day on which the last to be satisfied or (to the extent permissible) waived of the conditions for completion of the merger set forth in the merger agreement (other than those conditions that by their nature must be satisfied or waived at the closing (so long as such conditions are reasonably capable of being satisfied), but subject to the satisfaction or waiver of those conditions) is satisfied or (to the extent permissible) waived in accordance with the merger agreement or on such other date as Versum and Entegris may mutually agree in writing. Subject to the satisfaction or waiver of the conditions to the closing described in the section entitled **The Merger Agreement Conditions to the Completion of the Merger** beginning on page 152, including the adoption of the merger agreement by Versum stockholders at the Versum special meeting and adoption of the merger agreement by Entegris stockholders at the Entegris special meeting, it is anticipated that the merger will close in the second half of 2019. However, neither Entegris nor Versum can predict the actual date on which the merger will be completed, or if the completion will occur at all, because completion is subject to conditions and factors outside the control of both companies. It is possible that factors outside the control of both companies could result in the merger being completed at a different time, or not at all.

As soon as practicable following, and on the date of, the closing, Entegris and Versum will cause a certificate of merger relating to the merger, which is referred to as the certificate of merger, to be executed, acknowledged and filed with the Secretary of State of the State of Delaware as provided in Section 251 of the DGCL. The merger will become effective at the time when the certificate of merger has been duly filed with and accepted by the Secretary of State of the State of Delaware or at such later date and time as may be agreed by Entegris and Versum in writing and specified in the certificate of merger.

**Regulatory Approvals**

***General***

Entegris and Versum have agreed to cooperate with each other and use, and to cause their respective subsidiaries to use, their respective reasonable best efforts to take or cause to be taken all actions, and do or cause to be done all things reasonably necessary, proper or advisable on its part under the merger agreement and applicable law to cause the conditions to closing to be satisfied as promptly as reasonably practicable and advisable (and in any event no later than the outside date) and to consummate and make effective the transactions contemplated by the merger agreement as soon as reasonably practicable, including preparing and filing as promptly as reasonably practicable and advisable all documentation to effect all necessary notices, reports and other filings and to obtain as promptly as reasonably practicable all consents necessary or advisable to be obtained from any third party or any governmental entity in order to consummate such transactions.

***Requisite Regulatory Approvals***

The completion of the merger is subject to the receipt of antitrust clearance in the United States and in China, Germany, Japan, South Korea and Taiwan, which are referred to as the requisite regulatory approvals.

With respect to the United States, under the HSR Act, the merger may not be completed until notification and report forms have been filed with the FTC and the DOJ and the applicable waiting period has expired or been terminated. A transaction requiring notification under the HSR Act may not be completed until the expiration of a 30-calendar-day

waiting period following the parties filing of their respective HSR notifications or the early termination of that waiting period. Entegris and Versum each filed an HSR notification with the FTC and the DOJ on February 6, 2019 and the waiting period expired at 11:59 p.m. Eastern Time on March 8, 2019. With respect to Germany, clearance was received on March 19, 2019.

Table of Contents

At any time before or after consummation of the merger, notwithstanding the expiration or termination of the applicable waiting period under the HSR Act, the DOJ or the FTC, or any state, could take such action under the antitrust laws as it deems necessary or desirable in the public interest, including seeking to enjoin the completion of the merger, seeking divestiture of substantial assets of the parties or requiring the parties to license, or hold separate, assets or terminate existing relationships and contractual rights. At any time before or after the completion of the merger, and notwithstanding the expiration or termination of the applicable waiting period under the HSR Act, any state could take such action under the antitrust laws as it deems necessary or desirable in the public interest. Such action could include seeking to enjoin the completion of the merger or seeking divestiture of substantial assets of the parties. Private parties may also seek to take legal action under the antitrust laws under certain circumstances.

The merger is also subject to clearance or approval by antitrust authorities in certain other jurisdictions. The merger cannot be completed until Entegris and Versum obtain clearance to consummate the merger or applicable waiting periods have expired or been terminated in each applicable jurisdiction. Entegris and Versum, in consultation and cooperation with each other, will file notifications, as required with antitrust authorities in certain other jurisdictions, as promptly as practicable after the date of the merger agreement. The relevant antitrust authorities could take such actions under the applicable antitrust laws as they deem necessary or desirable, including seeking divestiture of substantial assets of the parties or requiring the parties to license, or hold separate, assets or terminate existing relationships and contractual rights. There is no assurance that Entegris and Versum will obtain all required antitrust clearances or approvals on a timely basis, if at all.

Each of Entegris and Versum is required under the merger agreement to defend through litigation (excluding any appeals) on the merits of any claim asserted in any court, agency or other proceeding by any person or entity (including any governmental antitrust entity) seeking to delay, restrain, prevent, enjoin or otherwise prohibit consummation of the merger. In addition, each of Entegris and Versum is required under the merger agreement to take, effect or agree to any regulatory remedy (as defined in the section entitled **The Merger Agreement Cooperation; Efforts to Consummate** beginning on page 145) if such regulatory remedy is reasonably necessary, proper or advisable to permit the consummation of the merger and other transactions contemplated by the merger agreement, although no such regulatory remedy is required if it is not conditioned upon the closing of the merger or if such regulatory remedy, individually or in the aggregate with any other regulatory remedy, would reasonably be expected to have a material adverse effect on the business, operations, financial condition or results of operations of Versum and its subsidiaries, taken as a whole, Entegris and its subsidiaries, taken as a whole, or the combined company and its subsidiaries, not taking into account any proceeds received or expected to be received from effecting any such action. For a description of the parties obligations with respect to regulatory approvals related to the merger, see the section entitled **The Merger Agreement Cooperation; Efforts to Consummate** beginning on page 145.

**Ownership of the Combined Company After the Merger**

As of the date of this joint proxy statement/prospectus, based on the exchange ratio of 1.120 and the estimated number of shares of common stock of Entegris and Versum that will be outstanding immediately prior to the completion of the merger, Entegris and Versum estimate that holders of shares of Entegris common stock as of immediately prior to the completion of the merger will hold, in the aggregate, approximately 52.5% of the issued and outstanding shares of common stock of the combined company (based on fully diluted shares outstanding of the combined company including exercisable options only) immediately following the completion of the merger, and holders of shares of Versum common stock as of immediately prior to the completion of the merger will hold, in the aggregate, approximately 47.5% of the issued and outstanding shares of common stock of the combined company (based on fully diluted shares outstanding of the combined company including exercisable options only) immediately following the completion of the merger.

123

Table of Contents

**Governance of the Combined Company**

***Certificate of Incorporation***

Subject to adoption of the amended and restated certificate of incorporation of Entegris by Entegris stockholders, at the effective time, the certificate of incorporation of Entegris, as in effect immediately prior to the effective time, will be amended as provided in the merger agreement, and as so amended will be the certificate of incorporation of the combined company, until thereafter amended as provided therein or by applicable law.

The amended and restated certificate of incorporation of Entegris implements certain governance matters for the combined company following completion of the merger. The full text of the proposed amended and restated certificate of incorporation is attached to this joint proxy statement/prospectus as Annex B.

***Board of Directors***

As of the effective time, the board of directors of the combined company will consist of nine directors, who will be determined prior to closing by mutual agreement of the parties, including:

- the four Entegris designees;
- the four Versum designees (including the chairman of the board of directors of Versum as of immediately prior to the effective time); and
- the Entegris CEO.

The parties intend that the combined company board of directors represent an appropriate mix of relevant experience, qualifications and attributes. Each of the Entegris designees and the Versum designees will meet the independence standards of NASDAQ or the NYSE as may be applicable with respect to the combined company as of the effective time. Subject to adoption of the amended and restated certificate of incorporation of Entegris by Entegris stockholders, from the closing until the third anniversary of the closing, any action by the board of directors to change the chief executive officer or the chairman of the board of directors of the combined company will require approval of at least 75% of the then-serving directors.

As of the date of this joint proxy statement/prospectus, other than as set forth above, the individuals to serve on the board of directors of the combined company at the effective time have not been determined.

***Chairman of the Board of Directors***

The chairman of the board of directors of Versum as of immediately prior to the effective time will serve as the chairman of the board of directors of the combined company. Subject to adoption of the amended and restated certificate of incorporation of Entegris by Entegris stockholders, from the closing until the third anniversary of the closing, the removal of the chairman of the board of directors of the combined company will require the approval of at least 75% of the then-serving directors.

***Committees of the Board of Directors***

As of the effective time, the board of directors of the combined company will include three committees: the audit and finance committee, the compensation committee and the nominating and governance committee.

***Chief Executive Officer***

As of the effective time, the Entegris CEO will serve as the chief executive officer of the combined company. Subject to adoption of the amended and restated certificate of incorporation of Entegris by Entegris stockholders, from the closing until the third anniversary of the closing, the removal of the chief executive officer of the combined company will require the approval of at least 75% of the then-serving directors.

Table of Contents

***Name***

The name of the combined company will be Entegris, Inc. as of the effective time.

***Headquarters***

As of the effective time, the headquarters of the combined company will be located in Billerica, Massachusetts.

**U.S. Federal Securities Law Consequences**

Pending the effectiveness of the registration statement on Form S-4, of which this joint proxy statement/prospectus forms a part, shares of Entegris common stock issued in the merger will not be subject to any restrictions on transfer arising under the Securities Act or the Exchange Act, except for shares of Entegris common stock issued to any Versum stockholder who may be deemed an affiliate of Entegris after the completion of the merger. This joint proxy statement/prospectus does not cover resales of Entegris common stock received by any person upon the completion of the merger, and no person is authorized to make any use of this joint proxy statement/prospectus in connection with any resale of Entegris common stock.

**Accounting Treatment**

Entegris and Versum prepare their respective financial statements in accordance with GAAP. Although the parties have structured the merger as a merger of equals, GAAP requires that one party to the merger be identified as the acquirer. The merger will be accounted for using the acquisition method of accounting, and Entegris will be treated as the accounting acquirer. In identifying Entegris as the acquiring entity for accounting purposes, Entegris and Versum took into account a number of factors as of the date of this joint proxy statement/prospectus, including the relative voting rights of all equity instruments in the combined company and the intended corporate governance structure of the combined company. No single factor was the sole determinant in the overall conclusion that Entegris is the acquirer for accounting purposes; rather all factors were considered in arriving at such conclusion.

**Exchange of Shares**

Prior to the effective time, Entegris will appoint an exchange agent (with Versum s prior approval) to handle the exchange of shares of Versum common stock for Entegris common stock. Each share of Versum common stock (other than Versum excluded shares) will be converted into the right to receive 1.120 shares of Entegris common stock, together with cash in lieu of fractional shares, if any, and unpaid dividends and distributions, if any, in accordance with the merger agreement.

After the effective time, shares of Versum common stock will be cancelled and will cease to exist and each certificate that previously represented shares of Versum common stock will represent only the right to receive Entegris common stock and cash in lieu of fractional shares, if any, and unpaid dividends and distributions, if any, in accordance with the merger agreement.

As soon as reasonably practicable (but in any event within three business days) after the effective time, the exchange agent will mail each holder of record of a certificate that immediately prior to the effective time represented outstanding shares of Versum common stock: (a) a notice advising such holders of the effectiveness of the merger, (b) a letter of transmittal specifying that delivery will be effected, and risk of loss and title to a certificate will pass, only upon the surrender of the certificate to the exchange agent and (c) instructions for surrendering the applicable certificate in exchange for shares of Entegris common stock. After the completion of the merger, shares of Versum

common stock represented by any such certificate will be exchanged for shares of Entegris common stock in book-entry form and cash will be paid in lieu of fractional shares, if any, and unpaid dividends or distributions, if any, in accordance with the merger agreement.

Table of Contents

Holders of shares of Versum common stock in book-entry form will not be required to take any specific actions to exchange shares Versum common stock for shares of Entegris common stock. After the completion of the merger, shares of Versum common stock held in book-entry form will be automatically exchanged for shares of Entegris common stock in book-entry form and cash will be paid in lieu of fractional shares, if any, and unpaid dividends or distributions, if any, in accordance with the merger agreement.

More information can be found in the section entitled **The Merger Agreement Exchange of Shares** beginning on page 129.

**Market Listing**

The shares of Entegris common stock to be issued in the merger are expected to be listed for trading on NASDAQ or the NYSE under the symbol ENTG. Stockholders will be informed in conjunction with the closing on which exchange the shares will trade.

**Delisting and Deregistration of Versum Common Stock**

If the merger is completed, Versum common stock will be delisted from the NYSE and deregistered under the Exchange Act, and Versum will no longer be required to file periodic reports with the SEC with respect to Versum common stock.

Versum has agreed to cooperate with Entegris and use its reasonable best efforts to take, or cause to be taken, all actions, and do or cause to be done all things, reasonably necessary, proper or advisable on its part under applicable laws and rules and policies of the NYSE to enable the delisting by the combined company of the shares of Versum common stock from the NYSE and the deregistration of the shares of Versum common stock under the Exchange Act as promptly as practicable after the effective time.

**Litigation Related to the Merger**

Following the public announcement of the merger, purported stockholders of Versum have filed three putative class action lawsuits and one individual lawsuit in the United States District Court for the District of Delaware against Versum and the members of the Versum board of directors (and, in the case of one of the putative class actions, also against Entegris): Price v. Versum Materials, Inc. et al., 1:19-cv-00427 (filed on March 1, 2019), Wang v. Versum Materials, Inc. et al., 1:19-cv-00460 (filed on March 5, 2019), Wheby v. Versum Materials, Inc. et al., 1:19-cv-00472 (filed on March 6, 2019), and Robert v. Versum Materials, Inc. et al., 1:19-cv-00511 (filed on March 14, 2019). The lawsuits contain similar allegations contending, among other things, that the registration statement on Form S-4, of which this joint proxy statement/prospectus forms a part, misstates or fails to disclose certain allegedly material information in violation of federal securities laws. The individual lawsuit (Wang) additionally alleges that the members of the Versum board of directors breached their fiduciary duties in connection with the Merck proposal. The lawsuits seek injunctive relief enjoining the merger, damages and costs, and other remedies.

Additionally, purported stockholders of Versum have filed two putative class action lawsuits in the Court of Chancery of the State of Delaware against Versum, the members of the Versum board of directors, and Broadridge Corporate Issuer Solutions, Inc. in its capacity as the rights agent for the Versum rights plan: Plumbers and Steamfitters Local 60 Pension Trust v. Versum Materials, Inc. et al., 2019-0190-JTL (filed on March 8, 2019) and City of Providence v. Versum Materials, Inc. et al., 2019-0206-JTL (filed on March 14, 2019). The lawsuits contain similar allegations contending, among other things, that the members of the Versum board of directors breached their fiduciary duties in connection with the Merck proposal and in instituting the Versum rights plan. One lawsuit (City of Providence)

additionally contains breach of fiduciary duty allegations arising out of alleged negotiation by members of the Versum board of directors with Entegris without board authorization and without full disclosure to the board. The lawsuits seek relief declaring that the Versum rights plan is unenforceable or enjoining its use, damages and costs, and other remedies. One lawsuit (City of Providence) additionally seeks to enjoin the merger. On March 19, 2019, the Delaware Chancery Court entered an order consolidating the two lawsuits under the caption In re Versum Materials, Inc. Stockholder Litigation, Consolidated C.A. No. 2019-0206-JTL. The complaint previously filed by the City of Providence was designated the operative complaint.

Table of Contents

## THE MERGER AGREEMENT

*The following description sets forth the principal terms of the merger agreement, which is attached as Annex A and is incorporated by reference into this joint proxy statement/prospectus. The rights and obligations of the parties are governed by the express terms and conditions of the merger agreement and not by this description, which is summary by nature. This description does not purport to be complete and is qualified in its entirety by reference to the complete text of the merger agreement. You are encouraged to read the merger agreement carefully and in its entirety, as well as this joint proxy statement/prospectus and any documents incorporated by reference herein, before making any decisions regarding any of the proposals described in this joint proxy statement/prospectus. This section is intended to provide you with information regarding the terms of the merger agreement. Accordingly, the representations, warranties, covenants and other agreements in the merger agreement should not be read alone, and you should read the information provided elsewhere in this joint proxy statement/prospectus and in the public filings Entegris and Versum make with the SEC, as described in the section entitled* ***Where You Can Find More Information*** *beginning on page 213.*

### Explanatory Note Regarding the Merger Agreement

The merger agreement and this summary of terms are included to provide you with information regarding the terms of the merger agreement. Factual disclosures about Entegris and Versum contained in this joint proxy statement/prospectus or in the public reports of Entegris and Versum filed with the SEC may supplement, update or modify the factual disclosures about Entegris and Versum contained in the merger agreement. The representations, warranties and covenants made in the merger agreement by Entegris and Versum were qualified and subject to important limitations agreed to by Entegris and Versum in connection with negotiating the terms of the merger agreement. In particular, in your review of the representations and warranties contained in the merger agreement and described in this summary, it is important to bear in mind that the representations and warranties were negotiated with the principal purpose of establishing circumstances in which a party to the merger agreement may have the right not to consummate the merger if the representations and warranties of the other party prove to be untrue due to a change in circumstance or otherwise, and allocating risk between the parties to the merger agreement, and were not intended by the parties to the merger agreement to be a characterization of the actual state of facts or condition of Entegris or Versum, except as expressly stated in the merger agreement. The representations and warranties also may be subject to a contractual standard of materiality different from that generally applicable to stockholders and reports and documents filed with the SEC and in some cases were qualified by the matters contained in the confidential disclosures that Entegris and Versum each delivered in connection with the merger agreement, which disclosures were not reflected in the merger agreement. Moreover, information concerning the subject matter of the representations and warranties, which do not purport to be accurate as of the date of this joint proxy statement/prospectus, may have changed since the date of the merger agreement and subsequent developments or new information qualifying a representation or warranty may have been included in this proxy statement or in the respective public filings made by each of Entegris or Versum with the SEC.

Additional information about Entegris and Versum may be found elsewhere in this joint proxy statement/prospectus and in the public filings Entegris and Versum make with the SEC. See the section entitled **Where You Can Find More Information** beginning on page 213.

### Structure of the Merger

The merger agreement provides for the merger of Versum with and into Entegris. As a result of the merger, the separate existence of Versum will cease, and Entegris will continue its existence under the laws of the State of Delaware as the surviving corporation upon consummation of the merger.

**Completion and Effectiveness of the Merger**

The closing of the merger will take place on the third business day following the day on which the last to be satisfied or (to the extent permissible) waived of the conditions for completion of the merger set forth in the

Table of Contents

merger agreement (other than those conditions that by their nature must be satisfied or waived at the closing (so long as such conditions are reasonably capable of being satisfied), but subject to the satisfaction or waiver of those conditions) is satisfied or waived (to the extent permissible) in accordance with the merger agreement or on such other date as Versum and Entegris may mutually agree in writing.

As soon as practicable following, and on the date of, the closing, Entegris and Versum will cause the certificate of merger to be executed, acknowledged and filed with the Secretary of State of the State of Delaware as provided in Section 251 of the DGCL. The merger will become effective at the time when the certificate of merger has been duly filed with and accepted by the Secretary of State of the State of Delaware or at such later date and time as may be agreed by Entegris and Versum in writing and specified in the certificate of merger.

Entegris and Versum are working to complete the merger prior to the outside date of January 28, 2020 (subject to extension in certain circumstances to April 28, 2020 pursuant to the terms of the merger agreement). It is possible that factors outside the control of both companies could result in the merger being completed at a different time, or not at all.

**Merger Consideration**

At the effective time, by virtue of the merger and without any action on the part of the parties or any holder of any capital stock of Versum, each share of Versum common stock issued and outstanding immediately prior to the effective time (other than Versum excluded shares) will be converted into and become exchangeable for 1.120 shares of Entegris common stock.

The exchange ratio is fixed, which means that it will not change between now and the date of the merger, regardless of whether the market price of either Entegris common stock or Versum common stock changes. Therefore, the value of the merger consideration will depend on the market price of Entegris common stock at the effective time. The market price of Entegris common stock has fluctuated since the date of the announcement of the merger agreement and will continue to fluctuate from the date of this joint proxy statement/prospectus to the date of the special meetings, the date the merger is completed and thereafter. The market price of Entegris common stock, when received by Versum stockholders after the merger is completed, could be greater than, less than or the same as the market price of Entegris common stock on the date of this joint proxy statement/prospectus or at the time of the special meeting. Accordingly, you should obtain current market quotations for Entegris common stock and Versum common stock before deciding how to vote with respect to any of the proposals described in this joint proxy statement/prospectus. Entegris common stock is traded on NASDAQ under the symbol ENTG and Versum common stock is traded on the NYSE under the symbol VSM.

At the effective time, all excluded shares will be cancelled and will cease to exist, and no payment will be made in respect of such shares.

**Treatment of Equity Awards**

***Treatment of Existing Entegris Equity Awards***

Entegris equity awards will remain equity awards relating to shares of Entegris common stock. Entegris equity awards will continue to vest in accordance with the terms of the award agreements applicable to such Entegris equity awards. However, the Entegris board of directors (or the applicable committee thereof) may determine to treat the merger as a change in control or term of similar meaning for purposes of the Entegris compensation and benefit plans, including Entegris equity awards, which determination may result in certain double trigger benefits under such plans upon a

qualifying termination of employment subsequent to the effective time, but in no event may such determination result in the single-trigger payment of benefits under such plans upon or in connection with the merger. Entegris may amend any outstanding Entegris options and Entegris RSU award, granted prior to January 27, 2019 to provide for, and may include in Entegris options, Entegris RSU awards and Entegris PSU awards granted in fiscal year 2019, double-trigger vesting upon certain qualifying terminations of employment.

Table of Contents

***Treatment of Existing Versum Equity Awards***

At the effective time, each Versum option that is outstanding immediately prior to the effective time will vest and be converted into a converted option relating to a number of shares of Entegris common stock equal to the product of (i) the number of shares of Versum common stock subject to the Versum option immediately prior to the effective time multiplied by (ii) the exchange ratio (rounded down to the nearest whole share number), with a per share exercise price equal to (a) the per share exercise price applicable to such Versum option immediately prior to the effective time divided by (b) the exchange ratio (rounded up to the nearest whole cent). Except as noted in the immediately preceding sentence, each converted option will continue to be governed by the same terms and conditions as were applicable to the Versum option immediately prior to the effective time.

At the effective time, each Versum RSU award and Versum PSU award that is outstanding immediately prior to the effective time will be converted into a converted RSU award relating to a number of shares of Entegris common stock equal to (i) the number of shares of Versum common stock subject to the Versum RSU award or Versum PSU award immediately prior to the effective time multiplied by (ii) the exchange ratio. For Versum PSU awards, the number of shares in clause (i) of the immediately preceding sentence will be determined based on actual performance through a shortened performance period ending immediately prior to the effective time. The converted RSU awards will vest and settle on terms (including acceleration events) at least as favorable as were applicable to the corresponding Versum RSU award or Versum PSU award immediately prior to the effective time, except that converted RSU awards relating to Versum PSU awards will vest solely based on continued service. Each converted RSU award will vest in full on the original vesting date or if the holder experiences a covered termination following the effective time and prior to the original vesting date, on the date of such covered termination. For employees of Versum and its subsidiaries, a covered termination means a termination by Versum or one of its subsidiaries or their successor in interest without cause or, to the extent good reason rights are provided for in the award agreement (or employment or similar agreement) applicable to the corresponding Versum RSU award or Versum PSU award, a resignation by the employee for good reason (as such terms are defined in the applicable Versum agreement), in either case, during the 24-month period following the effective time. For non-employee directors of Versum, a covered termination means the termination of their service as a director for any reason at or following the effective time.

At the effective time, each Versum DSU award will vest and be converted into the right to receive a number of shares of Entegris common stock equal to (i) the number of shares of Versum common stock covered by the Versum DSU award immediately prior to the effective time by (ii) the exchange ratio, with such shares distributed to the holder within 30 business days following the effective time.

The merger agreement prescribes certain treatment of Versum s existing equity awards, a summary of which is described under the section entitled **Interests of Versum s Directors and Executive Officers in the Merger** beginning on page 176.

**Exchange of Shares**

***Exchange Agent***

Entegris will deposit or cause to be deposited with an exchange agent selected by Entegris (with Versum s prior approval), for the benefit of the holders of Versum common stock, at or prior to the effective time, an aggregate number of shares of Entegris common stock to be issued in non-certificated book-entry form and, as promptly as reasonably practicable following the effective time, an aggregate amount of cash in U.S. dollars sufficient for the exchange agent to deliver to holders of Versum common stock the shares of Entegris common stock and cash in lieu of fractional shares of Entegris common stock required pursuant to the terms of the merger agreement. In addition,

Entegris will deposit or cause to be deposited with the exchange agent, as necessary from time to time after the effective time, any dividends or other distributions in respect of Entegris common stock with both a record and payment date after the effective time to which holders of unsurrendered certificates representing shares of Versum common stock may be entitled pursuant to the terms of the merger agreement.

Table of Contents

Such shares of Entegris common stock, cash and the amount of any dividends or other distributions deposited are referred to as the exchange fund.

***Exchange Procedures***

With respect to certificates formerly representing shares of Versum common stock, as promptly as reasonably practicable (but in any event within three business days) after the effective time, the combined company will cause the exchange agent to mail to each holder of record of each such certificate:

- a notice advising such holders of the effectiveness of the merger;
- a letter of transmittal in customary form; and
- instructions for surrendering such certificate to the exchange agent.

Upon surrender to the exchange agent of such certificate (or affidavit of loss in lieu of such certificate as provided in the merger agreement) together with a duly executed and completed letter of transmittal and such other documents as may reasonably be required pursuant to such instructions, the combined company will cause the exchange agent to mail to each holder of record of any such certificate in exchange for the certificate, as promptly as reasonably practicable thereafter:

- a statement reflecting the number of whole shares of Entegris common stock, if any, that such holder is entitled to receive in non-certificated book-entry form pursuant to the merger agreement in the name of such record holder; and
- a check in the amount (after giving effect to any required tax withholdings as provided in the merger agreement) of (a) any cash in lieu of fractional shares plus (b) any unpaid cash dividends and any other dividends or other distributions in respect of Entegris common stock that such holder has the right to receive pursuant to the merger agreement.

With respect to shares of Versum common stock held in book-entry form not held through DTC, as promptly as reasonably practicable (but in any event within three business days) after the effective time, the combined company will cause the exchange agent to mail to each holder of record of any such share:

- a notice advising such holders of the effectiveness of the merger;
- a letter of transmittal in customary form; and
- instructions for transferring such shares to the exchange agent.

Upon surrender to the exchange agent of book-entry shares not held through DTC in accordance with the terms of the letter of transmittal and accompanying instructions, the combined company will cause the exchange agent to mail to each holder of such book-entry shares not held through DTC, as promptly as reasonably practicable (but in any event within three business days) after the effective time:

- a statement reflecting the number of whole shares of Entegris common stock, if any, that such holder is entitled to receive in non-certificated book-entry form pursuant to the merger agreement in the name of such record holder; and

- a check in the amount (after giving effect to any required tax withholdings as provided in the merger agreement) of (a) any cash in lieu of fractional shares plus (b) any unpaid cash dividends and any other dividends or other distributions in respect of Entegris common stock that such holder has the right to receive pursuant to the merger agreement.

With respect to shares of Versum common stock held in book-entry form held through DTC, Entegris and Versum will cooperate to establish procedures with the exchange agent and DTC to ensure that the exchange agent will transmit to DTC or its nominees as soon as practicable after the effective time, upon surrender of

Table of Contents

shares of Versum common stock held of record by DTC or its nominees in accordance with DTC s customary surrender procedures, the merger consideration, cash in lieu of fractional shares of Entegris common stock, if any, and any unpaid cash dividends and any other dividends or other distributions in respect of Entegris common stock, in each case, that such holder has the right to receive pursuant to the merger agreement.

No interest will be paid or accrued on any amount payable for shares of Versum common stock pursuant to the merger agreement.

From and after the effective time, there will be no transfers on the stock transfer books of Versum of the shares of Versum common stock that were outstanding immediately prior to the effective time. From and after the effective time, the holders of certificates formerly representing shares of Versum common stock or shares of Versum common stock held in book-entry form will cease to have any rights with respect to such shares of Versum common stock except as otherwise provided in the merger agreement or by applicable law. If, after the effective time, certificates are presented to the combined company for any reason, they will be cancelled and exchanged as provided in the merger agreement.

**Dividends and Distributions with Respect to Unexchanged Shares of Versum Common Stock**

All shares of Entegris common stock to be issued pursuant to the merger will be deemed issued and outstanding as of the effective time and whenever a dividend or other distribution is declared by Entegris in respect of Entegris common stock, the record date for which is at or after the effective time, that declaration will include dividends or other distributions in respect of all shares issuable pursuant to the merger agreement. No dividends or other distributions in respect of shares of Entegris common stock with a record date at or after the effective time will be paid to any holder of any unsurrendered certificate representing Versum common stock until the certificate (or affidavit of loss in lieu of a certificate) is surrendered for exchange in accordance with the merger agreement. There will be issued or paid to the holder of record of the whole shares of Entegris common stock issued in exchange for Versum common stock in accordance with the merger agreement, without interest, (a) at the time of such surrender, the dividends or other distributions with a record date at or after the effective time theretofore payable with respect to such whole shares of Entegris common stock and not paid, and (b) at the appropriate payment date, the dividends or other distributions payable with respect to such whole shares of Entegris common stock with a record date at or after the effective time and prior to surrender but with a payment date subsequent to surrender.

**Treatment of Fractional Shares**

No fractional shares of Entegris common stock will be issued upon the conversion of shares of Versum common stock pursuant to the merger agreement. All fractional shares of Entegris common stock that a holder of shares of Versum common stock would be otherwise entitled to receive pursuant to the merger agreement will be aggregated, and such holder will be entitled to receive a cash payment, without interest, in lieu of any such fractional share, equal to the product (rounded to the nearest whole cent) of (a) the amount of such fractional share interest in a share of Entegris common stock to which such holder would be entitled pursuant to the merger agreement and (b) an amount equal to the average of the daily volume weighted average price per share of Entegris common stock on NASDAQ calculated for the ten consecutive trading days ending on the second full trading day immediately prior to (and not including) the closing date.

**Termination of the Exchange Fund**

Any portion of the exchange fund that remains unclaimed as of the date that is six months after the closing date will be delivered to Entegris. Any holder of shares of Versum common stock who has not by that point complied with the

terms of the exchange procedures in the merger agreement may thereafter look only to Entegris for delivery of the shares of Entegris common stock, cash in lieu of fractional shares of Entegris common stock, if any, and any unpaid cash dividends and any other dividends or other distributions, if any, and in each case, that such holder has the right to receive pursuant to the merger agreement.

Table of Contents

None of Entegris, Versum or the exchange agent will be liable to any person in respect of any portion of the merger consideration delivered to a public official pursuant to any applicable abandoned property, escheat or similar law. If any certificate formerly representing shares of Versum common stock or share of Versum common stock held in book-entry form has not been surrendered prior to seven years after the effective time, or immediately prior to such earlier date on which any shares of Entegris common stock, any cash in lieu of fractional shares of Entegris common stock and any unpaid cash dividends and any other dividends or other distributions, in each case, that a holder of any such shares has the right to receive pursuant to the merger agreement in respect thereof would otherwise escheat to or become property of any governmental entity, any such shares, cash, dividends or other distributions will, to the extent permitted by applicable law, become the property of Entegris, free and clear of all claims or interests of any person previously entitled thereto.

**Lost, Stolen or Destroyed Share Certificates**

In the event that any certificate formerly representing shares of Versum common stock is lost, stolen or destroyed, upon the making of an affidavit of that fact by the person claiming such certificate to be lost, stolen or destroyed and the posting by such person of a bond in customary amount and upon such terms as may be required as indemnity against any claim that may be made against it with respect to such certificate, the exchange agent will issue in exchange for such lost, stolen or destroyed certificate, the shares of Entegris common stock, cash in lieu of fractional shares of Entegris common stock, if any, and any unpaid cash dividends and any other dividends or other distributions, in each case, payable or issuable pursuant to the merger agreement, as if such lost, stolen or destroyed certificate had been surrendered.

**Withholding Rights**

Each of Entegris, the combined company, the exchange agent and any other withholding agent will be entitled to deduct and withhold from the consideration otherwise payable pursuant to the merger agreement to any holder of shares of Versum common stock and Versum equity awards such amounts as it is required to deduct and withhold with respect to the making of such payment under the Code or any other applicable state, local or foreign tax law.

**Adjustments to Prevent Dilution**

If, from the date of the merger agreement to the effective time, the issued and outstanding shares of Versum common stock or securities convertible or exchangeable into or exercisable for shares of Versum common stock or the issued and outstanding shares of Entegris common stock or securities convertible or exchangeable into or exercisable for shares of Entegris common stock, have been changed into a different number of shares or securities or a different class by reason of any reclassification, stock split (including a reverse stock split), stock dividend or distribution, recapitalization, merger, issuer tender or exchange offer, or other similar transaction, or a stock dividend with a record date within such period has been declared, then the merger consideration will be equitably adjusted to provide the holders of shares of Versum common stock and Entegris common stock the same economic effect as contemplated by the merger agreement prior to such event.

**Combined Company Governance Matters**

Under the merger agreement, Entegris and Versum have agreed to certain provisions relating to the governance of the combined company as of the effective time, including composition of the combined company board of directors and board committees and the roles of the chairman of the board of directors of the combined company and the chief executive officer of the combined company. For a more detailed description of the governance matters relating to the combined company, see the section entitled **The Merger Governance of the Combined Company** beginning on

page 124.

Subject to the receipt of the approval by Entegris stockholders of the Entegris charter proposal, at the effective time, the certificate of incorporation of Entegris, as amended and restated as set forth in Annex B, will

Table of Contents

be the certificate of incorporation of the combined company. At the effective time, the by-laws of Entegris, as in effect immediately prior to the effective time, will be the by-laws of the combined company.

**Representations and Warranties**

The merger agreement contains representations and warranties made by Versum to Entegris and by Entegris to Versum. Certain of the representations and warranties in the merger agreement are subject to materiality or material adverse effect qualifications (that is, they will not be deemed to be inaccurate or incorrect unless their failure to be true or correct is material or would result in a material adverse effect (as defined below) on the company making such representation or warranty). In addition, certain of the representations and warranties in the merger agreement are subject to knowledge qualifications, which means that those representations and warranties would not be deemed untrue, inaccurate or incorrect as a result of matters of which certain officers of the party making the representation did not have actual knowledge after reasonable inquiry. Furthermore, each of the representations and warranties is subject to the qualifications set forth on the disclosure letter delivered to Versum by Entegris, in the case of representations and warranties made by Entegris, or the disclosure letter delivered to Entegris by Versum, in the case of representations and warranties made by Versum (with each letter referred to as that party s disclosure letter), as well as the reports of Versum or Entegris, as applicable, filed with or furnished to the SEC during the period from January 1, 2018 through the business day prior to the date of the merger agreement (excluding any disclosures set forth or referenced in any risk factor section or in any other section to the extent they are forward-looking statements or cautionary, predictive or forward-looking in nature).

In the merger agreement, Versum has made representations and warranties to Entegris, and Entegris has made representations and warranties to Versum, regarding:

- organization, good standing and qualification to do business;
- such party s subsidiaries;
- corporate authority and power with respect to the execution, delivery and performance of the merger agreement;
- the filings with governmental entities needed in connection with the execution, delivery and performance of the merger agreement or the consummation of the merger and the other transactions contemplated by the merger agreement;
- the absence of violations of, or conflicts with, such company s or its subsidiaries organizational documents, applicable law and certain contracts as a result of the execution, delivery and performance of the merger agreement and the consummation of the merger and the other transactions contemplated by the merger agreement;

the proper filing of reports with the SEC since January 1, 2017, the accuracy of the information contained in those reports, compliance with the requirements of certain laws and the design of its internal disclosure controls and procedures;

the compliance with GAAP and SEC accounting rules and regulations with respect to financial statements included in or incorporated by reference in its SEC filings;

conduct of business in the ordinary course from January 1, 2018 through January 27, 2019 (the date of the merger agreement);

the absence of any event that would be reasonably expected to have a material adverse effect on such party from January 1, 2018;

absence of certain litigation and governmental orders;

absence of undisclosed liabilities;

employee benefits matters, including matters related to employee benefit plans;

Table of Contents

labor matters;

compliance with certain laws and regulations and such party s licenses;

inapplicability to the merger of state takeover statutes and anti-takeover provisions in such party s organizational documents;

environmental matters;

tax matters;

intellectual property;

insurance;

certain material contracts;

title to and interests in, and the operating condition of, such party s assets;

real property;

the absence of affiliate transactions; and

the absence of other representations and warranties.

In the merger agreement, Entegris has also made representations and warranties to Versum regarding:

Entegris capital structure, including the number of shares of common stock, stock options and other equity-based awards outstanding;

the unanimous adoption by the Entegris board of directors of resolutions:

determining that the merger agreement and the transactions contemplated by the merger agreement are fair to, and in the best interests of, Entegris and its stockholders;

approving and declaring advisable the merger agreement and the transactions contemplated by the merger agreement, on the terms and subject to the conditions set forth in the merger agreement;

directing that the share issuance and the merger agreement be submitted to Entegris stockholders for their approval and adoption and the amended and restated certificate of incorporation be submitted to Entegris stockholders for their adoption; and

recommending that Entegris stockholders vote in favor of the adoption of the merger agreement and approval of the share issuance on the terms and subject to the conditions set forth in the merger agreement, and in favor of the adoption of the amended and restated certificate of incorporation, which is referred to as the Entegris recommendation;

the Entegris board of directors receipt of an opinion from Morgan Stanley that the exchange ratio is fair from a financial point of view to Entegris;

fees payable to brokers and financial advisors in connection with the merger; and

the required vote of Entegris stockholders to adopt the merger agreement (including the issuance contemplated thereby) (which is referred to as the required Entegris vote) and to adopt the amended and restated certificate of incorporation.

In the merger agreement, Versum has also made representations and warranties to Entegris regarding:

Versum s capital structure, including the number of shares of common stock, stock options and other equity-based awards outstanding;

the unanimous adoption by the Versum board of directors of resolutions:

determining that merger agreement and the transactions contemplated by the merger agreement are fair to, and in the best interests of, Versum and its stockholders;

Table of Contents

approving and declaring advisable the merger agreement and the transactions contemplated by the merger agreement, including the merger, on the terms and subject to the conditions set forth in the merger agreement;

directing that the merger agreement be submitted to a vote of Versum stockholders for their adoption; and

resolving to recommend that Versum stockholders vote in favor of the adoption of the merger agreement, which is referred to as the Versum recommendation;

the Versum board of directors receipt of an opinion from Lazard that the exchange ratio is fair from a financial point of view to holders of Versum common stock (other than the holders of Versum excluded shares);

fees payable to brokers and financial advisors in connection with the merger; and

the required vote of Versum stockholders to adopt the merger agreement (which is referred to as the required Versum vote).

For purposes of the merger agreement, a material adverse effect with respect to Versum or Entegris means any effect that is materially adverse to the business, condition (financial or otherwise) or results of operations of such party and its subsidiaries, taken as a whole; except that none of the following, alone or in combination, will be deemed to constitute a material adverse effect, or be taken into account in determining whether a material adverse effect has occurred or would reasonably be expected to occur:

effects generally affecting the economy, credit, capital, securities or financial markets in the United States or elsewhere in the world, including changes to interest rates and exchange rates, or political, regulatory or business conditions in any jurisdiction in which such party or any of its subsidiaries has material operations or where any of such party s or any of its subsidiaries products or services are sold;

effects that are the result of factors generally affecting the semiconductor industry or any industry, markets or geographical areas in which such party and its subsidiaries operate;

any loss of, or adverse effect in, the relationship of such party or any of its subsidiaries, contractual or otherwise, with customers, employees, unions, suppliers, distributors, financing sources, partners or similar relationship to the extent caused by the entry into, announcement or consummation of the transactions contemplated by the merger agreement (except that this exception does not apply to the representations and warranties regarding the execution of the merger agreement violating organizational documents, contracts or laws);

the performance by any party of its obligations to the extent expressly required under the merger agreement;

any action taken (or not taken) by such party or any of its subsidiaries (1) that is required to be taken (or not to be taken) by the merger agreement and for which the party has requested in writing the other party s consent to permit its non-compliance and such non-requesting party has not granted such consent or (2) at the written request of the other party, which action taken (or not taken) is not required under the terms of the merger agreement;

changes or modifications, and prospective changes or modifications, in GAAP or in any law of general applicability, including the repeal thereof, or in the interpretation or enforcement thereof, after the date of the merger agreement;

any failure, in and of itself, by such party to meet any internal or public projections or forecasts or estimates of revenues or earnings for any period; except that this exception will not prevent or otherwise affect a determination that any effect underlying such failure has resulted in, or contributed to, or would reasonably be expected to result in, or contribute to, a material adverse effect (if not otherwise falling within any other exception);

Table of Contents

any effect resulting from acts of war (whether or not declared), civil disobedience, hostilities, sabotage, terrorism, geopolitical conditions, military actions or the escalation or worsening of any of the foregoing, any hurricane, flood, tornado, earthquake or other weather or natural disaster, or any outbreak of illness or other public health event or any other force majeure event, whether or not caused by any person; or

a decline in the market price, or change in trading volume, in and of itself, of the shares of common stock of such party on the NYSE or NASDAQ, as applicable, or any ratings downgrade or change in ratings outlook for such party or any of its subsidiaries; except that this exception will not prevent or otherwise affect a determination that any effect underlying such decline or change has resulted in, or contributed to, or would reasonably be expected to result in, or contribute to, a material adverse effect (if not otherwise falling within any other exceptions);

Notwithstanding the exceptions listed above, with respect to the first, second, sixth and eighth exceptions listed, such effect will be taken into account in determining whether a material adverse effect has occurred if it disproportionately adversely affects such party and its subsidiaries, taken as a whole, compared to other companies and their respective subsidiaries, taken as a whole, of comparable size, operating in the industries in which such party and its subsidiaries operate, but, in such event, only the incremental disproportionate impact of any such effect will be taken into account in determining whether a material adverse effect has occurred.

**Conduct of Business Prior to the Effective Time**

Each of Entegris and Versum has each agreed as to itself and its subsidiaries that, after the date of the merger agreement and prior to the effective time (subject to certain exceptions or except as approved in writing by Entegris or Versum, as applicable (which approval may not be unreasonably withheld, conditioned or delayed)) except as otherwise expressly contemplated by the merger agreement or as set forth in such party s disclosure letter, the business of it and its subsidiaries will be conducted in all material respects in the ordinary course and, to the extent consistent therewith, it and its subsidiaries will use their respective commercially reasonable efforts to preserve their business organizations intact and maintain existing relations and goodwill with governmental entities, customers, suppliers, licensors, licensees, distributors, creditors, lessors, employees and business associates and keep available the services of its and its subsidiaries present officers, employees and agents.

From the date of the merger agreement until the effective time, subject to certain exceptions and except as expressly contemplated by the merger agreement, required by applicable law, approved in writing by the other party (which approval may not be unreasonably withheld, conditioned or delayed) or set forth in such party s disclosure letter, each party has agreed not to and to cause its subsidiaries not to:

make or propose any change to its organizational documents or, except for amendments that would both not materially restrict the operations of its businesses and not reasonably be expected to prevent, materially delay or materially impair the ability of such party to consummate the transactions contemplated by the merger agreement, the organizational documents of any of its subsidiaries;

other than in the ordinary course, except for any such transactions among its direct or indirect wholly-owned subsidiaries, (a) merge or consolidate itself or any of its subsidiaries with any other person, or (b) restructure, reorganize or completely or partially liquidate;

acquire assets outside of the ordinary course from any other person (a) with a fair market value or purchase price in excess of $75 million in the aggregate in any transaction or series of related transactions (including incurring any indebtedness related thereto), in each case, including any amounts or value reasonably expected to be paid in connection with a future earn-out, purchase price adjustment, release of holdback or similar contingent payment obligation, or (b) that would reasonably be expected to prevent, materially delay or materially impair the ability of such party to consummate the merger or other transactions contemplated by the merger agreement, in each case,

Table of Contents

other than acquisitions of inventory or other goods in the ordinary course and transactions among such party and its direct or indirect wholly-owned subsidiaries or among such party s direct or indirect wholly-owned subsidiaries;

issue, sell, pledge, dispose of, grant, transfer, encumber, or authorize the same, or otherwise enter into any contract or understanding with respect to the voting of, any shares of its capital stock or of any of its subsidiaries (other than the issuance of shares (a) by its direct or indirect wholly-owned subsidiary to it or another of its direct or indirect wholly-owned subsidiaries, (b) in respect of equity-based awards outstanding as of the date of the merger agreement, or (c) granted in accordance with the provisions of the merger agreement, or pursuant to the Entegris, Inc. Amended and Restated Employee Stock Purchase Plan, in each case, in accordance with their terms and, as applicable, the plan documents as in effect on the date of the merger agreement), or securities convertible or exchangeable into or exercisable for any shares of such capital stock, or any options, warrants or other rights of any kind to acquire any shares of such capital stock or such convertible or exchangeable securities;

create or incur any encumbrance (other than certain permitted encumbrances) over any material portion of such party s and its subsidiaries consolidated properties and assets that is not incurred in the ordinary course on any of its assets or any of its subsidiaries, except for encumbrances (a) that are required by or automatically effected by contracts in place as of the date of the merger agreement, (b) that do not materially detract from the value of such assets or (c) that do not materially impair the operations of such party or any of its subsidiaries;

make any loans, advances, guarantees or capital contributions to or investments in any person (other than to or from Entegris and any of its direct or indirect wholly-owned subsidiaries or to or from Versum and any of its direct or indirect wholly-owned subsidiaries, as applicable, or in accordance with the merger agreement) in excess of $10 million in the aggregate;

declare, set aside, make or pay any dividend or other distribution, payable in cash, stock, property or otherwise, with respect to any of its capital stock (except for dividends paid by any direct or indirect wholly-owned subsidiary to it or to any other direct or indirect wholly-owned subsidiary) or modify in any material respects its dividend policy, except that, consistent with the provisions of the merger agreement:

Entegris may make, declare and pay one regular quarterly cash dividend in each fiscal quarter in an amount per share of up to $0.07 per quarter with a record date consistent with the record date for each quarterly period; and

Versum may make, declare and pay one regular quarterly cash dividend in each fiscal quarter in an amount per share of up to $0.08 per quarter with a record date consistent with the record date for each quarterly period,

in each case, solely to the extent such party has given the other party sufficient notice prior to the declaration date to enable the parties to coordinate dividend payments and such payment is coordinated with the other party for any quarterly dividends or distributions declared in accordance with the merger agreement in any calendar quarter in

which the closing date might reasonably be expected to occur, to ensure that Versum stockholders do not receive dividends on both shares of Versum common stock and Entegris common stock received in the merger in respect of any calendar quarter or fail to receive a dividend on either shares of Versum common stock or Entegris common stock received in the merger in respect of any calendar quarter;

reclassify, split, combine, subdivide or redeem, purchase (through such party s share repurchase program or otherwise) or otherwise acquire, directly or indirectly, any of its capital stock or securities convertible or exchangeable into or exercisable for any shares of its capital stock, other than with respect to:

the capital stock or other equity interests of a direct or indirect wholly-owned subsidiary of such party; or

Table of Contents

the acquisition of shares of Versum common stock or Entegris common stock, as applicable, tendered by employees in connection with a cashless exercise of Versum options or Entegris options, as applicable, outstanding as of the date of the merger agreement in order to pay taxes in connection with the exercise or vesting of Versum equity awards or Entegris equity awards, as applicable, outstanding as of the date of the merger agreement or granted in accordance with the terms of the merger agreement, pursuant to the terms of the Versum stock plan or the Entegris stock plan, as applicable, and the applicable award agreement, in the ordinary course;

make or authorize any payment of, or accrual or commitment for, capital expenditures, except any such expenditure:

not in excess of $25 million in the aggregate during any consecutive 12-month period (other than capital expenditures within the thresholds set forth in such party s disclosure letter);

expenditures not in excess of $10 million (net of insurance proceeds) in the aggregate that such party reasonably determines are necessary to avoid a material business interruption or maintain the safety and integrity of any asset or property; or

paid by any direct or indirect wholly-owned subsidiary to such party or to any other direct or indirect wholly-owned subsidiary of such party,

in each case in response to any unanticipated and subsequently discovered events, occurrences or developments (except that such party will use its reasonable best efforts to consult with the other party prior to making or agreeing to any such capital expenditure);

other than in the ordinary course, enter into any contract that would have been a material contract had it been entered into prior to the merger agreement, adversely amend, modify, supplement or waive, terminate, assign, convey, encumber or otherwise transfer, in whole or in part, rights or interest pursuant to or in any material contract other than (a) expirations and renewals of any such contract in the ordinary course in accordance with the terms of such contract, (b) non-exclusive licenses, covenants not to sue, releases, waivers or other non-exclusive rights under intellectual property owned by Versum and its subsidiaries or Entegris or any of its subsidiaries, as applicable, in each case, granted in the ordinary course, or (c) any agreement among such party and its direct or indirect wholly-owned subsidiaries or among such party s direct or indirect wholly-owned subsidiaries;

other than in the ordinary course or with respect to amounts that are not material to such party and its subsidiaries, taken as a whole, cancel, modify or waive any debts or claims held by it or any of its subsidiaries or waive any rights held by it or any of its subsidiaries except debts or claims among such party and its direct or indirect wholly-owned subsidiaries or among such party s direct or indirect wholly-owned subsidiaries;

settle or compromise, or offer or propose to settle or compromise any material proceeding, including before a governmental entity, except in accordance with the parameters set forth in each party s disclosure letter, except that no such settlement or compromise, or offer in respect thereof, may involve any injunctive or other non-monetary relief which, in either case, imposes any material restrictions on the business operations of such party and its subsidiaries or affiliates, or, after the effective time, the combined company;

materially amend any material financial accounting policies or procedures, except as required by changes to GAAP;

enter into any material closing agreement with respect to taxes, settle any material tax claim, audit, assessment or dispute materially in excess of the amount reserved therefore, surrender any right to claim a refund of a material amount of taxes, or fail to file when due (taking into account any available extensions) any material tax return;

transfer, sell, lease, divest, cancel, abandon, allow to lapse or expire or otherwise dispose of, or permit or suffer to exist the creation of any encumbrance upon, any assets (tangible or intangible), product

Table of Contents

lines or businesses material to it and its subsidiaries, taken as a whole, including capital stock of any of its subsidiaries, except in connection with (a) sales of or non-exclusive licenses of the foregoing provided in the ordinary course, (b) sales of obsolete assets, (c) sales, leases, licenses or other dispositions of assets (not including services) with a fair market value not in excess of $15 million in the aggregate other than pursuant to material contracts in effect prior to the date of the merger agreement, or entered into after the date of the merger agreement in accordance with the merger agreement and (d) sales among such party and its direct or indirect wholly-owned subsidiaries or among such party s direct or indirect wholly-owned subsidiaries;

except as required by the terms of any benefit plan as in effect on the date of the merger agreement, as permitted under the merger agreement or as required by applicable law, increase or change the compensation or benefits payable to any employee other than in the ordinary course, except as expressly disclosed in such party s disclosure letter or required pursuant to a Versum benefit plan or Entegris benefit plan, as applicable, in effect as of the date of the merger agreement, the parties may not:

grant any new long-term incentive or equity-based awards or amend or modify the terms of any such outstanding awards under any Versum benefit plan or Entegris benefit plan, as applicable;

grant any retention or transaction bonuses;

increase or change the compensation or benefits payable to any executive officer (other than changes in health and welfare benefits that are generally applicable to all salaried employees in the ordinary course or increases in the base salaries and benefits of any executive officer in the ordinary course);

terminate, enter into, amend or renew (or communicate any intention to take such action) any material benefit plan, other than routine amendments to health and welfare plans (other than severance plans) that do not materially increase benefits or result in a material increase in administrative costs, or, other than as permitted by such party s disclosure letter, adopt any compensation or benefit arrangement that would be a material benefit plan if it were in existence as of the date of the merger agreement;

accelerate the vesting of any compensation for the benefit of any employee;

increase or change the severance terms applicable to any employee;

take any action to fund or secure the payment of any amounts under any benefit plan;

other than as required by GAAP, change any assumptions used to calculate funding or contribution obligations under any benefit plan, or increase or accelerate the funding rate in respect of any benefit plan; or

terminate the employment of any executive officer (other than for cause) or hire any new executive officer (other than as a replacement hire receiving substantially similar terms of employment); except that, to the extent that a party intends to hire an individual to replace a named executive officer of such party, such party will first consult in good faith with the other party prior to, and with respect to, the hiring of such individual;

recognize any labor organization as the representative of any of the employees of the party or its subsidiaries or become a party to, establish, adopt, amend, commence negotiations for or terminate any collective bargaining agreement or other similar written agreement with a labor organization, in each case, other than in the ordinary course or as required by applicable law;

incur any indebtedness (including the issuance of any debt securities, warrants or other rights to acquire any debt security) or guarantee any such indebtedness, except for:

indebtedness for borrowed money incurred in the ordinary course under Versum s or Entegris , as applicable, revolving credit facilities and other lines of credit existing as of the date of the merger agreement;

Table of Contents

guarantees by Entegris or any direct or indirect wholly-owned subsidiary of Entegris of indebtedness of Entegris or any other direct or indirect wholly-owned subsidiary of Entegris;

guarantees by Versum or any direct or indirect wholly-owned subsidiary of Versum of indebtedness of Versum or any other direct or indirect wholly-owned subsidiary of Versum;

indebtedness incurred in connection with a refinancing or replacement of existing indebtedness (but in all cases which refinancing or replacement must not increase the aggregate amount of indebtedness permitted to be outstanding thereunder and in each case on customary commercial terms consistent in all material respects with the indebtedness being refinanced or replaced);

indebtedness incurred pursuant to letters of credit, performance bonds or other similar arrangements in the ordinary course;

interest, exchange rate and commodity swaps, options, futures, forward contracts and similar derivatives or other hedging contracts not entered for speculative purposes and entered into in the ordinary course and in compliance with its risk management and hedging policies or practices in effect on the date of the merger agreement;

indebtedness incurred by mutual agreement of the parties in accordance with the merger agreement; or

indebtedness incurred among such party and its direct or indirect wholly-owned subsidiaries or among such party s direct or indirect wholly-owned subsidiaries;

convene any special meeting (or any adjournment or postponement thereof) of each party s respective stockholders other than the Versum special meeting or the Entegris special meeting, in each case, as described in this joint proxy statement/prospectus, as applicable; or

agree or commit to do any of the foregoing.

**No Solicitation of Acquisition Proposals**

Entegris and Versum have agreed that neither Entegris nor Versum, nor any of their respective subsidiaries, will, and that they will cause their and their respective subsidiaries directors, officers, employees not to, and not permit its investment bankers, attorneys, accountants and other advisors or representatives to, which directors, officers, employees, investment bankers, attorneys, accountants and other advisors or representatives are collectively referred to as representatives, directly or indirectly:

initiate, solicit, propose, knowingly encourage (including by way of furnishing information) or knowingly take any action designed to facilitate any inquiry regarding, or the making of any inquiry, proposal or offer that constitutes or would reasonably be expected to lead to, an acquisition proposal;

engage in, continue or otherwise participate in any discussions with or negotiations relating to, or otherwise cooperate in any way with, any acquisition proposal or any inquiry, proposal or offer that would reasonably be expected to lead to an acquisition proposal (other than to state that the terms of the merger agreement prohibit such discussions or negotiations);

provide any nonpublic information to any person in connection with any acquisition proposal or any inquiry, proposal or offer that constitutes or would reasonably be expected to lead to an acquisition proposal; or

otherwise knowingly facilitate any effort or attempt to make an acquisition proposal or any inquiry, proposal or offer that constitutes or would reasonably be expected to lead to an acquisition proposal.

An acquisition proposal means:

any proposal, offer or indication of interest relating to a merger, joint venture, partnership, consolidation, dissolution, liquidation, tender offer, recapitalization, reorganization, spin-off, share

Table of Contents

exchange, business combination or similar transaction involving Versum or Entegris, as applicable, or any of their respective subsidiaries and involving, directly or indirectly, 15% or more of the consolidated net revenues, net income or total assets (it being understood that total assets include equity securities of subsidiaries of Versum or Entegris, as applicable); or

any acquisition by any person or group (as defined under Section 13 of the Exchange Act) resulting in, or any proposal, offer, inquiry or indication of interest that if consummated would result in, any person or group (as defined under Section 13 of the Exchange Act) becoming the beneficial owner of, directly or indirectly, in one or a series of related transactions, 15% or more of the total voting power or of any class of equity securities of Versum or Entegris, as applicable, or 15% or more of the consolidated net revenues, net income or total assets (it being understood that total assets include equity securities of subsidiaries) of Versum or Entegris, as applicable, in each case of this bullet and the preceding bullet, other than the merger and the other transactions contemplated by the merger agreement, except that any proposal or offer to the extent related to the purchase of assets required to be divested or held separate (including by trust or otherwise) pursuant to a regulatory remedy (as defined in the section entitled **Cooperation; Efforts to Consummate** beginning on page 145) in accordance with the merger agreement will not be deemed an acquisition proposal.

Notwithstanding the restrictions described above, prior to the time, but not after, in the case of Versum, the required Versum vote is obtained or, in the case of Entegris, the required Entegris vote is obtained, in response to an unsolicited, *bona fide* written acquisition proposal received after the date of the merger agreement that did not arise from or in connection with a breach of the above obligations, Entegris or Versum, as applicable, may:

provide information in response to a request therefor (including nonpublic information regarding it or any of its subsidiaries) to the person who made such acquisition proposal only if such information has previously been made available to, or is made available to Entegris or Versum, as applicable, prior to or substantially concurrently with the time such information is made available to such person and, prior to furnishing any such information, Entegris or Versum, as applicable, receives from the person making such acquisition proposal an executed confidentiality agreement containing terms that are generally not less restrictive to the other party than those contained in the confidentiality agreement executed by Entegris and Versum are on Entegris or Versum, as applicable (except that such confidentiality agreement need not include any standstill terms ), and which confidentiality agreement does not prohibit compliance by either of Versum or Entegris with this bullet point; and

participate in any discussions or negotiations with any such person regarding such acquisition proposal,

in each case only if, prior to doing so, the Entegris board of directors or Versum board of directors, as applicable, determines in good faith after consultation with its outside legal counsel that based on the information then available and after consultation with its financial advisor such acquisition proposal either constitutes a superior proposal or could reasonably be expected to result in a superior proposal.

A superior proposal means an unsolicited, *bona fide* written acquisition proposal (except that the references in the definition thereof to 15% or more will be deemed to be references to 50% or more ) made after the date of the merger agreement that the Versum board of directors or the Entegris board of directors, as applicable, has determined in good faith, after consultation with its outside legal counsel and its financial advisor:

would result in a transaction more favorable (including, without limitation, from a financial point of view) to Versum stockholders or Entegris stockholders, as applicable, than the transactions contemplated by the merger agreement; and

is reasonably likely to be consummated on the terms proposed, in each case of this bullet and the preceding bullet, taking into account any legal, financial, regulatory and stockholder approval requirements, the sources, availability and terms of any financing, financing market conditions and the existence of a financing contingency, the likelihood of termination, the timing of closing, the identity

Table of Contents

of the person or persons making the proposal and any other aspects considered relevant by the Versum board of directors or the Entegris board of directors, as applicable.

**Notice Regarding Acquisition Proposals**

Entegris and Versum each must promptly (and, in any event, within 24 hours) give notice to the other party if (a) any inquiries, proposals or offers with respect to an acquisition proposal are received by, (b) any information is requested in connection with any acquisition proposal from, or (c) any discussions or negotiations with respect to an acquisition proposal are sought to be initiated or continued with, it or any of its representatives, setting forth in such notice the name of such person and the material terms and conditions of any proposals or offers (including, if applicable, complete copies of any written requests, proposals or offers, including proposed agreements) and must then keep the other party informed, on a current basis (and, in any event, within 24 hours), of the status and material terms of any such proposals or offers (including any amendments) and the status of any such discussions or negotiations, including any change in its intentions as previously notified.

**No Change of Recommendation**

Entegris and Versum have agreed that, except as otherwise set forth in the merger agreement, neither the Entegris board of directors nor the Versum board of directors, including any committee thereof, will:

withhold, withdraw, qualify or modify (or publicly propose or resolve to withhold, withdraw, qualify or modify) the Entegris recommendation or the Versum recommendation, as applicable, in a manner adverse to Entegris or Versum, as applicable;

fail to include the Entegris recommendation or the Versum recommendation, as applicable, in this joint proxy statement/prospectus;

fail to recommend against acceptance of a tender or exchange offer by its stockholders pursuant to Rule 14d-2 under the Exchange Act for outstanding shares of Entegris common stock or Versum common stock, as applicable (other than by Entegris or an affiliate of Entegris or Versum or an affiliate of Versum, as applicable), in each case, within ten business days after the commencement of such tender or exchange offer (or, if earlier, prior to the applicable special meeting) (except that the taking of no position or a neutral position by the Versum board of directors or the Entegris board of directors, as applicable, in respect of the acceptance of a tender offer or exchange offer as of the end of such period will constitute a failure to recommend against acceptance of any such offer);

approve or recommend, or publicly declare advisable or publicly propose to approve or recommend, or publicly propose to enter into, any letter of intent, memorandum of understanding, agreement in principle, acquisition agreement, merger agreement, option agreement, joint venture agreement, partnership agreement or other agreement (other than a confidentiality agreement permitted as discussed above) relating to any acquisition proposal, which agreement is referred to as an alternative acquisition agreement (any action described in this bullet or the preceding three bullets being referred to as a change of recommendation); or

cause or permit Entegris or Versum, as applicable, to enter into an alternative acquisition agreement.

***Permitted Change of Recommendation Superior Proposal***

Prior to the time, but not after, in the case of Versum, the required Versum vote is obtained or, in the case of Entegris, the required Entegris vote is obtained, the Versum board of directors or the Entegris board of directors, as applicable, may effect a change of recommendation or terminate the merger agreement to enter into a definitive written agreement with respect to a superior proposal if an unsolicited, *bona fide* written acquisition proposal received after the date of the merger agreement that did not arise from or in connection with a breach of the obligations set forth in the merger agreement is received by Versum or Entegris, as applicable, and is not

Table of Contents

withdrawn, and the Versum board of directors or the Entegris board of directors, as applicable, determines in good faith, after consultation with its outside legal counsel and its financial advisor that such acquisition proposal constitutes a superior proposal, and:

- Versum has given Entegris or Entegris has given Versum, as applicable, written notice of such action and the basis therefor four business days in advance, which notice sets forth in writing that the Versum board of directors or the Entegris board of directors, as applicable, intends to consider whether to take such action, which such notice is referred to as a board recommendation notice;

- after giving such board recommendation notice and prior to making a change of recommendation or terminating the merger agreement, Versum or Entegris, as applicable, negotiates in good faith with the other party (to the extent the other party wishes to negotiate), to make such revisions to the terms of the merger agreement as would cause such acquisition proposal to cease to be a superior proposal; and

- at the end of the four business day period, prior to and as a condition to making a change of recommendation or terminating the merger agreement, the Versum board of directors or the Entegris board of directors, as applicable, takes into account any changes to the terms of the merger agreement proposed in writing by the other party and any other information offered by the other party in response to the board recommendation notice, and has determined in good faith after consultation with its outside legal counsel and its financial advisor that in the case of a superior proposal, such superior proposal would continue to constitute a superior proposal, if such changes offered in writing by the other party were to be given effect.

Any amendment to the financial terms and any other material amendment to any acquisition proposal will be deemed to be a new acquisition proposal for the purposes of the obligations described above except that references to four business days will be deemed to be references to two business days and such two business day period will expire at 11:59 p.m. on the second business day immediately following the day on which such new board recommendation notice is delivered.

***Permitted Change of Recommendation Intervening Event***

Prior to the time, but not after, in the case of Versum, the required Versum vote is obtained or, in the case of Entegris, the required Entegris vote is obtained, the Versum board of directors or the Entegris board of directors, as applicable, may effect a change of recommendation if an intervening event has occurred, and prior to taking such action, the Versum board of directors or Entegris board of directors, as applicable, determines in good faith, after consultation with its outside legal counsel and its financial advisor, that failure to take such action in response to such intervening event would reasonably be expected to be inconsistent with the directors fiduciary duties under applicable law, and:

- Versum has given Entegris or Entegris has given Versum, as applicable, a board recommendation notice four business days in advance, which notice includes a reasonably detailed description of such intervening event;

- after giving such board recommendation notice and prior to effecting a change of recommendation, Versum or Entegris, as applicable, negotiates in good faith with the other party (to the extent the other party wishes

to negotiate), to make such revisions to the terms of the merger agreement; and

at the end of the four business day period, prior to and as a condition to effecting a change of recommendation, the Versum board of directors or the Entegris board of directors, as applicable, will take into account any changes to the terms of the merger agreement proposed in writing by the other party and any other information offered by the other party in response to the board recommendation notice, and has determined in good faith after consultation with its outside legal counsel and its financial advisor that (1) such intervening event remains in effect and (2) the failure to effect a change of recommendation in response to such intervening event would reasonably be expected to be

Table of Contents

inconsistent with the directors fiduciary duties under applicable law if such changes offered in writing by the other party were to be given effect.

An intervening event means any material effect that was not known or reasonably foreseeable by the Versum board of directors or the Entegris board of directors, as applicable, on the date of the merger agreement (or, if known or reasonably foreseeable, the consequences of which were not known or reasonably foreseeable by such board of directors as of the date of the merger agreement), which effect or consequences, as applicable, become known by such board of directors prior to the time Versum receives the required Versum vote or Entegris receives the required Entegris vote, as applicable, except that:

in no event will the receipt, existence or terms of an acquisition proposal or a superior proposal or any inquiry or communications relating thereto, or any matter relating thereto or consequence thereof, be taken into account for purposes of determining whether an intervening event has occurred;

in no event will any changes in the market price or trading volume of Versum common stock or Entegris common stock, as applicable, or the fact that Versum or Entegris, as applicable, meets, exceeds or fails to meet internal or published projections, forecasts or revenue or earnings predictions for any period constitute an intervening event, except that the underlying cause or causes of such change or fact may be taken into account for purposes of determining whether an intervening event has occurred; and

in no event will any effect that has had or would reasonably be expected to have an adverse effect on the business or financial condition of Versum (in the case of determination made by the Entegris board of directors) or Entegris (in the case of determination made by the Versum board of directors) and its subsidiaries, as applicable, constitute an intervening event unless such effect constitutes a material adverse effect on Versum or Entegris, as applicable.

Nothing contained in the merger agreement will prevent Entegris or Versum from complying with its disclosure obligations under applicable United States federal or state law with regard to an acquisition proposal or making any stop, look and listen or similar communication of the type contemplated by Rule 14d-9(f) of the Exchange Act pending disclosure of its position thereunder, except that neither party may effect a change of recommendation other than in accordance with the procedures described above.

**Existing Discussions and Standstill Provisions**

Entegris and Versum each must, and must cause its subsidiaries and must use its reasonable best efforts to cause their respective representatives to, immediately cease and cause to be terminated any existing activities, discussions or negotiations with any person conducted prior to the date of the merger agreement with respect to any acquisition proposal, or proposal that would reasonably be expected to lead to an acquisition proposal. Entegris and Versum, as applicable, must promptly deliver a written notice to each such person providing only that each of Entegris and Versum, as applicable, is ending all discussions and negotiations with such person with respect to any acquisition proposal, or proposal or transaction that would reasonably be expected to lead to an acquisition proposal, which notice must also request the prompt return or destruction of all confidential information concerning Entegris and any of its subsidiaries or Versum and any of its subsidiaries, as applicable, that has been furnished to such person by or on behalf of Entegris or Versum, as applicable, or any of their respective subsidiaries, as applicable. Entegris and Versum, as applicable, will promptly terminate all physical and electronic data access previously granted to such persons.

During the period beginning on the date of the merger agreement and continuing until the earlier of the effective time and termination of the merger agreement pursuant to its terms, Entegris and Versum, as applicable, must not terminate, amend, modify or waive any provision of any confidentiality, standstill or similar agreement to which Entegris and Versum, as applicable, or any of their respective subsidiaries is a party and must enforce, to the fullest extent permitted under applicable law, the provisions of any such agreement, including by obtaining injunctions to prevent any breaches of such agreements and to enforce specifically the terms and provisions of such agreements.

Table of Contents

**Registration Statement**

Notwithstanding anything in the merger agreement to the contrary, the parties agree that for purposes of the merger agreement, the registration statement on Form S-4 will be deemed to have been declared effective so long as the parties have abided by any policies and procedures put forth by the SEC relating to making registration statements effective during a federal government shutdown, if applicable.

**Special Meetings**

Each of Entegris and Versum must take, in accordance with applicable law and its organizational documents, all action necessary to convene the Entegris special meeting or Versum special meeting, as applicable, as promptly as practicable after this Form S-4 is declared effective, to consider and vote upon, in the case of Versum, the adoption of the merger agreement, and in the case of Entegris, the adoption of the merger agreement (including the share issuance contemplated thereby) and adoption of the amended and restated certificate of incorporation of Entegris, and to cause such vote to be taken, and must not postpone or adjourn such meeting except to the extent required by law, in accordance with the terms of the merger agreement, or, if, as of the time for which such party s special meeting was originally scheduled, there are insufficient shares of such party s common stock represented (either in person or by proxy) and voting to obtain such party s required vote or to constitute a quorum necessary to conduct the business of such party s special meeting. Entegris and Versum each must, subject to the right of each board to effect a change of recommendation in accordance with the terms of the merger agreement, use reasonable best efforts to solicit from its stockholders proxies in favor of, in the case of Versum, the proposal to adopt the merger agreement, and in the case of Entegris, the Entegris merger agreement proposal and the Entegris charter proposal, and to secure the required votes of such party s stockholders.

Entegris and Versum will cooperate and use their reasonable best efforts to schedule and convene the Entegris special meeting and the Versum special meeting on the same date, and each agrees to provide the other reasonably detailed periodic updates concerning proxy solicitation. The special meetings may be adjourned, including at the other party s request, if it is necessary to ensure that any supplement or amendment to this joint proxy statement/prospectus is delivered or if either party has not received sufficient proxies to obtain the required vote of its stockholders as of two business days before its special meeting. Such adjournment must not be more than 10 days in connection with any one postponement or adjournment and to a date that is no later than three business days prior to the outside date. If either party postpones or adjourns its special meeting, the other party may postpone or adjourn its special meeting such that both special meetings are scheduled on the same date.

Subject to each party s termination rights described in **Termination of the Merger Agreement** beginning on page 153, each of Entegris and Versum agrees that its obligations to hold the Entegris special meeting and the Versum special meeting, as applicable, will not be affected by the making of a change of recommendation by the Entegris board of directors or the Versum board of directors, as applicable, nor will those obligations be affected by the commencement of or announcement or disclosure of or communication to Entegris or Versum, as applicable, of any acquisition proposal (including any superior proposal) or the occurrence or disclosure of an intervening event as to Entegris or Versum, as applicable.

**Cooperation; Efforts to Consummate**

On the terms and subject to the conditions set forth in the merger agreement, Entegris and Versum are required to cooperate with each other and use (and will cause their respective subsidiaries to use) their respective reasonable best efforts to take or cause to be taken all actions, and to do or cause to be done all things, reasonably necessary, proper or advisable on its part under the merger agreement and applicable law to cause the conditions to closing to be satisfied

as promptly as reasonably practicable and advisable (and in any event no later than the outside date) and to consummate and make effective the merger and the other transactions contemplated by the merger agreement as soon as reasonably practicable, including preparing and filing as promptly as reasonably

practicable and advisable all documentation to effect all necessary notices, reports and other filings and to obtain as promptly as reasonably practicable (and in any event no later than the outside date) all consents necessary or advisable to be obtained from any third party or any governmental entity in order to consummate the merger and the other transactions contemplated by the merger agreement, executing and delivering any additional instruments necessary to consummate the merger and the other transactions contemplated by the merger agreement and refraining from taking any action that would reasonably be expected to impede, interfere with, prevent or materially delay the consummation of the merger and the other transactions contemplated by the merger agreement.

Versum and Entegris will jointly develop and consult and cooperate in all respects with one another, and consider in good faith the views of one another, in connection with the form and content of any analyses, appearances, presentations, memoranda, briefs, arguments, opinions and proposals made with, or submitted to, any third party or any governmental entity in connection with the merger and the other transactions contemplated by the merger agreement. Neither Versum nor Entegris will permit any of its officers or other representatives to participate in any substantive meeting, telephone call or conference with any governmental entity in respect of any filing, investigation or otherwise relating to the merger and the other transactions contemplated by the merger agreement unless, to the extent reasonably practicable, it consults with the other party in advance and, to the extent permitted by such governmental entity, gives the other party the opportunity to attend and participate therein.

Each of the parties will use reasonable best efforts to furnish to each other all information required for any filing, other than confidential or proprietary information not directly related to the merger and the other transactions contemplated by the merger agreement, and to give the other party reasonable prior notice of any such filing and, to the extent practicable, keep the other party reasonably informed with respect to the status of each consent sought from a governmental entity in connection with the merger and the other transactions contemplated by the merger agreement and the material communications between such party and such governmental entity, and, to the extent practicable, permit the other party to review and discuss in advance, and consider in good faith the views of the other in connection with any such filing or communication.

Each of the parties will promptly furnish the other with copies of all correspondence, filings (except for the parties initial HSR Act filings) and material communications between them and their affiliates and representatives, on one hand, and any such governmental entity or its respective staff on the other hand, with respect to the merger and the other transactions contemplated by the merger agreement in order for such other party to meaningfully consult and participate in accordance with the merger agreement, except that materials furnished may be redacted as necessary to address reasonable attorney-client or other privilege or confidentiality concerns.

Subject to applicable law, each of Versum and Entegris and their respective subsidiaries will not agree to any actions, restrictions or conditions with respect to obtaining any consent in connection with the merger and the other transactions contemplated by the merger agreement, and neither party will directly or indirectly agree to extend any applicable waiting period (including under the HSR Act) or enter into any agreement with a governmental entity related to the merger agreement or the merger or the other transactions contemplated by the merger agreement, in each case, without the prior written consent of the other party. In exercising the foregoing rights, each of Versum and Entegris will act reasonably and as promptly as reasonably practicable.

Subject to certain exceptions, neither Entegris nor Versum will, and each of them will cause their respective affiliates not to, take any action, including acquiring any asset, property, business or person (by way of merger, consolidation, share exchange, investment, other business combination, asset, stock or equity purchase, or otherwise), in each case, that could reasonably be expected to materially impair, adversely affect or materially delay obtaining or making any filing contemplated by the merger agreement or the timely receipt thereof.

146

Table of Contents

On the terms and subject to the conditions set forth in the merger agreement, each of Entegris and Versum agrees, subject to applicable law, to:

promptly provide to each and every federal, state, local or foreign court or governmental entity with jurisdiction over enforcement of any applicable antitrust law non-privileged information and documents requested by any such governmental entity or that are necessary, proper or advisable to permit consummation of the merger and the other transactions contemplated by the merger agreement; and

promptly use its reasonable best efforts to take all reasonably necessary, proper or advisable steps to avoid the entry of, and resist, vacate, modify, reverse, suspend, prevent, eliminate or remove any actual, anticipated or threatened temporary, preliminary or permanent injunction or other order, decree, decision, determination or judgment entered or issued, or that becomes reasonably foreseeable to be entered or issued, in any proceeding or inquiry of any kind that would reasonably be expected to delay, restrain, prevent, enjoin or otherwise prohibit or make unlawful the consummation of the merger or the other transactions contemplated by the merger agreement, including:

the defense through litigation (excluding any appeals) on the merits of any claim asserted in any court, agency or other proceeding by any person or entity seeking to delay, restrain, prevent, enjoin or otherwise prohibit consummation of the merger or the other transactions contemplated by the merger agreement; and

(i) proposing, negotiating, committing to and agreeing to sell, lease, license or otherwise dispose of, or hold separate pending such disposition; (ii) agreeing to restrictions or actions that after the effective time would limit the combined company s or its subsidiaries or affiliates freedom of action or operations with respect to, or its ability to retain, one or more of its subsidiaries businesses, product lines or assets; or (iii) agreeing to enter into, modify or terminate existing contractual relationships, contractual rights or contractual obligations and promptly effecting the sale, lease, license, divestiture, disposal and holding separate of, assets, operations, rights, product lines, licenses, businesses or interests therein of Entegris or Versum or either of their respective subsidiaries if such remedy described in this bullet and the two preceding bullets (each such action being referred to as a regulatory remedy) should be reasonably necessary, proper or advisable so as to permit the consummation of the merger and the other transactions contemplated by the merger agreement on a schedule as close as possible to that contemplated in the merger agreement, except that neither Entegris nor Versum is required to effectuate or agree to effectuate any such regulatory remedy described in this bullet and the two preceding bullets unless such remedy is conditioned upon the closing.

Neither the covenants described in this section nor the reasonable best efforts standard in the merger agreement will require, or be construed to require, Entegris or Versum or any of their respective subsidiaries or other affiliates to (a) waive any of the conditions to the closing of the merger, (b) take, effect or agree to any regulatory remedies unless such regulatory remedy is conditioned upon the occurrence of the closing or is effective on or after the closing, or (c) take, effect or agree to any regulatory remedy that individually or in the aggregate with any other regulatory remedy to be taken, effected or agreed to, would reasonably be expected to have a material adverse effect on the business, operations, financial condition or results of operations of Versum and its subsidiaries, taken as a whole, Entegris and its subsidiaries, taken as a whole, or the combined company and its subsidiaries, taken as a whole, in

each case, from and after the effective time (which is referred to as a burdensome effect), not taking into account any proceeds received or expected to be received from any such action.

Entegris and Versum will use reasonable best efforts to cooperate with each other and work in good faith in formulating any such regulatory remedy described above.

Table of Contents

**Status and Notifications**

Subject to applicable law and except as otherwise required by any governmental entity, Entegris and Versum each will keep the other apprised of the status of material matters relating to completion of the merger and the other transactions contemplated by the merger agreement, including promptly furnishing the other with copies of notices or other substantive communications received by Entegris or Versum, as applicable, or any of its subsidiaries from any third party and/or any governmental entity with respect to the merger and the other transactions contemplated by the merger agreement.

**Financing and Indebtedness**

Entegris and Versum have agreed to cooperate in good faith during the period from the date of the merger agreement to the effective time to mutually determine and use reasonable best efforts to implement any necessary, appropriate or desirable arrangements, in anticipation of the consummation of the merger and other transactions contemplated by the merger agreement, regarding each party s credit agreements, indentures or other documents governing or relating to indebtedness of the parties, including arrangements by way of amendments, consents, redemption, payoff, new financing or otherwise, with respect to retaining or refinancing a party s credit agreement or senior notes.

**Access to Information**

Subject to applicable law and certain exceptions and conditions, Entegris and Versum each must, upon request by the other, use reasonable best efforts to furnish the other with all information concerning itself, its subsidiaries, directors, officers and stockholders and such other matters as may be reasonably necessary or advisable in connection with any statement, filing, notice or application made by or on behalf of Entegris, Versum or any of their respective subsidiaries to any third party or any governmental entity in connection with the merger and other transactions contemplated by the merger agreement and must, upon giving of reasonable notice by the other party, use reasonable best efforts to afford the other party s officers and other authorized representatives reasonable access, during normal business hours following reasonable advance notice throughout the period prior to the effective time, to its officers, employees, agents, contracts, books and records, as well as properties, offices and other facilities, and, during such period, each must (and must cause its subsidiaries to) use reasonable best efforts to furnish promptly to the other all information concerning its business, properties and personnel as may reasonably be requested, including in connection with this joint proxy statement/prospectus, or any other statement, filing, notice or application made by or on behalf of Entegris, Versum or any of their respective subsidiaries to any third party or any governmental entity in connection with the merger and the other transactions contemplated by the merger agreement.

**NASDAQ or NYSE Listing; NYSE Delisting**

Entegris must use its reasonable best efforts to cause the shares of Entegris common stock to be issued in the merger to be approved for listing on NASDAQ or the NYSE prior to the closing date. Prior to the closing date, Versum must cooperate with Entegris and use reasonable best efforts to take, or cause to be taken, all actions, and do or cause to be done all things, reasonably necessary, proper or advisable on its part under applicable laws and rules and policies of the NYSE to enable the delisting by the combined company of the shares of Versum common stock from the NYSE and the deregistration of such shares under the Exchange Act as promptly as practicable after the effective time.

**Publicity**

Versum and Entegris are required to consult with each other before issuing any press release or disclosure relating to any financing transaction or making any public statement with respect to the merger agreement, the merger or the

other transactions contemplated by the merger agreement and may not issue any such press release

Table of Contents

or disclosure relating to financing or make any such public statement without the prior consent of the other, such consent not to be unreasonably withheld, conditioned or delayed, except that (a) any such press release, disclosure relating to any financing transaction or public statement as may be required by applicable law or any listing agreement with any national securities exchange may be issued prior to such consultation if the party making the release or statement has used its reasonable best efforts to consult with the other party on a timely basis and (b) each party may issue public announcements, including disclosure relating to any financing transaction, or make other public disclosures regarding the merger agreement or the merger or the other transactions contemplated by the merger agreement that consist solely of information previously disclosed in press releases, disclosures relating to any financing transaction or public statements previously approved by either party or made by either party in compliance with this section. The immediately preceding sentence does not apply to any disclosure of information concerning the merger agreement in connection with any dispute between the parties regarding the merger agreement or in respect of internal announcements to employees, and, subject to certain exceptions, the parties are not required to consult with or obtain approval from the other party with respect to a public announcement or press release issued in connection with the receipt and existence of an acquisition proposal and matters relating thereto or a change of recommendation.

**Employee Benefits Matters**

For one year following the effective time, Entegris shall provide, or shall cause to be provided, to employees of both Versum and its subsidiaries and Entegris and its subsidiaries who, in each case, remain employed following the effective time (such Versum and Entegris employees who remain employed, continuing employees ), (i) base salaries or base wage, annual cash incentive opportunities and long-term cash and equity incentive opportunities that are, in each case, no less favorable than those in effect immediately prior to the effective time, (ii) severance benefits and protections no less favorable than those provided immediately prior to the effective time, and (iii) health, welfare, pension and retirement benefits that are no less favorable, in the aggregate, than those provided immediately prior to the effective time.

With respect to any compensation and benefit plan in which any continuing employees first become eligible to participate on or after the effective time, each of Entegris and Versum shall (i) cause any preexisting conditions or limitations and eligibility waiting periods under any of its group health plans to be waived with respect to the other party s continuing employees and their eligible dependents, (ii) give the other party s continuing employees credit for the plan year in which the effective time occurs towards applicable deductibles and annual out-of-pocket limits for medical expenses incurred during the plan year but prior to the effective time, for which payment has been made and (iii) give the other party s continuing employees service credit for such continuing employee s employment with the other party for purposes of vesting, benefit accrual and eligibility to participate under each applicable compensation and benefit plan, as if such service had been performed with such party, except for benefit accrual under defined benefit pension plans, for purposes of qualifying for subsidized early retirement benefits (unless otherwise required under applicable law) or to the extent it would result in the duplication of benefits.

Entegris and Versum agreed that, as of the effective time, a change in control will occur or will be deemed to occur under Versum s compensation and benefit plans. The Entegris board of directors (or applicable committee thereof) may, in its discretion, provide that a change in control will occur as of the effective time under Entegris compensation and benefit plans, which determination may result in certain double trigger benefits under such plans upon a qualifying termination of employment subsequent to the effective time, but in no event may such determination result in the single trigger payment of benefits under such plans upon or in connection with the merger.

Versum is permitted to adopt annual bonus and incentive plans for its fiscal year commencing October 1, 2019 that are substantially equivalent to those in effect for the fiscal year ending September 30, 2019. Entegris is permitted to adopt annual bonus and incentive plans for its fiscal years commencing January 1, 2019 and January 1, 2020 that are

substantially equivalent to those in effect for the fiscal year ending December 31, 2018.

Table of Contents

Versum may, in its discretion, determine to pay continuing employees a pro-rated bonus or incentive for the fiscal year in which closing occurs, based on actual performance for the portion of the applicable fiscal year completed prior to the closing date. Any such pro-rated bonuses or incentives will be paid at such time as Versum pays such bonuses in the ordinary course of business consistent with past practice. If the closing date occurs following December 31, 2019, Entegris may pay annual cash bonuses or incentives earned by its continuing employees for the fiscal year ending December 31, 2019, with such bonus or incentive paid at such time as Entegris normally pays bonuses in the ordinary course consistent with past practice.

Versum may establish a cash-based retention program for the benefit of employees of Versum and its subsidiaries, with the aggregate retention pool not to exceed $15 million. Entegris may establish a cash-based retention program for the benefit of employees of Entegris and its subsidiaries, with the aggregate retention pool not to exceed $15 million. Any retention bonuses granted by either party will be paid promptly following the six-month anniversary of the effective time, subject to continued employment through such date (or, if earlier, promptly following a qualifying termination).

Versum and Entegris may each make annual grants of equity awards to their respective employees in the ordinary course of business consistent with past practice, except that no such equity awards granted in such party s fiscal year 2020 will contain double-trigger vesting protections relating to the transaction contemplated by the merger agreement. However, Entegris may provide that such equity awards vest on a pro-rated basis upon certain qualifying terminations of employment.

**Expenses**

Except as otherwise provided in certain provisions related to the effect of termination of the merger agreement, whether or not the merger is completed, all costs and expenses incurred in connection with the preparation, negotiation, execution and performance of the merger agreement and the merger and other transactions contemplated by the merger agreement will be paid by the party incurring such expense, except that (a) certain expenses described in Versum s disclosure letter will be paid by Entegris, (b) expenses incurred in connection with any filing fees in connection with the HSR Act, any other antitrust law, this Form S-4 and the printing and mailing of this joint proxy statement/prospectus will be shared equally by Entegris and Versum, (c) expenses in respect of any necessary, appropriate or desirable arrangements, in anticipation of the consummation of the merger and the other transactions contemplated by the merger agreement, regarding each party s credit agreements, indentures or other documents governing or relating to indebtedness of the parties will be shared equally by Versum and Entegris and (d) the combined company will pay all charges and expenses, including those of the exchange agent, in connection with the share exchange and delivery of the merger consideration.

**Indemnification; Directors and Officers Insurance**

The merger agreement provides that, from and after the effective time, the combined company will indemnify and hold harmless to the fullest extent as such individuals would be indemnified as of the date of the merger agreement under applicable law, Versum s organizational documents and any indemnification agreements in effect as of the date of the merger agreement, each present and former (determined as of the effective time) director and officer of Versum or any of its subsidiaries or any person who prior to or at the effective time served at the request of Versum or any of its subsidiaries as a director or officer of another person in which Versum or any of its subsidiaries has an equity investment, in each case, when acting in such capacity (which are referred to as the indemnified parties) against any costs or expenses (including reasonable attorneys fees, costs and expenses), judgments, inquiries, fines, losses, claims, damages or liabilities incurred in connection with, arising out of or otherwise related to any proceeding, in connection with, arising out of or otherwise related to matters existing or occurring at or prior to the effective time, whether

asserted or claimed prior to, at or after the effective time, including in connection with (i) the merger agreement, the merger or the other transactions contemplated by the merger agreement, and (ii) actions to enforce this provision or any other indemnification or

Table of Contents

advancement right of any indemnified party, and the combined company will also advance expenses as incurred to the fullest extent that such individual would have been entitled to under applicable law, Versum s organizational documents and any indemnification agreements in effect as of the date of the merger agreement, except that any person to whom expenses are advanced provides an undertaking to repay such advances if it is ultimately determined by final adjudication that such person is not entitled to indemnification.

Prior to the effective time, Versum will and, if Versum is unable to, Entegris will cause the combined company as of the effective time to, obtain and fully pay the premium for tail insurance policies for the extension of (a) the directors and officers liability coverage of Versum s existing directors and officers insurance policies, and (b) Versum s existing fiduciary liability insurance policies, in each case for a claims reporting or discovery period of six years from and after the effective time, which is referred to as the tail period, from one or more insurance carriers with the same or better credit rating as Versum s insurance carrier as of the date of the merger agreement with respect to directors and officers liability insurance and fiduciary liability insurance with terms, conditions, retentions and limits of liability that are at least as favorable to the insureds as Versum s existing policies with respect to matters existing or occurring at or prior to the effective time (including in connection with the merger agreement or the merger and other transactions contemplated by the merger agreement). If Versum and the combined company for any reason fail to obtain such tail insurance policies as of the effective time, the combined company will continue to maintain in effect for the tail period such insurance policies in place as of the date of the merger agreement with terms, conditions, retentions and limits of liability that are at least as favorable to the insureds as provided in Versum s existing policies as of the date of the merger agreement, or the combined company will purchase comparable insurance policies for the tail period with terms, conditions, retentions and limits of liability that are at least as favorable as provided in Versum s existing policies as of the date of the merger agreement, except that in no event will the aggregate cost of the insurance policy exceed during the tail period 300% of the current aggregate annual premium paid by Versum for such purpose, and if the cost of such insurance coverage exceeds such amount, the combined company will obtain a policy with the greatest coverage available for a cost not exceeding such amount.

During the tail period, all rights to indemnification and exculpation from liabilities for acts or omissions occurring at or prior to the effective time and rights to advancement of related expenses existing at the time of the merger agreement in favor of any indemnified party as provided in the organizational documents of Versum and its subsidiaries or any indemnification agreement between such person and Versum or any of its subsidiaries, in each case, as in effect on the date of the merger agreement, will survive the merger and other transactions contemplated by the merger agreement unchanged and will not be amended, restated, repealed or otherwise modified in any manner that would adversely affect any right thereunder of any such person.

The indemnification, exculpation and insurance provisions described in this section are intended to be for the benefit of, and from and after the effective time will be enforceable by, each of the persons eligible for indemnification, exculpation or insurance as described in the merger agreement, who will be third-party beneficiaries of such provisions.

**Dividends**

Versum and Entegris have agreed to coordinate with each other to designate the same record and payment dates for any quarterly dividends or distributions declared in accordance with the merger agreement in any calendar quarter in which the closing date might reasonably be expected to occur, so that holders of shares of Versum common stock do not receive dividends on both shares of Versum common stock and Entegris common stock received in the merger in respect of any calendar quarter or fail to receive a dividend on either shares of Versum common stock or Entegris common stock received in the merger in respect of any calendar quarter, except that the declaration and payment of any dividends on shares of Versum common stock or Entegris common stock will be subject to applicable law and the

approval of the Versum board of directors or Entegris board of directors, as applicable.

Table of Contents

**Litigation**

Each of Entegris and Versum has agreed to promptly advise the other party of any litigation commenced after the date of the merger agreement against such party or any of its directors (in their capacity as directors) by any stockholders of such party (on their own behalf or on behalf of such party) relating to the merger agreement or the merger or other transactions contemplated by the merger agreement, and to keep the other party reasonably informed regarding any such litigation. Each of Entegris and Versum has agreed to give the other party the opportunity to participate in the defense or settlement of any such stockholder litigation, and that no such settlement will be agreed to without the other party s prior written consent (which consent must not be unreasonably withheld, conditioned or delayed).

**Conditions to the Completion of the Merger**

Each party s obligation to effect the merger is subject to the satisfaction at closing or waiver at or prior to closing of each of the following conditions:

receipt of the required Entegris vote and the required Versum vote;

the shares of Entegris common stock to be issued to Versum stockholders in accordance with the merger agreement (including shares of Entegris common stock issuable upon the exercise of any converted options) having been approved for listing on NASDAQ or the NYSE, subject to official notice of issuance;

expiration of waiting periods and the receipt of all requisite regulatory approvals, and the continued full force and effectiveness of the requisite regulatory approvals and no governmental entity of competent jurisdiction having enacted, issued, promulgated, enforced or entered into any law or governmental order (whether temporary, preliminary or permanent) in connection with a requisite regulatory approval that (a) requires either party or any of its subsidiaries to take an action that would constitute or would reasonably be expected to have a burdensome effect or (b) would otherwise constitute or reasonably be expected to have a burdensome effect and is in effect;

no governmental entity of competent jurisdiction having enacted, issued, promulgated, enforced or entered any law or governmental order (whether temporary, preliminary or permanent) that is in effect and restrains, enjoins, makes illegal or otherwise prohibits the closing of the merger and the other transactions contemplated by the merger agreement or imposes a burdensome effect, which such law or governmental order is referred to as a relevant legal restraint;

the effectiveness of the registration statement of which this joint proxy statement/prospectus forms a part and the absence of a stop order or proceedings seeking a stop order by the SEC;

the accuracy of the representations and warranties of the other party as follows:

each of the representations and warranties of such party regarding organization, good standing and qualification; corporate authority and approval; takeover statutes; and such party s brokers and finders must have been true and correct in all material respects as of the date of the merger agreement and must be true and correct in all material respects as of the closing date (except to the extent that any such representation and warranty expressly speaks as of a particular date or period of time, in which case such representation and warranty must be so true and correct in all material respects as of such particular date or period of time);

the representations and warranties of such party regarding the absence of certain changes or events must have been true and correct in all respects as of the date of the merger agreement and must be true and correct in all respects as of the closing date;

the representation of such party regarding its capital structure must have been true and correct in all respects as of the date of the merger agreement and must be true and correct in all respects as of the closing date, other than, in each case, *de minimis* inaccuracies; and

Table of Contents

each other representation and warranty of such party set forth in the merger agreement must be true and correct in all respects (without giving effect to any qualification by materiality or material adverse effect contained therein) as of the date of the merger agreement and as of the closing date (except to the extent that any such representation and warranty expressly speaks as of a particular date or period of time, in which case such representation and warranty must be so true and correct in all respects as of such particular date or period of time), except for any failure of any such representation and warranty to be so true and correct in all respects (without giving effect to any qualification by materiality or material adverse effect contained therein) that would not, individually or in the aggregate, reasonably be expected to have a material adverse effect with respect to such party;

the other party s performance of, in all material respects, its obligations under the merger agreement required to be performed at or prior to the closing date;

the receipt by such party of a certificate of the chief executive officer or chief financial officer of the other party certifying that the conditions in the immediately preceding bullets with respect to representations and warranties and performance of obligations have been satisfied; and

the receipt of a written opinion from such party s counsel, in form and substance reasonably satisfactory to such party, dated as of the closing date, to the effect that for U.S. federal income tax purposes the merger will qualify as a reorganization within the meaning of Section 368(a) of the Code.

In addition, the obligations of Versum to effect the merger are subject to the satisfaction or waiver of the following additional condition:

Entegris having taken the actions necessary such that the board of directors, chairman of the board of directors and chief executive officer of the combined company are as provided in the merger agreement effective as of the effective time. For more details on the governance arrangements of the combined company, see the section entitled **The Merger Governance of the Combined Company** beginning on page 124.

**Termination of the Merger Agreement**

***Termination by Mutual Consent***

The merger agreement may be terminated and the merger and the other transactions contemplated by the merger agreement may be abandoned at any time prior to the effective time by mutual written consent of Versum and Entegris by action of their respective boards of directors.

***Termination by Either Entegris or Versum***

Either Entegris or Versum may terminate the merger agreement and the merger may be abandoned at any time prior to the effective time by action of its respective board of directors if:

the merger has not been completed by 5:00 p.m. (New York time) on January 28, 2020, which date may be extended by either party to April 28, 2020 (either date being referred to as the outside date) by delivery of written notice to the other party at or prior to 5:00 p.m. (New York Time) on January 28, 2020, if certain conditions to closing (solely as it relates to any antitrust laws) as described in the third and fourth bullet points of the section entitled **Conditions to the Completion of the Merger** beginning on page 152 have not been satisfied or waived on or prior to January 28, 2020 but all other conditions to closing have been satisfied (other than those conditions that by their nature are to be satisfied at the closing (so long as such conditions are reasonably capable of being satisfied at that time)) or waived, although such right to terminate will not be available to any party that has breached in any material respect any of its representations, warranties, covenants or agreements under the merger

Table of Contents

agreement in any manner that has been the primary cause of or primarily resulted in the occurrence of the failure of a condition to the consummation of the merger to be satisfied, which event is referred to as an outside date termination event and such termination is referred to as an outside date termination;

a relevant legal restraint as described in the section entitled **The Merger Regulatory Approvals** beginning on page 122 permanently restraining, enjoining, making illegal or otherwise prohibiting consummation of the merger or imposing a burdensome effect has become final and non-appealable, and the party seeking to terminate the agreement pursuant to this bullet point has used reasonable best efforts to prevent the entry of and to remove such relevant legal restraint in accordance with the merger agreement, although such right to terminate will not be available to any party that has breached in any material respect any of its representations, warranties, covenants or agreements under the merger agreement in any manner that has been the primary cause of or primarily resulted in the occurrence of the failure of the condition to the consummation of the merger regarding required government consents to be satisfied, which event is referred to as a regulatory restraint termination event;

the required Versum vote has not been obtained at the Versum special meeting (or, if the Versum special meeting has been adjourned or postponed in accordance with the merger agreement, at the final adjournment or postponement thereof) at which a vote on the adoption of the merger agreement was taken, which event is referred to as a Versum no vote termination event and such termination is referred to as a Versum no vote termination; or

the required Entegris vote has not been obtained at the Entegris special meeting (or, if the Entegris special meeting has been adjourned or postponed in accordance with the merger agreement, at the final adjournment or postponement thereof) at which a vote on the adoption of the merger agreement (including the share issuance contemplated thereby) was taken, which event is referred to as an Entegris no vote termination event and such termination is referred to as an Entegris no vote termination.

***Termination by Entegris***

Entegris may terminate the merger agreement and the merger may be abandoned at any time prior to the effective time by action of the Entegris board of directors:

prior to the time the required Versum vote is obtained, if the Versum board of directors has made a change of recommendation;

if at any time prior to the effective time, there has been a breach by Versum of any of its representations, warranties, covenants or agreements set forth in the merger agreement such that the conditions relating to accuracy of representations and warranties and performance of covenants would not be satisfied (and such breach is not curable prior to the outside date, or if curable prior to the outside date, has not been cured within the earlier of (i) 30 days after the giving of notice thereof by Entegris to Versum or (ii) three business days prior to the outside date); except that this right to terminate the merger agreement is not available if Entegris has breached in any material respect any of its representations, warranties, covenants or agreements set forth in the merger agreement in any manner that has been the primary cause of or primarily resulted in

the occurrence of the failure of a condition to the consummation of the merger to be satisfied; and

in order to enter into a definitive written agreement with respect to a superior proposal with respect to Entegris, provided that Entegris has complied with its obligations described in the sections entitled **No Solicitation of Acquisition Proposals,** **Notice Regarding Acquisition Proposals**, **No Change of Recommendation** and **Existing Discussions and Standstill Provisions** beginning on pages 140, 142, 142 and 144, respectively, and, in connection with the termination of the merger agreement, Entegris pays to Versum in immediately available funds the Entegris termination fee described below.

Table of Contents

***Termination by Versum***

Versum may terminate the merger agreement and the merger may be abandoned at any time prior to the effective time by action of the Versum board of directors:

- prior to the time the required Entegris vote is obtained, if the Entegris board of directors has made a change of recommendation;

- if at any time prior to the effective time, there has been a breach by Entegris of any of its representations, warranties, covenants or agreements set forth in the merger agreement such that the conditions relating to accuracy of representations and warranties and performance of covenants would not be satisfied (and such breach is not curable prior to the outside date, or if curable prior to the outside date, has not been cured within the earlier of (i) 30 days after the giving of notice thereof by Versum to Entegris or (ii) three business days prior to the outside date), except that this right to terminate the merger agreement is not available if Versum has breached in any material respect any of its representations, warranties, covenants or agreements set forth in the merger agreement in any manner that has been the primary cause of or primarily resulted in the occurrence of the failure of a condition to the consummation of the merger to be satisfied; and

- in order to enter into a definitive written agreement with respect to a superior proposal with respect to Versum, provided that Versum has complied with its obligations described in the sections entitled **No Solicitation of Acquisition Proposals,** **Notice Regarding Acquisition Proposals**, **No Change of Recommendation** and **Existing Discussions and Standstill Provisions** beginning on pages 140, 142, 142 and 144, respectively, and, in connection with the termination of the merger agreement, Versum pays to Entegris in immediately available funds the Versum termination fee described below.

**Termination Fees**

Versum will be required to pay to Entegris a termination fee of $140 million if the merger agreement is terminated:

- by either Versum or Entegris pursuant to an outside date termination (if the sole reason that the merger was not consummated was the failure of Versum to convene and hold the Versum special meeting prior to the outside date) or pursuant to a Versum no vote termination, and, in either case:

  - a *bona fide* acquisition proposal with respect to Versum has been publicly made directly to Versum stockholders or otherwise has become publicly known or any person has publicly announced an intention (whether or not conditional) to make an acquisition proposal with respect to Versum (and such acquisition proposal or publicly announced intention has not been publicly withdrawn without qualification five business days prior to (i) the date of such termination, with respect to an outside date termination or (ii) the date of the Versum special meeting, with respect to a Versum no vote termination), and

within 12 months after such termination, (1) Versum or any of its subsidiaries has entered into an alternative acquisition agreement with respect to any acquisition proposal with respect to Versum or (2) there has been consummated any acquisition proposal with respect to Versum (in each case of clauses (1) and (2), with 50% being substituted in lieu of 15% in each instance thereof in the definition of acquisition proposal ),

by Entegris pursuant to a change of recommendation by Versum,

by either Entegris or Versum pursuant to a Versum no vote termination (and, at the time of such termination, Entegris had the right to terminate the merger agreement as a result of a change of recommendation by Versum), or

by Versum to accept a superior proposal.

Table of Contents

Entegris will be required to pay to Versum a termination fee of $155 million if the merger agreement is terminated:

by either Versum or Entegris pursuant to an outside date termination (if the sole reason that the merger was not consummated was the failure of Entegris to convene and hold the Entegris special meeting prior to the outside date) or pursuant to an Entegris no vote termination and, in either case:

a *bona fide* acquisition proposal with respect to Entegris has been publicly made directly to Entegris stockholders or otherwise has become publicly known or any person has publicly announced an intention (whether or not conditional) to make an acquisition proposal with respect to Entegris (and such acquisition proposal or publicly announced intention has not been publicly withdrawn without qualification five business days prior to (i) the date of such termination, with respect to an outside date termination or (ii) the date of the Entegris special meeting, with respect to an Entegris no vote termination), and

within 12 months after such termination, (1) Entegris or any of its subsidiaries has entered into an alternative acquisition agreement with respect to any acquisition proposal with respect to Entegris or (2) there has been consummated any acquisition proposal with respect to Entegris (in each case of clauses (1) and (2), with 50% being substituted in lieu of 15% in each instance thereof in the definition of acquisition proposal ),

by Versum pursuant to a change of recommendation by Entegris,

by either Entegris or Versum pursuant to an Entegris no vote termination (and, at the time of such termination, Versum had the right to terminate the merger agreement as a result of a change of recommendation by Entegris), or

by Entegris to accept a superior proposal.

**Amendment**

Subject to applicable law and the provisions of the merger agreement restricting modification of the parties obligations regarding indemnification and directors and officers insurance and relating to financing parties, at any time prior to the effective time, the parties to the merger agreement may amend or modify the merger agreement if, and only if, such amendment or modification is in writing and signed by Entegris and Versum.

**Waiver**

The conditions to each of the parties obligations to consummate the merger and the other transactions contemplated by the merger agreement are for the sole benefit of such party and may be waived by such party in whole or in part to the extent permitted by applicable law, except that any such waiver will only be effective if made in writing and executed by the party against whom the waiver is to be effective. No failure or delay by any party in exercising any right, power or privilege under the merger agreement will operate as a waiver thereof nor will any single or partial exercise thereof

preclude any other or further exercise thereof or the exercise of any other right, power or privilege. The rights and remedies provided in the merger agreement are cumulative and not exclusive of any rights or remedies provided by law.

**Specific Performance**

Each of the parties to the merger agreement acknowledges and agrees that the rights of each party to consummate the merger and other transactions contemplated by the merger agreement are special, unique and of extraordinary character and that if for any reason any of the provisions of the merger are not performed in accordance with their specific terms or are otherwise breached, immediate and irreparable harm or damage would be caused for which money damages would not be an adequate remedy. Accordingly, each party agrees that, in addition to any other available remedies a party may have in equity or at law, each party will be entitled to

Table of Contents

enforce specifically the terms and provisions of the merger agreement and to obtain an injunction restraining any breach or violation or threatened breach or violation of the provisions of the merger agreement in the Court of Chancery of the State of Delaware without necessity of posting a bond or other form of security. In the event that any action or proceeding should be brought in equity to enforce the provisions of the merger agreement, no party thereto will allege, and each party thereby waives the defense, that there is an adequate remedy at law.

**Third-Party Beneficiaries**

Entegris and Versum have agreed that their respective representations, warranties and covenants set forth in the merger agreement are solely for the benefit of the other parties to the merger agreement, in accordance with and subject to the terms of the merger agreement, and the merger agreement is not intended to, and does not, confer upon any person other than Entegris, Versum and their respective successors, legal representatives and permitted assigns any rights or remedies, express or implied, thereunder, including the right to rely upon the representations and warranties set forth in the merger agreement, except with respect to the sections regarding indemnification and directors and officers insurance and financing parties, and after the effective time, the provisions of the merger agreement relating to payment of the merger consideration, any dividends or other distributions payable under the merger agreement and any cash in lieu of fractional shares payable under the merger agreement, which inure to the benefit of, and are enforceable by, holders of Versum common stock and Versum equity awards as of immediately prior to the effective time to the extent necessary to receive the consideration and amount due to such persons thereunder. The representations and warranties in the merger agreement are the product of negotiations among the parties. Any inaccuracies in such representations and warranties are subject to waiver by the parties in accordance with the terms of the merger agreement without notice or liability to any other person. In some instances, the representations and warranties in the merger agreement may represent an allocation among the parties of risks associated with particular matters regardless of the knowledge of any of the parties. Consequently, persons other than the parties may not rely upon the representations and warranties in the merger agreement as characterizations of actual facts or circumstances as of the date of the merger agreement or as of any other date.

Table of Contents

## UNAUDITED PRO FORMA CONDENSED COMBINED FINANCIAL STATEMENTS

The following unaudited pro forma condensed combined financial information presents the combination of the historical consolidated financial statements of Entegris and Versum, adjusted to give effect to the merger.

The unaudited pro forma condensed combined balance sheet, which is referred to as the pro forma balance sheet, combines the audited historical consolidated balance sheet of Entegris and the historical consolidated balance sheet of Versum, derived from unaudited interim financial statements as of December 31, 2018, giving effect to the merger as if it had been consummated on December 31, 2018.

Entegris fiscal year ends on December 31, whereas Versum s fiscal year ends on September 30. Due to this difference in year end, for the purpose of the unaudited pro forma condensed combined statement of operations for the twelve months ended December 31, 2018 the Versum financial results for the twelve months ended December 31, 2018, have been calculated by adding its financial results for the three months ended December 31, 2018 to its financial results for the twelve months ended September 30, 2018 and subtracting its financial results for the three months ended December 31, 2017. The unaudited pro forma condensed combined statement of operations, which is referred to as the pro forma statement of operations, for the twelve months ended December 31, 2018 combines the Entegris audited consolidated statement of operations for the year ended December 31, 2018 and the Versum financial results for the twelve months ended December 31, 2018. This gives effect to the merger as if it had been consummated on January 1, 2018.

The pro forma balance sheet and the pro forma statement of operations are collectively referred to as the pro forma financial statements.

The pro forma financial statements should be read in conjunction with the accompanying notes to the pro forma financial statements. In addition, the pro forma financial statements were based on and should be read in conjunction with the following historical consolidated financial statements and accompanying notes of Entegris and Versum for the applicable periods, which are incorporated by reference into this joint proxy statement/prospectus:

- Separate historical financial statements of Entegris as of and for the fiscal year ended December 31, 2018 and the related notes included in Entegris Annual Report on Form 10-K for the year ended December 31, 2018.

- Separate historical financial statements of Versum as of and for the fiscal year ended September 30, 2018 and the related notes included in Versum s Annual Report on Form 10-K for the year ended September 30, 2018 as well as the separate historical financial statements of Versum as of and for the fiscal quarter ended December 31, 2018 and the related notes included in Versum s Quarterly Report on Form 10-Q for the quarter ended December 31, 2018.

The pro forma financial statements have been prepared by Entegris management in accordance with SEC Regulation S-X Article 11, *Pro Forma Financial Information* for illustrative and informational purposes only. The pro forma financial statements are not necessarily indicative of what the combined company s balance sheet or statement of operations actually would have been had the merger been completed as of the dates indicated. In addition, the pro forma financial statements do not purport to project the future financial position or operating results of the combined company.

The pro forma financial statements have been prepared using the acquisition method of accounting under GAAP with Entegris being the accounting acquirer in the proposed merger of Entegris and Versum. See the section entitled **The Merger Accounting Treatment** beginning on page 125. The pro forma adjustments as presented in this section are preliminary, based upon available information as of the date of this joint proxy statement/prospectus and made solely for the purpose of providing these pro forma financial statements. Differences between these preliminary estimates and the final acquisition accounting will occur and these differences could have a material impact on the accompanying pro forma financial statements and the future results of operations and financial position of the combined company.

Table of Contents

**Unaudited Pro Forma Condensed Combined Balance Sheet (as of December 31, 2018)**

| | Historical | | | | |
|---|---|---|---|---|---|
| | Entegris | Versum as Reclassified | Pro Forma Adjustments | Notes | Pro Forma Combined |
| **ASSETS** | | Note 3 | | | |
| **Current assets:** | | | | | |
| Cash and cash equivalents | $ 482,062 | $ 407,989 | $ (87,141) | 6(I) | $ 802,910 |
| Trade accounts and notes receivable, net | 222,055 | 188,823 | (461) | 6(H) | 410,417 |
| Inventories, net | 268,140 | 190,024 | 39,976 | 6(B) | 498,140 |
| Deferred tax charges and refundable income taxes | 17,393 | | | | 17,393 |
| Other current assets | 39,688 | 58,652 | | | 98,340 |
| **Total current assets** | 1,029,338 | 845,488 | (47,626) | | 1,827,200 |
| Property, plant and equipment, net | 419,529 | 414,480 | 189,116 | 6(C) | 1,023,125 |
| Other assets: | | | | | |
| Goodwill | 550,202 | 183,737 | 2,526,621 | 6(G) | 3,260,560 |
| Intangible assets, net | 295,687 | 62,187 | 1,862,813 | 6(D) | 2,220,687 |
| Deferred tax assets and other noncurrent tax assets | 10,162 | 17,949 | | | 28,111 |
| Other noncurrent assets | 12,723 | 21,544 | | | 34,267 |
| **Total assets** | $ 2,317,641 | $ 1,545,385 | $ 4,530,924 | | $ 8,393,950 |
| **LIABILITIES AND EQUITY** | | | | | |
| **Current liabilities:** | | | | | |
| Long-term debt, current maturities | $ 4,000 | $ 5,750 | $ (351) | 6(E) | $ 9,399 |
| Accounts payable | 93,055 | 62,023 | (461) | 6(H) | 154,617 |
| Accrued payroll and related benefits | 78,288 | 9,792 | | | 88,080 |
| Other accrued liabilities | 62,732 | 47,070 | (4,528) | 6(I) | 105,274 |
| Income tax payable | 31,593 | 50,611 | | | 82,204 |
| **Total current liabilities** | 269,668 | 175,246 | (5,340) | | 439,574 |
| Long-term debt, excluding current maturities | 934,863 | 973,200 | (3,819) | 6(E) | 1,904,244 |
| Pension benefit obligations and other liabilities | 31,795 | 54,231 | | | 86,026 |
| Deferred tax liabilities and other noncurrent tax liabilities | 69,290 | 75,866 | 462,746 | 6(F) | 607,902 |
| **Equity:** | | | | | |
| Common stock | 1,362 | 109,110 | (107,888) | 6(J) | 2,584 |
| Treasury stock | (7,112) | | | 6(J) | (7,112) |
| Additional paid-in capital | 837,658 | 5,208 | 4,358,752 | 6(J) | 5,201,618 |
| Retained earnings | 213,753 | 133,915 | (190,808) | 6(J) | 156,860 |

| | | | | | |
|---|---|---|---|---|---|
| Accumulated other comprehensive loss | (33,636) | (17,281) | 17,281 | 6(J) | (33,636) |
| **Stockholders equity** | 1,012,025 | 230,952 | 4,077,337 | | 5,320,314 |
| Non-controlling interests | | 35,890 | | 6(A) | 35,890 |
| **Total equity** | 1,012,025 | 266,842 | 4,077,337 | | 5,356,204 |
| **Total liabilities and equity** | $ 2,317,641 | $ 1,545,385 | $ 4,530,924 | | $ 8,393,950 |

Table of Contents

**Unaudited Pro Forma Condensed Combined Statement of Operations (for the year ended December 31, 2018)**

| | Historical | | | | Pro Forma |
|---|---|---|---|---|---|
| | Entegris | Versum as Reclassified | Pro Forma Adjustments | Notes | Combined |
| | | Note 3 | | | |
| Net sales | $ 1,550,497 | $ 1,381,077 | $ (3,749) | 7(A) | $ 2,927,825 |
| Cost of sales | 830,666 | 791,965 | 23,451 | 7(B) | 1,644,883 |
| | | | (1,725) | 7(A) | |
| | | | 526 | 7(E) | |
| Gross profit | 719,831 | 589,112 | (26,001) | | 1,282,942 |
| Selling, general and administrative expenses | 246,534 | 157,374 | 3,803 | 7(B) | 415,224 |
| | | | 7,513 | 7(E) | |
| Engineering, research and development expenses | 118,456 | 49,298 | 2,724 | 7(B) | 171,358 |
| | | | 880 | 7(E) | |
| Amortization of intangible assets | 62,152 | 6,710 | 135,582 | 7(C) | 204,444 |
| **Operating income** | 292,689 | 375,730 | (176,503) | | 491,916 |
| Interest expense | 34,094 | 49,707 | (2,145) | 7(D) | 81,656 |
| Interest income | (3,839) | (3,112) | | | (6,951) |
| Other expense, net | 8,002 | (1,720) | | | 6,282 |
| **Income before income taxes** | 254,432 | 330,855 | (174,358) | | 410,929 |
| Income tax expense | 13,677 | 83,752 | (39,231) | 7(F) | 58,198 |
| **Net income** | 240,755 | 247,103 | (135,127) | | 352,731 |
| Net income attributable to noncontrolling interests | | 7,236 | | | 7,236 |
| **Net income attributable to Entegris** | $ 240,755 | $ 239,867 | $ (135,127) | | $ 345,495 |
| **Per common share data (Note 8):** | | | | | |
| Earnings per share | | | | | |
| Basic | $ 1.71 | | | | $ 1.31 |
| Diluted | $ 1.69 | | | | $ 1.30 |
| Weighted average shares outstanding | | | | | |
| Basic | 141,026 | | | | 263,731 |
| Diluted | 142,610 | | | | 265,341 |

Table of Contents

**1. Description of the Merger**

On January 27, 2019, Entegris and Versum entered into a definitive merger agreement pursuant to which Versum will merge with and into Entegris, with Entegris surviving and continuing as the surviving corporation and Versum stockholders receiving 1.120 shares of Entegris common stock for each existing share of Versum common stock held by them.

The merger is subject to approval by Entegris stockholders and by Versum stockholders and the satisfaction of customary closing conditions and regulatory approvals. Entegris and Versum expect to complete the merger in the second half of 2019.

**2. Basis of presentation**

The accompanying pro forma financial statements were prepared using the acquisition method of accounting in accordance with Accounting Standards Codification 805, Business Combinations ( ASC 805 ) and are based on the audited historical financial information of Entegris and audited annual and unaudited interim historical financial information of Versum. The audited historical consolidated financial information has been adjusted in the accompanying pro forma financial statements to give effect to pro forma events that are (i) directly attributable to the merger, (ii) factually supportable, and (iii) with respect to the unaudited pro forma condensed combined statement of operations, expected to have a continuing impact on the consolidated results.

GAAP requires that one of the two companies party to the merger be designated as the acquirer for accounting purposes based on the evidence available. In identifying Entegris as the acquiring entity for accounting purposes, the companies took into account the voting rights of all equity instruments, the intended corporate governance structure of the combined company and the size of each of the companies. In assessing the size of each of the companies, the companies evaluated various metrics, including, but not limited to: assets, revenue, operating income, EBITDA, adjusted EBITDA, market capitalization and enterprise value. No single factor was the sole determinant in the overall conclusion that Entegris is the acquirer for accounting purposes; rather, all factors were considered in arriving at the conclusion. Under ASC 805, Entegris, as the accounting acquirer, will account for the merger by using Entegris historical information and accounting policies and adding the assets and liabilities of Versum as of the effective time of the merger at their respective fair values.

The acquisition method of accounting uses the fair value concepts defined in ASC 820, Fair Value Measurements and Disclosures ( ASC 820 ). Fair value is defined in ASC 820 as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Fair value measurements can be highly subjective and it is possible the application of reasonable judgment could develop different assumptions resulting in a range of alternative estimates using the same facts and circumstances. The allocation of the estimated consideration is preliminary, pending finalization of various estimates and analyses. Since these pro forma financial statements have been prepared based on preliminary estimates of consideration and fair values attributable to the merger, the actual amounts eventually recorded for the merger, including Goodwill, may differ materially from the information presented.

The initial allocation of the preliminary consideration in these pro forma financial statements is based upon an estimated preliminary consideration of approximately $4,365,000, inclusive of approximately $26,000 related to Versum equity-based awards. This amount is based on approximately 122,204 shares of Entegris common stock, exclusive of converted Versum equity-based awards, that Entegris would expect to issue to holders of Versum common stock in connection with the merger, the number of shares of Versum common stock outstanding as of January 25, 2019 and the Versum exchange ratio of 1.120 provided in the merger agreement. The preliminary

consideration has been prepared based on the share price of Entegris common stock on March 11, 2019 (the latest practicable date prior to the date of this joint proxy statement/prospectus), equal to $35.51 per share. The actual number of shares of Entegris common stock issued to holders of Versum common stock will be determined by the actual number of shares of Versum common stock issued and outstanding

Table of Contents

immediately prior to the effective time of the merger. No additional consideration is expected for equity-based awards as all awards will be converted on like terms. The merger agreement does not contain any provision that would adjust the exchange ratio based on the fluctuations in the market value of either the Entegris common stock or Versum common stock. As a result, the implied value of the merger consideration to the Entegris stockholders and Versum stockholders will fluctuate between now and the effective time of the merger.

Under ASC 805, acquisition-related transaction costs are not included as a component of consideration transferred but are accounted for as expenses in the period in which the costs are incurred. Total combination related transaction costs, including severance costs, in connection with the merger are estimated to be approximately $64,000. As there is no continuing impact, the impact of these costs is not included in the pro forma statement of operations. These anticipated combination related transaction costs are reflected in the pro forma balance sheet as a reduction to cash and retained earnings for transaction costs incurred by Entegris. No combination related transaction costs in connection with the merger were incurred by either Entegris or Versum during the periods presented in the pro forma financial statements.

Further, the pro forma financial statements do not reflect the following items:

- Restructuring or integration activities that have yet to be determined or transaction or other costs following the merger that are not expected to have a continuing impact on the business of the combined company;

- The impact of possible cost or growth synergies expected to be achieved by the combined company, as no assurance can be made that such cost or growth synergies will be achieved.

**Accounting policies**

The pro forma financial statements do not assume any differences in accounting policies as Entegris is not aware of any differences that would have a material impact on the pro forma financial statements. Further review of Versum s detailed accounting policies following the consummation of the combination may identify additional differences between the accounting policies of the two companies that, when conformed, could have a material impact on the financial statements of the combined company. Certain reclassifications have been made to the historical financial statements of Versum to conform to Entegris presentation, which are discussed in more detail in *Note 3.*

**3. Reclassifications**

Certain reclassification adjustments have been made to the historical presentation of Versum financial information in order to conform to a combined Entegris balance sheet. In order to prepare the pro forma financial statements, Entegris performed a preliminary review of Versum s accounting policies to identify significant differences. After the merger is completed, the combined company will conduct an additional review of Versum s accounting policies to determine if differences in accounting policies require further adjustment or reclassification of Versum s results of operations, assets or liabilities to conform to Entegris accounting policies and classifications. As a result of that review, the combined company may identify additional differences between the accounting policies of the two companies that, when conformed, could have a material impact on the pro forma financial statements.

Table of Contents

**Versum Unaudited Reclassified Condensed Balance Sheet (as of December 31, 2018)**

| | Versum Before Reclassification | Reclassification | Notes | Versum as Reclassified |
|---|---|---|---|---|
| **ASSETS** | | | | |
| **Current assets:** | | | | |
| Cash and cash equivalents | $ 407,989 | $ | | $ 407,989 |
| Trade accounts and notes receivable, net | 188,823 | | | 188,823 |
| Inventories, net | 190,024 | | | 190,024 |
| Deferred tax charges and refundable income taxes | | | | |
| Contracts in progress, less progress billings | 24,579 | (24,579) | (A) | |
| Prepaid expenses | 16,115 | (16,115) | (A) | |
| Other current assets | 17,958 | 40,694 | (A) | 58,652 |
| **Total current assets** | 845,488 | | | 845,488 |
| Property, plant and equipment, net | 414,480 | | | 414,480 |
| Other assets: | | | | |
| Goodwill | 183,737 | | | 183,737 |
| Intangible assets, net | 62,187 | | | 62,187 |
| Deferred tax assets and other noncurrent tax assets | | 17,949 | (B) | 17,949 |
| Other noncurrent assets | 39,493 | (17,949) | (B) | 21,544 |
| **Total assets** | $ 1,545,385 | $ | | $ 1,545,385 |
| **LIABILITIES AND EQUITY** | | | | |
| **Current liabilities:** | | | | |
| Long-term debt, current maturities | $ 5,750 | $ | | $ 5,750 |
| Payables and accrued liabilities | 118,885 | (118,885) | (C) | |
| Accounts payable | | 62,023 | (C) | 62,023 |
| Accrued payroll and related benefits | | 9,792 | (C) | 9,792 |
| Other accrued liabilities | | 47,070 | (C) | 47,070 |
| Income tax payable | 50,611 | | | 50,611 |
| **Total current liabilities** | 175,246 | | | 175,246 |
| Long-term debt, excluding current maturities | 973,200 | | | 973,200 |
| Pension benefit obligations and other liabilities | 54,231 | | | 54,231 |
| Noncurrent income tax payable | 35,670 | (35,670) | (D) | |
| Deferred tax liabilities | 40,196 | (40,196) | (D) | |
| Deferred tax liabilities and other noncurrent tax liabilities | | 75,866 | (D) | 75,866 |
| **Equity:** | | | | |
| Common stock | 109,110 | | | 109,110 |
| Treasury stock | | | | |

| | | | |
|---|---|---|---|
| Additional paid-in capital | 5,208 | | 5,208 |
| Retained earnings | 133,915 | | 133,915 |
| Accumulated other comprehensive loss | (17,281) | | (17,281) |
| **Stockholders equity** | 230,952 | | 230,952 |
| Non-controlling interests | 35,890 | | 35,890 |
| **Total equity** | 266,842 | | 266,842 |
| **Total liabilities and equity** | $ 1,545,385 | $ | $ 1,545,385 |

(A) Reclassification from Contracts in progress, less progress billings and Prepaid expenses to Other current assets
(B) Reclassification from Other noncurrent assets to Deferred tax assets and other noncurrent tax assets
(C) Reclassification from Payables and accrued liabilities to Accounts payable, Accrued payroll and related benefits, and Other accrued liabilities
(D) Reclassification from Noncurrent income tax payable and Deferred tax liabilities into Deferred tax liabilities and other noncurrent tax liabilities

Table of Contents

**Versum Unaudited Reclassified Condensed Statement of Operations (for the year ended December 31, 2018)**

| | Versum Before Reclassification | Reclassifications | Versum as Reclassified |
|---|---|---|---|
| | | (A) | |
| Net sales | $ 1,381,077 | $ | $ 1,381,077 |
| Cost of sales | 792,799 | (834) | 791,965 |
| **Gross profit** | 588,278 | 834 | 589,112 |
| Selling, general and administrative expenses | 143,357 | 14,017 | 157,374 |
| Engineering, research and development expenses | 49,320 | (22) | 49,298 |
| Business separation, restructuring and cost reduction actions | 19,864 | (19,864) | |
| Other (income) expense, net | (4,856) | 4,856 | |
| Amortization of intangible assets | | 6,710 | 6,710 |
| **Operating income** | 380,593 | (4,863) | 375,730 |
| Interest expense | 49,707 | | 49,707 |
| Non-service components of net periodic pension cost | 31 | (31) | |
| Interest income | | (3,112) | (3,112) |
| Other expense, net | | (1,720) | (1,720) |
| **Income before income taxes** | 330,855 | | 330,855 |
| Income tax expense | 83,752 | | 83,752 |
| **Net income** | 247,103 | | 247,103 |
| Net income attributable to noncontrolling interests | 7,236 | | 7,236 |
| **Net income attributable to Versum** | $ 239,867 | $ | $ 239,867 |

Table of Contents

(A) The table below summarizes certain reclassifications made to the Versum historical statement of operations to conform to Entegris presentation:

| | Year ended December 31, 2018 | | |
|---|---|---|---|
| | Versum | Reclassification Adjustments | Versum Conformed to Entegris Presentation |
| Amortization of intangibles | $ | $ 834 | $ 834 |
| Cost of sales | 792,799 | (834) | 791,965 |
| | $ 792,799 | $ | $ 792,799 |
| Business separation, restructuring and cost reduction actions | $ 19,864 | $ (19,864) | $ |
| Amortization of intangibles | | 5,847 | 5,847 |
| Selling, general and administrative expenses | 143,357 | 14,017 | 157,374 |
| | $ 163,221 | $ | $ 163,221 |
| Amortization of intangibles | $ | $ 22 | $ 22 |
| Research and development | 49,320 | (22) | 49,298 |
| | $ 49,320 | $ | $ 49,320 |
| Other (income) expense, net | $ (4,856) | $ 4,856 | $ |
| Non-service components of net periodic pension cost | 31 | (31) | |
| Amortization of intangibles | | 7 | 7 |
| Interest income | | (3,112) | (3,112) |
| Other expense, net | | (1,720) | (1,720) |
| | $ (4,825) | $ | $ (4,825) |

**4. Preliminary Consideration**

The preliminary consideration is calculated as follows:

| | |
|---|---|
| Shares of Versum common stock outstanding as of January 25, 2019 | 109,111 |
| Exchange ratio | 1.12 |
| **Shares of Entegris common stock issued in exchange** | **122,204** |
| Entegris closing share price as of March 11, 2019 | $ 35.51 |

| | |
|---|---|
| **Estimated stock consideration to be transferred** | **$ 4,339,475** |
| Fair value of Entegris equity-based awards issued in exchange for Versum equity-based awards | 25,706 |
| **Estimate of consideration expected to be transferred** | **$ 4,365,181** |

The preliminary value of the consideration does not purport to represent the actual value of the total consideration that will be received by the Versum stockholders when the merger is completed. In accordance with GAAP, the fair value of the equity securities comprising the consideration will be measured on the closing date of the merger at the then-current market price per share of Entegris common stock. This requirement will likely result in a difference from the $35.51 per share on March 11, 2019, assumed in the calculation, and that

Table of Contents

difference may be material. For example, an increase or decrease of 15% in the price of Entegris common stock on the closing date of the merger from the price of Entegris common stock assumed in these pro forma financial statements would change the value of the preliminary consideration by approximately $651,000, which would be reflected as a corresponding increase or decrease to Goodwill. Based on historical volatility, a 15% change in Entegris common share price is reasonably possible during the period between the date of this joint proxy statement/prospectus and the expected effective time of the merger.

The preliminary estimate of the fair value of share-based compensation awards relates to Versum options that will be converted into converted options and Versum RSU awards and Versum PSU awards that will be converted into converted RSU awards. Versum PSU awards will be replaced with time-based converted RSU awards, with the number of shares of Entegris common stock subject to such converted RSU awards determined based on the achievement of actual performance through the effective date of the merger. The fair value of the converted options and converted RSU awards attributable to pre-combination service will be recognized as part of the purchase consideration transferred.

**5. Fair Value Estimate of Assets to be Acquired and Liabilities to be Assumed**

The table below represents an initial allocation of the preliminary consideration to Versum s tangible and intangible assets acquired and liabilities assumed based on management s preliminary estimate of their respective fair values as of December 31, 2018:

| | Versum as Reclassified | Fair Value Adjustment | Fair Value | Goodwill Calculation | Notes |
|---|---|---|---|---|---|
| **Estimated consideration transferred** | | | **$ 4,365,181** | | 4 |
| Non-controlling interests | $ 35,890 | $ | 35,890 | | 6(A) |
| **Total value to allocate** | | | | **$ 4,401,071** | |
| Inventories, net | 190,024 | 39,976 | 230,000 | | 6(B) |
| Property, plant and equipment, net | 414,480 | 189,116 | 603,596 | | 6(C) |
| Intangible assets, net | 62,187 | 1,862,813 | 1,925,000 | | 6(D) |
| All other assets (excluding goodwill) | 674,957 | | 674,957 | | |
| **Total assets** | **$ 1,341,648** | **$ 2,091,905** | **$ 3,433,553** | | |
| Long-term debt, current maturities | $ 5,750 | $ (351) | $ 5,399 | | 6(E) |
| Long-term debt, excluding current maturities | 973,200 | (3,819) | 969,381 | | 6(E) |
| Deferred tax liabilities and other noncurrent tax liabilities | 72,716 | 471,617 | 544,333 | | 6(F) |
| All other liabilities | 223,727 | | 223,727 | | |
| **Total liabilities** | **$ 1,275,393** | **$ 467,447** | **$ 1,742,840** | | |
| Fair value of net assets (excluding goodwill) | | | | **$ 1,690,713** | |
| **Entegris goodwill attributable to Versum** | | | | **$ 2,710,358** | 6(G) |

**6. Adjustments to Pro Forma Balance Sheet**

Explanations of the adjustments to the pro forma balance sheet are as follows:

(A) Represents noncontrolling interests remaining in Versum. For the purposes of these pro forma financial statements, book value of the non-controlling interests was used for the purchase price allocation, which is preliminary and subject to further adjustments as additional information becomes available and as additional analyses are performed.

(B) Represents the preliminary fair value of inventories, which considers replacement cost for materials and net realizable value for work-in-process and finished goods. Entegris will recognize the increased

Table of Contents

value of inventory in cost of sales as the inventory is sold, which for purposes of these pro forma financial statements is assumed to occur within the first year after the merger. As there is no continuing impact of the fair value adjustment to inventory on Entegris results, it has not been reflected in the pro forma statement of operations.

(C) Represents the preliminary fair value and resulting adjustment to net property, plant and equipment. The preliminary amounts assigned to net property, plant and equipment and estimated weighted average useful lives are as follows:

| | Preliminary Fair Value | Estimated Weighted Average Useful Life (in years) |
|---|---|---|
| Land | $ 31,686 | n/a |
| Buildings | 138,404 | 20 |
| Production facilities | 326,710 | 4 |
| Distribution and other machinery/equipment | 42,297 | 4 |
| Construction in progress | 64,499 | 20 |
| **Total fair value of Versum s property, plant and equipment, net** | **$ 603,596** | |
| Less: Versum s historical property, plant and equipment, net | 414,480 | |
| **Pro forma adjustment** | **$ 189,116** | |

(D) Represents the preliminary fair value and resulting adjustment to intangible assets (other than Goodwill). The preliminary amounts assigned to intangible assets and estimated weighted average useful lives are as follows:

| | Preliminary Fair Value | Estimated Weighted Average Useful Life (in years) |
|---|---|---|
| Customer relationships | $ 1,450,000 | 20 |
| Patents and technology | 425,000 | 8 |
| Other | 50,000 | 3 |
| **Total fair value of Versum s intangible assets (other than Goodwill)** | **$ 1,925,000** | |
| Less: Versum s historical other intangible assets | 62,187 | |

| | |
|---|---|
| **Pro forma adjustment** | **$ 1,862,813** |

(E) Represents the adjustment to record Versum s long-term debt at fair value as of December 31, 2018, which is reflected in long-term debt due within one year and long-term debt. These adjustments are net of the elimination of deferred financing costs.

(F) Represents the preliminary adjustment to deferred tax liabilities primarily associated with the one-time deductible transaction and severance costs and fair value adjustments for property, plant, and equipment, inventories, and other intangible assets excluding goodwill, using a blended statutory tax rate of 22.5%. See also note 6(J) for the impact to retained earnings.

(G) Represents the excess of the preliminary consideration over the preliminary fair value of the assets acquired and liabilities assumed. Goodwill will be tested for impairment at least annually and whenever events or circumstances have occurred that may indicate a possible impairment. Goodwill is not expected to be deductible for income tax purposes.

(H) Represents the elimination of accounts receivable and accounts payable resulting from transactions between Entegris and Versum.

Table of Contents

(I) Represents one-time transaction-related costs, net of related deferred taxes, to be incurred prior to, or concurrent with, the completion of the merger including bank fees, deferred compensation payout, legal fees, other consulting fees and severance costs of the Versum CEO and CFO who will be severed at the effective time of the merger. See also note 6(J) for the impact to retained earnings.

(J) The following table summarized the pro forma adjustments impacting equity:

| | Adjustments to Historical Equity | New Equity Structure | Other Items | Pro Forma Adjustments |
|---|---|---|---|---|
| Common stock | $ (109,110) | $ 1,222 | $ | $ (107,888) |
| Treasury stock | | | | |
| Additional paid-in capital | (5,208) | 4,363,960 | | 4,358,752 |
| Retained earnings | (133,915) | | (56,893) | (190,808) |
| Accumulated other comprehensive loss | 17,281 | | | 17,281 |
| **Stockholders equity** | **$ (230,952)** | **$ 4,365,182** | **$ (56,893)** | **$ 4,077,337** |
| Noncontrolling interests | | | | |
| **Total equity** | **$ (230,952)** | **$ 4,365,182** | **$ (56,893)** | **$ 4,077,337** |

***Adjustments to Historical Equity:*** Represents the elimination of Versum s historical equity.

***New Equity Structure:*** Represents the allocation of the preliminary consideration of $4,365,182 to common stock at Entegris par value of $.01 ($1,222) and additional paid-in-capital ($4,363,960) based on the price as of March 11, 2019.

***Other Items:*** Represents the impact of the nonrecurring transaction costs and severance to retained earnings, which is discussed within 6(F) and 6(I).

**7. Adjustments to Pro Forma Statement of Operations**

Explanations of the adjustments to the pro forma statement of operations are as follows:

(A) Transactions between Entegris and Versum have been eliminated as if Entegris and Versum were consolidated affiliates for the period presented.

(B) Represents the preliminary pro forma adjustment to recognize changes to straight-line depreciation expense resulting from the fair value adjustments to acquired property, plant, and equipment.

(C)

Represents estimated incremental straight-line amortization expense resulting from the allocation of purchase consideration to definite-lived intangible assets subject to amortization.

(D) Represents the amortization of the fair value adjustment to Versum s long-term debt.

(E) Represents incremental difference in stock based compensation for replaced equity awards.

(F) Represents the income tax effect of the pro forma adjustments related to the mergers calculated using a blended statutory income tax rate of 22.5%. The effective tax rate of the combined company could be significantly different depending on the mix of activities. The Versum historical income statement includes the impacts of the Tax Cuts and Jobs Act, which have not been adjusted in the pro forma financial statements since these are non-recurring items and not directly attributable to the merger.

Table of Contents

**8. Entegris Earnings Per Share Information**

The following table shows our calculation of pro forma combined basic and diluted earnings per share for the year ended December 31, 2018:

| | December 31, 2018 |
|---|---|
| Net income attributable to Entegris common stock | $ 345,495 |
| Basic weighted average Entegris shares outstanding | 141,026 |
| Versum shares converted to Entegris shares[1] | 122,204 |
| Entegris shares issued in respect of Versum equity-based awards | 501 |
| Pro forma basic weighted average shares outstanding | 263,731 |
| Dilutive effect of securities: | |
| Weighted common shares assumed upon exercise of Entegris options and vesting of Entegris restricted stock units | 1,584 |
| Entegris shares issued for Versum equity-based awards | 26 |
| Pro forma diluted weighted average shares outstanding | 265,341 |
| Pro forma basic earnings per share | $ 1.31 |
| Pro forma diluted earnings per share | $ 1.30 |

(1) Represents the estimated number of shares of Entegris common stock to be issued to Versum stockholders based on the number of shares of Versum common stock outstanding as of January 25, 2019 and after giving effect to the exchange ratio of 1.120 as determined in the merger agreement. Versum historical adjusted weighted average diluted shares outstanding for the quarter ended December 31, 2018 was 109,800.

Table of Contents

## INTERESTS OF ENTEGRIS DIRECTORS AND EXECUTIVE OFFICERS IN THE MERGER

In considering the recommendations of the Entegris board of directors, Entegris stockholders should be aware that Entegris directors and executive officers have interests in the merger, including financial interests, that may be different from, or in addition to, the interests of the other Entegris stockholders generally. These interests are described in more detail below, and with respect to the named executive officers of Entegris, are quantified in the tables below in the section entitled **Quantification of Payments and Benefits to Entegris Named Executive Officers** beginning on page 172. The Entegris board of directors was aware of and considered these interests, among other matters, in reaching its decisions to adopt the merger agreement and approve the transactions contemplated thereby (including approval of the share issuance) and to recommend the adoption of the merger agreement to Entegris stockholders. See the sections entitled **The Merger Background of the Merger** and **The Merger Recommendation of the Entegris Board of Directors; Entegris Reasons for the Merger** beginning on pages 80 and 87, respectively.

### *Executive Officers*

For purposes of this disclosure, Entegris named executive officers are (1) Bertrand Loy, President & Chief Executive Officer, (2) Gregory B. Graves, Executive Vice President, Chief Financial Officer & Treasurer, (3) Todd Edlund, Executive Vice President & Chief Operating Officer, (4) Sue Rice, Senior Vice President, Human Resources and (5) Clint Haris, Senior Vice President & General Manager, Microcontamination Control. For purposes of this disclosure, Entegris executive officers are its named executive officers, together with (a) Corey Rucci, Senior Vice President, Business Development, (b) Gregory Marshall, Senior Vice President, Quality, EH&S and Entegris Business Support, (c) Stuart Tison, Senior Vice President & General Manager, Specialty Chemicals and Engineered Materials, (d) William Shaner, Senior Vice President & General Manager, Advanced Materials Handling, (e) Bruce W. Beckman, Senior Vice President, Finance and (f) Michael D. Sauer, Vice President, Controller & Chief Accounting Officer.

### *Entegris Change in Control*

The Entegris board of directors has determined to treat the transaction as a change in control or term of similar meaning for purposes of Entegris compensation plans and arrangements, including its equity awards and severance agreements described below.

### *Treatment of Entegris Equity Awards*

*Generally.* Entegris equity awards will remain equity awards relating to shares of Entegris common stock. Entegris equity awards will continue to vest in accordance with the terms of the award agreements applicable to Entegris equity awards.

*Change in Control*. Pursuant to the existing terms of the Entegris PSU awards, at the effective time, performance would be determined based on actual performance through the effective time and the Entegris PSU awards would continue to vest solely based on continued service through the end of the regularly scheduled performance period. If an executive officer were terminated without cause or resigned with good reason during the two years following the effective time, his or her Entegris PSU award would vest in full.

Pursuant to the their terms, outstanding Entegris options and Entegris RSU awards would vest in full upon a termination without cause during the two years following the change in control. In addition, the Entegris board of directors has amended the terms of the outstanding Entegris options and Entegris RSU awards to provide that they

will vest in full upon a resignation for good reason that occurs during the two years following the effective time.

*Future Grants of Equity Awards*. Entegris may make annual grants of equity awards in the ordinary course of business consistent with past practice prior to the effective time. No such Entegris equity award granted in

Table of Contents

2020 will contain any double-trigger vesting protections relating to the merger. In addition, Entegris may provide that awards granted in 2019 or 2020 will vest upon a prorated basis upon a termination of the holder s employment without cause, a resignation by such holder for good reason or the holder s retirement, without regard to whether a change in control precedes the termination of employment.

*Estimated Value*. For an estimate of the amounts that would be realized by each of Entegris named executive officers in respect of his or her unvested Entegris equity awards upon a qualifying termination of employment following the effective time, please see the section entitled **Quantification of Payments and Benefits to Entegris Named Executive Officers** beginning on page 172. The estimated aggregate amount that would be realized by Entegris executive officers who are not named executive officers in respect of their unvested Entegris equity awards upon a qualifying termination of employment following the effective time is $10,318,575, which is based on the same assumptions used to calculate the estimated payments to Entegris named executive officers in the section entitled **Quantification of Payments and Benefits to Entegris Named Executive Officers** beginning on page 172.

***Severance Agreements***

*Change in Control Severance Agreements.* Each of Messrs. Loy, Graves, Edlund, Marshall, Rucci, Beckman and Sauer and Ms. Rice entered into a change in control termination agreement, which we refer to collectively as the Entegris CIC Agreements, with Entegris at or around the time the executive officer was hired or promoted into an executive officer role. Pursuant to the Entegris CIC Agreements, if the executive officer were terminated by Entegris without cause or resigns with good reason , in each case, during the two years following the effective time, the executive officer would be entitled to: (1) a lump sum cash payment, payable within 30 days following the termination date, equal to two times the sum of (a) the executive officer s annual base salary plus (b) the greater of (i) the highest annual bonus paid to the executive officer during the three years prior to termination and (ii) the executive officer s target annual bonus for the year of termination, (2) continued participation in medical, dental and life insurance plans for two years following the date of termination, (3) immediate vesting of all unvested equity awards, with any Entegris options remaining exercisable through the earlier of one year following termination or the expiration date of the Entegris options and (4) up to $15,000 of outplacement services. In addition, the Entegris CIC Agreements with Messrs. Graves and Edlund provide for the gross-up of taxes, interest or penalties incurred pursuant to Section 4999 of the tax code. In connection with the merger, Section 4999 of the tax code will apply to Versum executive officers, but not Entegris executive officers; accordingly Messrs. Graves and Edlund will not be entitled to a tax gross-up. Each executive officer party to an Entegris CIC Agreement is subject to a perpetual confidentiality covenant and restrictions on competing with Entegris and soliciting Entegris employees for 24 months following his or her termination of employment.

*Entegris Severance Policy*. Each executive officer who is not party to an Entegris CIC Agreement is covered by Entegris broad-based severance practice at all times. The broad-based severance practice provides for (1) the greater of (a) 1.5 weeks of salary per year of service and (b) 52 weeks of salary for Vice Presidents or above, (2) medical and dental benefit continuation at the same cost as when the executive was an active employee during the period of severance, (3) up to six months outplacement services and (4) 90 days following termination to exercise vested outstanding options.

*Estimated Value*. For an estimate of the amounts of severance that would be payable to Entegris named executive officers upon a qualifying termination of employment following a change in control of Entegris, please see the section entitled **Quantification of Payments and Benefits to Entegris Named Executive Officers** beginning on page 172. The estimated aggregate value of the severance benefits that would be payable to the Entegris executive officers who are not named executive officers upon a qualifying termination of employment following the effective time is $4,355,655, which is based on the same assumptions used to calculate the estimated payments to Entegris named

executive officers in the section entitled **Quantification of Payments and Benefits to Entegris Named Executive Officers** beginning on page 172.

Table of Contents

***Annual Incentive Compensation***

Entegris may, in its discretion, determine to pay pro-rated annual bonuses or incentives for the fiscal year in which the effective time occurs, based on actual performance, for the portion of the applicable fiscal year completed prior to the closing date. Any such pro-rated bonuses or incentives will be paid at such time as Entegris pays such bonuses in the ordinary course of business.

For an estimated amount of the pro-rated bonuses that would be payable to Entegris named executive officers if Entegris elects to pay such a pro-rated bonus, please see the section entitled **Quantification of Payments and Benefits to Entegris Named Executive Officers** beginning on page 172. If Entegris elects to pay such pro-rated bonuses, the estimated aggregate amount of the pro-rated bonuses that would be payable to Entegris executive officers other than the named executive officers is $185,326, which is based on the same assumptions used to calculate the estimated payments to Entegris named executive officers in the section entitled **Quantification of Payments and Benefits to Entegris Named Executive Officers** beginning on page 172.

***Other Compensation Matters***

In connection with the merger, Entegris may establish a cash-based retention program for the benefit of Entegris and its subsidiaries employees, including Entegris executive officers, with the aggregate retention pool not to exceed $15 million. Any such retention bonuses will be payable promptly following the six-month anniversary of the effective time, subject to continued employment through such date or, if earlier, promptly following a qualifying termination of employment. No retention bonuses have been granted to Entegris executive officers as of the date of the filing of this joint proxy statement/prospectus.

***Certain Governance Matters***

At the effective time, the board of directors of the combined company will have nine members, who will be determined prior to closing by mutual agreement of the parties, including four directors who, prior to the effective time, were members of the Entegris board of directors, four directors who, prior to the effective time, were members of the Versum board of directors (including the chairman of the Versum board of directors), and the Entegris CEO. The parties intend that the combined company board of directors represent an appropriate mix of relevant experience, qualifications and attributes. For more information, see the section entitled **The Merger Governance of the Combined Company** beginning on page 124.

***Quantification of Payments and Benefits to Entegris Named Executive Officers***

The following information, table and the related footnotes present information about the compensation payable to Entegris named executive officers in connection with the merger.

*Golden Parachute Compensation*

The following table sets forth the information required by Item 402(t) of Regulation S-K regarding the compensation for Entegris named executive officers based on the merger, assuming the following:

- the relevant price per share of Entegris common stock is $33.34, which equals the average closing price of a share of Entegris common stock over the five business day period following the first public announcement of

the merger (i.e., the five business day period beginning January 28, 2019);

the effective time of the merger occurs on March 11, 2019, which is the latest practicable date prior to the date of this filing;

the Entegris named executive officers are terminated without cause or, where applicable, resign for good reason, in each case immediately following the completion of the merger;

Table of Contents

all performance metrics applicable to any annual cash incentive awards or Entegris PSU awards are deemed satisfied based on target performance;

each such named executive officer s base salary and annual target bonus remains unchanged from those in place on March 11, 2019; and

the number of outstanding Entegris PSU awards, Entegris RSU awards and Entegris options is based on the number of such awards held by each Entegris executive officer that was unvested as of March 11, 2019.

The amounts below are based on multiple assumptions that may or may not actually occur or be accurate on the relevant date, including assumptions described in footnotes to the table. The amounts below do not reflect certain compensation actions that may occur before the effective time. The actual amounts payable to Entegris named executive officers, if any, will depend on whether the named executive officer incurs a qualifying termination, the date of termination of the named executive officer s employment (if applicable), the closing date of the merger, the value of Entegris common stock on the termination date, the manner of termination, and the terms of the plans or agreements in effect at such time. More detail on the included payments and benefits are set forth above in this section entitled **Interests of Entegris Directors and Executive Officers in the Merger** beginning on page 170.

| Name | Cash($)(1) | Equity($)(2) | Pension/ NQDC($)(3) | Perquisites/ Benefits($)(4) | Tax Reimbursement($)(5) | Other($) | Total($) |
|---|---|---|---|---|---|---|---|
| **Bertrand Loy**<br><br>President & Chief Executive Officer | 4,252,515 | 11,152,944 | | 53,274 | | | 15,458,733 |
| **Gregory B. Graves**<br><br>Executive Vice President & Chief Financial Officer | 1,907,027 | 4,034,918 | | 44,741 | | | 5,986,686 |
| **Todd J. Edlund**<br><br>Executive Vice President & Chief Operating Officer | 1,949,406 | 3,613,946 | | 44,741 | | | 5,608,093 |
| **Susan Rice**<br><br>Senior Vice President, Human Resources | 1,364,497 | 1,570,002 | | 40,450 | | | 2,974,949 |
| **Clint Haris**<br><br>Senior Vice President & General Manager, Microcontamination | 345,672 | 1,049,867 | | 32,872 | | | 1,428,411 |

Control

(1) Pursuant to the Entegris CIC Agreements with Messrs. Loy, Graves, Edlund and Ms. Rice, the amount set forth in the table above includes an amount equal to two times the sum of (a) the named executive officer s annual base salary plus (b) the greater of (i) the highest annual bonus paid to the named executive officer during the three years prior to termination and (ii) the named executive officer s target annual bonus for the year of termination. This amount is a double-trigger benefit payable within 30 days following the named executive officer s termination date if the named executive officer is terminated by Entegris without cause or resigns with good reason during the two years following the effective time. The amount included for Mr. Haris includes 52 weeks salary and benefits and a pro-rated bonus for the year in which the effective time occurs.

Table of Contents

Pursuant to the merger agreement, the amount set forth in the table above includes a pro-rated bonus for the year in which the effective time occurs, which would be paid upon the regularly scheduled payment date. This amount is a double-trigger benefit payable if the named executive officer experiences a qualifying termination prior to such date.

| Name | Cash Severance ($) | Pro-Rated Bonus ($) |
|---|---|---|
| Bertrand Loy | 4,073,200 | 179,315 |
| Gregory B. Graves | 1,842,301 | 64,726 |
| Todd J. Edlund | 1,883,242 | 66,164 |
| Susan Rice | 1,323,073 | 41,425 |
| Clint Haris | 310,001 | 35,671 |

For additional details, see the sections entitled **Severance Agreements** and **Annual Incentive Compensation** beginning on pages 171 and 172, respectively.

(2) Pursuant to the terms of the Entegris RSU awards, Entegris PSU awards and Entegris options, the amount set forth in the table above includes the value of the accelerated vesting of any unvested Entegris RSU awards, Entegris PSU awards and Entegris options held by the actual Entegris named executive officers. Amounts with respect to PSUs are set forth in the table above based on performance, and as of March 11, 2019, performance was tracking as follows with respect to outstanding Entegris PSU awards: (a) with respect to awards granted in 2017, 150% of target, (b) with respect to awards granted in 2018, 148.15% of target and (c) with respect to awards granted in 2019, insufficient time has elapsed in the performance period to make a determination thus awards are reflected at target. Any unvested Entegris options with an exercise price greater than $33.34 are excluded from the amounts set forth in the table above because they are out-of-the-money based on the assumed Entegris stock price. Amounts payable in respect of the Entegris RSU awards, Entegris PSU awards and Entegris options are double-trigger payments payable upon a termination of employment without cause, and, for Entegris PSU awards, a resignation for good reason, in each case, that occurs during the two years following the effective time.

| Name | Entegris RSU Awards ($) | Entegris PSU Awards ($) | Entegris Options ($) |
|---|---|---|---|
| Bertrand Loy | 3,880,320 | 4,187,107 | 3,085,517 |
| Gregory B. Graves | 1,396,289 | 1,540,558 | 1,098,079 |
| Todd J. Edlund | 1,374,059 | 1,381,086 | 858,800 |
| Susan Rice | 1,052,410 | 417,253 | 100,339 |
| Clint Haris | 475,443 | 425,384 | 149,040 |

For additional details, see the section entitled **Treatment of Entegris Equity Awards** beginning on page 170.

(3) None of the named executive officers are eligible to receive any non-qualified deferred compensation plan enhancements upon the merger or termination of employment following the merger. Although the Entegris deferred compensation plan provides for accelerated distributions in connection with a change in control, Entegris

may not deem the merger a change in control under this plan as this would result in the provision of single-trigger benefits pursuant to the terms of the Entegris deferred compensation plan. Entegris does not maintain any defined benefit pension plans in which its named executive officers participate.

Table of Contents

(4) The amount set forth in the table above reflects the value of continued medical, dental and, for Messrs. Loy, Graves, and Edlund and Ms. Rice, life insurance for two years following the named executive officer s termination date and the value of outplacement benefits. These benefits are double-trigger benefits which will be provided if the named executive officer is terminated without cause or resigns with good reason during the two years following the effective time.

| Name | Medical, Dental and Life Insurance Benefits ($) | Outplacement Benefits ($) |
|---|---|---|
| Bertrand Loy | 38,274 | 15,000 |
| Gregory B. Graves | 29,741 | 15,000 |
| Todd J. Edlund | 29,741 | 15,000 |
| Susan Rice | 25,450 | 15,000 |
| Clint Haris | 17,872 | 15,000 |

(5) The Entegris CIC Agreements with Messrs. Graves and Edlund provide for the gross-up of taxes, interest or penalties incurred pursuant to Section 4999 of the tax code. In connection with the merger, Section 4999 of the tax code will apply to Versum executive officers, but not Entegris executive officers, and thus the amount of tax reimbursement for Messrs. Graves and Edlund is zero.

Table of Contents

## INTERESTS OF VERSUM S DIRECTORS AND EXECUTIVE OFFICERS IN THE MERGER

In considering the recommendations of the Versum board of directors, Versum stockholders should be aware that Versum s directors and executive officers have interests in the merger, including financial interests, that may be different from, or in addition to, the interests of the other Versum stockholders generally. These interests are described in more detail below, and with respect to the named executive officers of Versum, are quantified in the tables below in the section entitled **Quantification of Payments and Benefits to Versum s Named Executive Officers** beginning on page 179. The Versum board of directors was aware of and considered these interests, among other matters, in reaching its decisions to adopt the merger agreement and approve the transactions contemplated thereby and to recommend the adoption of the merger agreement to Versum stockholders. See the sections entitled **The Merger Background of the Merger** and **The Merger Recommendation of the Versum Board of Directors; Versum s Reasons for the Merger** beginning on pages 80 and 91, respectively.

***Executive Officers***

For purposes of this disclosure, Versum s named executive officers are (1) Guillermo Novo, President and Chief Executive Officer, (2) George G. Bitto, Executive Vice President and Chief Financial Officer, (3) Michael W. Valente, Senior Vice President, General Counsel and Secretary, (4) Edward C. Shober, Senior Vice President, Materials, and (5) Patrick F. Loughlin. Mr. Loughlin served as Versum s Senior Vice President, Operations and Supply Chain, through October 31, 2018. For purposes of this disclosure, Versum s executive officers are its named executive officers, together with (a) Dr. John G. Langan, Senior Vice President and Chief Technology Officer and (b) John J. ( Jeff ) White, Senior Vice President, Delivery Systems and Services.

***Time-Based Restricted Stock Units, and Performance-Based Restricted Units; Deferred Stock Units***

Pursuant to the merger agreement, at the effective time:

Each outstanding Versum option, including those held by Versum s executive officers, will vest and be converted into a converted option relating to a number of shares of Entegris common stock equal to the product of (x) the number of shares of Versum common stock subject to the Versum option immediately prior to the effective time multiplied by (y) the exchange ratio (rounded down to the nearest whole share number), with a per share exercise price equal to (A) the per share exercise price applicable to such Versum option immediately prior to the effective time divided by (B) the exchange ratio (rounded up to the nearest whole cent). The converted option awards will vest and be exercisable on terms (including acceleration events) at least as favorable as were applicable to the corresponding Versum option immediately prior to the effective time.

Outstanding Versum RSU awards, including those held by Versum s executive officers and directors, will convert into a number of time-based Entegris restricted stock units equal to the product of (x) the number of shares of Versum common stock subject to such Versum RSU award immediately prior to the effective time multiplied by (y) the exchange ratio. Each converted RSU award will vest and settle on terms (including acceleration events) at least as favorable as applied to such former Versum RSU award immediately prior to the effective time. Each converted RSU award will vest in full on the original vesting date or, if an executive officer or director experiences a covered termination following the effective time and prior to the original vesting date, on the date of such covered termination. For executive officers, a covered termination means a

termination by Versum or one of its subsidiaries without cause or, to the extent good reason rights are provided for in the award agreement (or employment or similar agreement) applicable to the corresponding Versum RSU award, a resignation by the executive officer for good reason (as such terms are defined in the applicable Versum agreement), in either case, during the 24-month period following the effective time. For non- employee directors of Versum, a covered termination means the termination of their service as a director for any reason at or following the effective time.

Table of Contents

Outstanding Versum PSU awards, including those held by Versum s executive officers, will convert into a number of time-based Entegris restricted stock units equal to the product of (x) the number of shares of Versum common stock subject to such Versum PSU award immediately prior to the effective time multiplied by (y) the exchange ratio. The number of shares referenced in clause (x) of the immediately preceding sentence will be determined based on actual performance through a shortened performance period ending immediately prior to the effective time. The converted RSU award will vest and settle on terms (including acceleration events) at least as favorable as were applicable to the corresponding Versum PSU award immediately prior to the effective time, except that the converted RSU awards relating to these Versum PSU awards will vest solely based on continued service and, in addition, will vest in full to the extent an executive officer who holds a converted RSU award undergoes a covered termination following the effective time and prior to the original vesting date, on the date of such covered termination.

One member of the Versum board of directors, Ambassador Alejandro D. Wolff, has an account balance under the Versum Deferred Compensation Plan for Directors, which is referred to as the Director DCP. As soon as practicable, but in no event later than 30 days, following the effective time, each Versum DSU award held in Ambassador Wolff s Director DCP account shall vest and be settled in a number of shares of Entegris common stock equal to the product of (x) the number of shares of Versum common stock subject to each Versum DSU award held in such director s Director DCP account and (y) the exchange ratio.

Versum may make annual grants of Versum equity awards to its employees in the ordinary course of business consistent with past practice prior to the effective time. No such Versum equity award granted in Versum s fiscal year 2020 will contain any double-trigger vesting protection relating to the merger.

For an estimated value of the accelerated Versum RSU awards and Versum PSU awards that would be payable to Versum s named executive officers upon a covered termination, please see the section entitled **Quantification of Payments and Benefits to Versum s Named Executive Officers** beginning on page 179 below. As of the date of this joint proxy statement/prospectus, no Versum directors hold Versum options, and all Versum options awarded to Versum s executive officers are fully vested. The estimated value of the accelerated Versum RSU awards and Versum PSU awards payable upon a covered termination of Versum s executive officers who are not named executive officers (based on the same assumptions used to determine the named executive officers acceleration value in the section entitled **Quantification of Payments and Benefits to Versum s Named Executive Officers** beginning on page 179) is $4,409,295. The estimated value of the accelerated Versum RSU awards payable to Versum s non-employee directors upon a covered termination is $576,671. The estimated value of the Versum DSU award (based on an assumed share price of $37.03) is $232,971.

***Versum Change in Control Severance***

Versum s executive officers are eligible for enhanced severance benefits under their respective employment agreements if they are terminated following a change in control. Mr. Loughlin served as Versum s Senior Vice President, Operations and Supply Chain, through October 31, 2018 and is not entitled to enhanced or additional severance benefits under his employment agreement as a result of the merger.

If the employment of Messrs. Novo, Bitto, Valente, Shober, White or Langan is terminated without cause or, in the case of Messrs. Novo, Bitto or Valente, by such executive officer for good reason, following a change in control, each of which is referred to as a qualifying termination, the executive officer will be entitled to, in addition to accrued but unpaid base salary and earned but unpaid prior year annual bonus, the following payments and benefits: (i) a lump sum pro rata portion of any annual bonus based upon actual performance for the fiscal year in which the termination of employment occurs; (ii) a lump sum payment equal to the sum of (x) the executive s monthly base salary at termination and (y) 1/12th of the executive s average annual bonus paid with respect to the last three full fiscal years

prior to the year of termination, with such sum multiplied by 36

Table of Contents

for Mr. Novo, 24 for Messrs. Bitto and Valente and 12 for Messrs. Shober, White and Langan; (iii) healthcare benefits under COBRA for 12 months or, if sooner, until the executive s COBRA eligibility ceases; (iv) $20,000 for Messrs. Novo, Bitto and Valente and $10,000 for Messrs. Shober, White and Langan, for outplacement services; and (v) an amount equal to the matching and the maximum non-elective contributions to the executive s qualified and non-qualified plans that would have been made based on the executive s most recent deferral elections and base salary, respectively, for the 12 months following such termination.

To receive any of the foregoing cash payments or benefits under the executive officer s employment agreement, the terminated executive officer must sign (and not revoke) a release of claims and continue to comply with covenants of non-competition, non-solicitation of employees, consultants and independent contractors, non-solicitation and non-interference with business relationships, confidentiality, and nondisparagement.

Under the employment agreements, if an executive officer s merger-related payments are subject to Section 4999 of the tax code, then the executive officer will either receive all such payments and benefits subject to the excise tax or such payments and benefits will be reduced so that the excise tax does not apply, whichever approach yields the best after tax outcome for the executive officer. Versum may, in consultation with Entegris, mitigate the impact of the excise tax under Section 4999 of the tax code on the executive officers and the lost deduction to Entegris under Section 280G of the tax code by (i) accelerating payments of earned or reasonably expected to be earned cash incentive compensation that would be payable in 2020 to December 2019, (ii) accelerating the vesting or settlement of Versum equity awards scheduled to vest after December 31, 2019 and prior to the effective time of the merger and (iii) valuing certain non-compete covenants.

For an estimate of the amounts of severance that would be payable to Versum s named executive officers upon a qualifying termination, please see the section entitled **Quantification of Payments and Benefits to Versum s Named Executive Officers** beginning on page 179 below. The estimated value of the severance benefits that would be payable to the Versum executive officers who are not named executive officers upon a qualifying termination is $1,582,852 in the aggregate, which is based on the same assumptions used to calculate the estimated payments to Versum s named executive officers in the section entitled **Quantification of Payments and Benefits to Versum s Named Executive Officers** beginning on page 179 below.

***Versum Deferred Compensation Plan***

Versum s executive officers have account balances under the Versum Deferred Compensation Plan, which is referred to as the DCP. As soon as administratively feasible following the effective time, but in no event longer than 90 days thereafter, Versum will, pay each participant a single lump-sum cash payment of such participant s accrued account balance. The executive officers account balances under the DCP are fully vested. These accrued account balances, as of March 11, 2019, are as follows:

| Name | DCP Account Balance ($) |
|---|---|
| Guillermo Novo | 357,958 |
| George G. Bitto | 1,235,481 |
| Michael W. Valente | 215,745 |
| Edward C. Shober | 240,891 |

| | |
|---|---|
| Patrick F. Loughlin | 196,543 |
| All Other Executive Officers | 146,374 |

***Certain Governance Matters***

At the effective time, the board of directors of the combined company will have nine members, who will be determined prior to closing by mutual agreement of the parties, including four directors who, prior to the effective time, were members of the Entegris board of directors, four directors who, prior to the effective time, were members of the Versum board of directors (including the chairman of the Versum board of directors), and the Entegris CEO. The parties intend that the combined company board of directors represent an appropriate mix of relevant experience, qualifications and attributes.

Table of Contents

***Indemnification; Directors and Officers Insurance***

Pursuant to the terms of the merger agreement, certain directors and officers of Versum and its subsidiaries will be entitled to certain ongoing indemnification and coverage under directors and officers liability and fiduciary liability insurance policies following the merger. Such indemnification and insurance coverage is further described in the section entitled **The Merger Agreement Indemnification; Directors and Officers Insurance** beginning on page 150.

***Other Compensation Matters***

In connection with the merger, Versum has established a cash-based retention program for the benefit of Versum s and its subsidiaries employees, including Versum s executive officers, with the aggregate retention pool not to exceed $15 million. Such retention bonuses are payable promptly following the six-month anniversary of the effective time, subject to continued employment through such date or, if earlier, promptly following a qualifying termination of employment. The retention bonuses granted to Versum executive officers as of the date of the filing of this joint proxy statement/prospectus are as follows:

| Name | Retention Bonus ($) |
|---|---|
| Guillermo Novo | 3,000,000 |
| George G. Bitto | 1,000,000 |
| Michael W. Valente | |
| Edward C. Shober | |
| Patrick F. Loughlin | |
| All Other Executive Officers | |

***Quantification of Payments and Benefits to Versum s Named Executive Officers***

The following information, table and the related footnotes present information about the compensation payable to Versum s named executive officers in connection with the merger.

*Golden Parachute Compensation*

The following table sets forth the information required by Item 402(t) of Regulation S-K regarding the compensation for Versum s named executive officers based on the merger, assuming the following:

- the relevant price per share of Versum common stock is $37.03, which equals the average closing price of a share of Versum common stock over the first five business day period following the first public announcement of the merger (i.e., the five business day period beginning January 28, 2019);
- the effective time of the merger occurs on March 11, 2019, which is the latest practicable date prior to the date of this filing;

each such named executive officer experienced a severance-qualifying termination (and, for purposes of Versum equity awards, a covered termination) immediately following the completion of the merger;

each such named executive officer s base salary and annual target bonus remains unchanged from those in place on March 11, 2019; and

the equity awards outstanding and unvested on March 11, 2019 will fully vest.

Table of Contents

The amounts below are based on multiple assumptions that may or may not actually occur or be accurate on the relevant date, including assumptions described in footnotes to the table. The amounts below do not reflect certain compensation actions that may occur before the effective time. The actual amounts payable to Versum s named executive officers, if any, will depend on whether the named executive officer incurs a qualifying termination, the date of termination of the named executive officer s employment (if applicable), the closing date of the merger, the value of Entegris common stock on the termination date, the manner of termination, and the terms of the plans or agreements in effect at such time. More detail on the included payments and benefits are set forth above in this section entitled **Interests of Versum s Directors and Executive Officers in the Merger** beginning on page 176.

| Name | Cash ($)[1] | Equity ($)[2] | Pension / NQDC ($)[3] | Perquisites / Benefits ($)[4] | Tax Reimbursement ($)[5] | Other ($)[6] | Total ($) |
|---|---|---|---|---|---|---|---|
| Guillermo Novo | 7,147,733 | 16,049,587 | | 52,103 | | 3,000,000 | 26,249,423 |
| George G. Bitto | 2,630,799 | 6,005,819 | | 52,103 | | 1,000,000 | 9,688,721 |
| Michael W. Valente | 1,956,329 | 4,343,252 | | 52,103 | | | 6,351,684 |
| Edward C. Shober | 1,109,979 | 2,689,313 | | 42,103 | | | 3,841,395 |
| Patrick F. Loughlin | | | | | | | |

(1) The amounts in this column represent the cash amounts to which the executive officers would be entitled in severance under their respective employment agreements, assuming a qualifying termination following a change in control, which consist of the following:

| Name | Cash Severance Payments ($) | Pro-rated Annual Bonus Payment ($) | Matching and Non-Elective Contributions Payment ($) | Total ($) |
|---|---|---|---|---|
| Guillermo Novo | 6,664,000 | 356,233 | 127,500 | 7,147,733 |
| George G. Bitto | 2,371,333 | 187,466 | 72,000 | 2,630,799 |
| Michael W. Valente | 1,768,000 | 132,329 | 56,000 | 1,956,329 |
| Edward C. Shober | 931,000 | 122,979 | 56,000 | 1,109,979 |
| Patrick F. Loughlin | | | | |

The cash severance payments are double trigger benefits contingent upon a qualifying termination of employment at or following the effective time and, in each case, are payable in a lump sum within 60 days following termination, subject to such named executive officer s execution and non-revocation of a release of claims and continued compliance with covenants of non-competition, non-solicitation of employees, consultants or independent contractors, non-solicitation and non-interference with business relationships, confidentiality and nondisparagement. The severance portion of the cash severance payment is equal to the sum of (x) the executive s monthly base salary at termination and (y) 1/12th of the executive s average annual bonus paid with respect to the last three full fiscal years prior to the year of termination, with such sum multiplied by 36 for Mr. Novo, 24 for Messrs. Bitto and Valente and 12 for Mr. Shober. The average annual bonus portion of the cash severance payment is calculated using a named executive officer s most recent base salary and target annual bonus, to which the performance factor from each of the prior three plan years is applied before determining the average of such amounts. With respect to the pro-rated annual

bonus payment, because actual performance under Versum s annual bonus program cannot be determined as of the date of this joint proxy statement/prospectus, the amounts set forth above reflect target performance and are pro-rated for the period from October 1, 2018, the beginning of Versum s fiscal year, to March 11, 2019. The pro-rated annual bonus payment is payable at the time bonuses are paid to actively employed executives. The amount of matching and non-elective contribution payments may include one or more profit-sharing contributions, which are unknown at this time. For purposes hereof, a profit-sharing contribution equal to 3%, which is the profit-sharing contribution made by Versum in Versum s 2018 fiscal year, is assumed. The amount of matching contributions would be paid at the end of the 12-month period following the named executive officer s termination of employment.

Table of Contents

Mr. Loughlin served as Versum s Senior Vice President, Operations and Supply Chain, through October 31, 2018 and is therefore not entitled to any compensation or benefits based on, or otherwise relating to, the merger.

(2) As of the effective time, all Versum options awarded to named executive officers are fully vested and are not reflected in this table. The amounts in this column represent the value of unvested Versum RSU awards and unvested Versum PSU awards, which we refer to as unvested Versum awards in the below tables and are double-trigger benefits which would accelerate upon a qualifying termination of the named executive officer during the 24-month period following the effective date of the merger.

| Name | Total ($) |
|---|---|
| Guillermo Novo | 16,049,587 |
| George G. Bitto | 6,001,197 |
| Michael W. Valente | 4,339,657 |
| Edward C. Shober | 2,687,990 |
| Patrick F. Loughlin | |

The amounts reflected in the table above with respect to unvested Versum awards held by a named executive officer assume that the number of Versum shares subject to each Versum PSU award held by a named executive officer is equal to the Versum PSU award that would have vested based on an estimate of actual performance through March 11, 2019 as follows:

| Fiscal Year Award | Type of Versum PSU Award (Versum MSU or Versum PRSU) | Performance Vesting Factor (Multiple of Target) |
|---|---|---|
| Fiscal year 2017 | Versum MSU | 1.50 |
| Fiscal year 2017 | Versum PRSU | 1.93 |
| Fiscal year 2018 | Versum MSU | 1.24 |
| Fiscal year 2018 | Versum PRSU | 2.00 |
| Fiscal year 2019 | Versum PRSU | 2.00 |

The amounts reflected in the Equity column above include accelerated vesting of accrued cash dividends relating to Versum RSU awards granted in respect of Versum s 2016 fiscal year and accrued as of March 11, 2019 as follows in the table below. All other dividends are reflected in the number of unvested Versum awards as share equivalents.

| Name | Accrued Dividends ($) |
|---|---|
| Guillermo Novo | |
| George G. Bitto | 4,622 |
| Michael W. Valente | 3,594 |

| | |
|---|---|
| Edward C. Shober | 1,323 |
| Patrick F. Loughlin | |

(3) None of the named executive officers are eligible to receive any non-qualified deferred compensation plan enhancements upon the merger or termination of employment following the merger, except that the deferred account balances under Versum s non-qualified deferred compensation plans will be paid out within 90 days following the effective time of the merger. As of the date of this joint proxy/prospectus, the named executive officers deferred account balances are fully vested. Versum does not maintain any defined benefit pension plans in which its named executive officers participate.

Table of Contents

(4) The amounts in the table include the estimated value of continued health benefits under COBRA for up to 12 months and outplacement benefits, which, in each case, are double-trigger benefits payable following a qualifying termination under each named executive officer s respective employment agreement.

Mr. Loughlin served as Versum s Senior Vice President, Operations and Supply Chain, through October 31, 2018 and is therefore not entitled to continued health benefits or outplacement benefits in connection with the merger.

| Name | Continued Health Benefits ($) | Outplacement Benefits ($) | Total ($) |
|---|---|---|---|
| Guillermo Novo | 32,103 | 20,000 | 52,103 |
| George G. Bitto | 32,103 | 20,000 | 52,103 |
| Michael W. Valente | 32,103 | 20,000 | 52,103 |
| Edward C. Shober | 32,103 | 10,000 | 42,103 |
| Patrick F. Loughlin | | | |

(5) None of the named executive officers will receive an excise tax gross-up in connection with the merger.

(6) The amounts in this column reflect payment of the retention bonus granted to each of Messrs. Novo and Bitto, which is payable upon the six-month anniversary of the effective date (i.e., a single-trigger payment) or, if earlier, upon a qualifying termination of such named executive officer (i.e., double-trigger payment).

Table of Contents

## MATERIAL U.S. FEDERAL INCOME TAX CONSEQUENCES

The following discussion summarizes the material U.S. federal income tax consequences of (a) the merger to holders of Versum common stock and (b) post-merger ownership and disposition of Entegris common stock, in each case to holders of Versum common stock who receive the merger consideration pursuant to the merger. This discussion is based on the provisions of the Code, the U.S. Treasury Regulations promulgated thereunder and judicial and administrative rulings, all as in effect as of the date of this joint proxy statement/prospectus and all of which are subject to change or varying interpretation, possibly with retroactive effect. Any such changes could affect the accuracy of the statements and conclusions set forth herein.

This discussion assumes that holders of Versum common stock hold their shares as capital assets within the meaning of Section 1221 of the Code (generally, property held for investment). This discussion does not address all aspects of U.S. federal income taxation that may be relevant to a holder of Versum common stock in light of such holder s particular circumstances, nor does it discuss the special considerations applicable to holders of Versum common stock subject to special treatment under the U.S. federal income tax laws, such as, for example, financial institutions or broker-dealers, mutual funds, tax-exempt organizations or governmental organizations, insurance companies, dealers in securities or foreign currencies, traders in securities who elect the mark-to-market method of accounting, persons who are required to recognize income or gain with respect to the merger no later than such income or gain is required to be reported on an applicable financial statement under Section 451(b) of the Code, partnerships, S corporations or other pass-through entities (or investors therein), regulated investment companies, real estate investment trusts, controlled foreign corporations, passive foreign investment companies, U.S. expatriates, holders who acquired their Versum common stock through the exercise of options or otherwise as compensation, holders who hold their Versum common stock as part of a hedge, straddle, constructive sale or conversion transaction, U.S. holders (as defined below) whose functional currency is not the U.S. dollar, and holders who own or have owned (directly, indirectly or constructively) 5% or more of Versum s stock (by vote or value). This discussion does not address any tax consequences arising under the unearned income Medicare contribution tax pursuant to the Health Care Education Reconciliation Act of 2010, nor does it address any aspect of foreign, state, local, alternative minimum, estate, gift or other tax law that may be applicable to a holder.

This discussion is intended to provide only a general summary of the material U.S. federal income tax consequences of the merger to holders of Versum common stock and post-merger ownership and disposition of Entegris common stock; it is not intended to be a complete analysis or description of all potential U.S. federal income tax consequences of the merger and post-merger ownership and disposition of Entegris common stock. The U.S. federal income tax laws are complex and subject to varying interpretation. Accordingly, the Internal Revenue Service, which is referred to as the IRS, may not agree with the tax consequences described in this joint proxy statement/prospectus.

If an entity or arrangement treated as a partnership for U.S. federal income tax purposes holds Versum common stock, the tax treatment of a partner in such partnership generally will depend on the status of the partner and activities of the partnership. Any entity treated as a partnership for U.S. federal income tax purposes that is holding Versum common stock, and any partners in such partnership, should consult their own tax advisors.

**All holders should consult their own tax advisors to determine the particular tax consequences to them of the receipt of the merger consideration in exchange for shares of Versum common stock pursuant to the merger and the post-merger ownership and disposition of Entegris common stock.**

For purposes of this discussion, the term U.S. holder means a beneficial owner of Versum common stock that is, for U.S. federal income tax purposes:

an individual citizen or resident of the United States;

Table of Contents

a corporation (including any entity treated as a corporation for U.S. federal income tax purposes) created or organized in or under the laws of the United States, any state thereof or the District of Columbia;

a trust if (a) its administration is subject to the primary supervision of a court within the United States and one or more U.S. persons have the authority to control all substantial decisions of the trust or (b) it has a valid election in effect under applicable U.S. Treasury Regulations to be treated as a U.S. person; or

an estate the income of which is subject to U.S. federal income tax regardless of its source.

A non-U.S. holder is a beneficial owner (other than a partnership) of Versum common stock that is not a U.S. holder.

**U.S. Holders**

***Tax Consequences of the Merger***

For U.S. federal income tax purposes, the merger is intended to be treated as a reorganization within the meaning of Section 368(a) of the Code. It is a condition to the obligation of Entegris to complete the merger that Entegris receive an opinion from Wachtell, Lipton, Rosen & Katz, dated the closing date of the merger, to the effect that the merger will qualify as a reorganization within the meaning of Section 368(a) of the Code. It is a condition to the obligation of Versum to complete the merger that Versum receive an opinion from Simpson Thacher & Bartlett LLP, dated the closing date of the merger, to the effect that the merger will qualify as a reorganization within the meaning of Section 368(a) of the Code. These opinions will be based on facts and representations contained in representation letters provided by Entegris and Versum and on customary factual assumptions.

Assuming such qualification for the remainder of this discussion, upon the exchange of shares of Versum common stock for shares of Entegris common stock, a U.S. holder generally will not recognize gain or loss, except with respect to cash received instead of fractional shares of Entegris common stock (as discussed below). A U.S. holder s aggregate tax basis in Entegris common stock received in the merger (including any fractional shares deemed received and redeemed for cash as described below) will equal such U.S. holder s aggregated adjusted tax basis in the Versum common stock exchanged therefor. A U.S. holder s holding period for Entegris common stock received in the merger (including any fractional shares deemed received and redeemed for cash as described below) will include the U.S. holder s holding period in respect of the Versum common stock exchanged for Entegris common stock. If a U.S. holder acquired different blocks of Versum common stock at different times or at different prices, the Entegris common stock such U.S. holder receives will be allocated pro rata to each block of Versum common stock, and the basis and holding period of each block of Entegris common stock such U.S. holder receives will be determined on a block-for-block basis depending on the basis and holding period of the blocks of Versum common stock exchanged for such block of Entegris common stock.

A U.S. holder of Versum common stock who receives cash in lieu of fractional shares of Entegris common stock generally will be treated as having received such fractional share of Entegris common stock pursuant to the merger and then as having received cash in redemption of such fractional share of Entegris common stock. A U.S. holder who receives cash in lieu of fractional shares of Entegris common stock will recognize gain or loss equal to the difference between the amount of cash received and such U.S. holder s basis in the fractional share of such Entegris common stock (as set forth above). Such gain or loss generally will be capital gain or loss, and will be long-term capital gain or loss if, as of the effective date of the merger, the holding period for such fractional share (including the holding period of shares of Versum common stock surrendered therefor) is greater than one year. Long-term capital gains of certain non-corporate holders of Versum common stock, including individuals, are generally taxed at preferential rates. The

deductibility of capital losses is subject to limitations.

Neither Entegris nor Versum has obtained or will obtain a ruling from the IRS that the merger will qualify for U.S. federal income tax purposes as a reorganization within the meaning of Section 368(a) of the Code and

Table of Contents

the opinions of legal counsel that the merger will qualify as a reorganization are not binding on the IRS or the courts. Consequently, there is no guarantee that the IRS or the courts will treat the merger in the manner described herein.

U.S. holders should consult their own tax advisors regarding the U.S. federal, state and local and foreign and other tax consequences of the merger in their particular circumstances (including the possible tax consequences if the reorganization treatment is successfully challenged).

***Ownership of Entegris Common Stock Received in the Merger***

*Distributions on Entegris Common Stock*

Distributions of cash or property (other than certain pro rata distributions of shares of Entegris common stock or rights to acquire shares of Entegris common stock) paid on Entegris common stock generally will be treated as dividends to the extent of Entegris current or accumulated earnings and profits. Dividends paid to a non-corporate U.S. holder that constitute qualified dividend income will be taxable at preferential rates applicable to long-term capital gains so long as the holder holds the Entegris common stock for more than 60 days during the 121-day period beginning 60 days before the ex-dividend date and meets other holding period requirements. Dividends paid with respect to Entegris common stock will generally be qualified dividend income, provided the holding period requirements in the previous sentence are satisfied. In addition, dividends paid to corporate U.S. holders may qualify for the dividends received deduction if the holder meets certain holding period and other requirements. Distributions in excess of Entegris current and accumulated earnings and profits will be treated as a return of capital to the extent of a U.S. holder s basis in Entegris common stock and thereafter as capital gain.

*Sale or Other Disposition of Entegris Common Stock*

A U.S. holder that sells or otherwise disposes of Entegris common stock will recognize capital gain or loss for U.S. federal income tax purposes equal to the difference between the amount that the U.S. holder realizes and the U.S. holder s tax basis in those shares. Capital gain of a non-corporate U.S. holder is taxed at preferential rates when the holder has a holding period greater than one year. The deduction of capital losses is subject to limitations.

**Non-U.S. Holders**

***Tax Consequences of the Merger***

As discussed above under the section entitled **U.S. Holders Tax Consequences of the Merger** beginning on page 184, the merger is intended to be treated as a reorganization within the meaning of Section 368(a) of the Code, and holders of Versum common stock will only recognize gain or loss in respect of cash received in lieu of fractional shares. Any gain recognized by a non-U.S. holder on the receipt of cash in lieu of fractional shares pursuant to the merger generally will not be subject to U.S. federal income tax unless:

- the gain is effectively connected with a U.S. trade or business of such non-U.S. holder (and, if required by an applicable income tax treaty, is also attributable to a permanent establishment or a fixed base in the United States maintained by such non-U.S. holder), in which case the non-U.S. holder generally will be subject to tax on such gain in the same manner as a U.S. holder and, if the non-U.S. holder is a foreign corporation, such corporation may be subject to branch profits tax at the rate of 30% (or such lower rate as may be specified by an applicable income tax treaty); or

the non-U.S. holder is a nonresident alien individual who is present in the United States for 183 days or more in the taxable year of the merger and certain other conditions are met, in which case the non-U.S. holder generally will be subject to a 30% tax on the non-U.S. holder s net gain realized in the merger, which may be offset by U.S. source capital losses of the non-U.S. holder, if any.

Table of Contents

***Ownership of Entegris Common Stock Received in the Merger***

*Distributions on Entegris Common Stock*

Distributions, if any, of cash or property (other than certain pro rata distributions of shares of Entegris common stock or rights to acquire shares of Entegris common stock) paid on Entegris common stock will be treated as dividends, return of capital or capital gains to the same extent as described above under the section entitled **U.S. Holders Ownership of Entegris Common Stock Received in the Merger Distributions on Entegris Common Stock** beginning on page 185. Except as described below, dividends to a non-U.S. holder of common stock are subject to withholding tax at a 30% rate or at a lower rate if the non-U.S. holder is eligible for the benefits of an income tax treaty that provides for a lower rate. Even if the non-U.S. holder is eligible for a lower treaty rate, Entegris and other payors will generally be required to withhold at a 30% rate (rather than the lower treaty rate) on dividend payments to the non-U.S. holder, unless the non-U.S. holder has furnished to Entegris or another payor:

- a valid IRS Form W-8 or an acceptable substitute form upon which the non-U.S. holder certifies, under penalties of perjury, its status as a non-U.S. person and entitlement to the lower treaty rate with respect to such payments, or

- in the case of payments made outside the United States to an offshore account (generally, an account maintained by the non-U.S. holder at an office or branch of a bank or other financial institution at any location outside the United States), other documentary evidence establishing the non-U.S. holder s entitlement to the lower treaty rate in accordance with U.S. Treasury Regulations.

If a non-U.S. holder is eligible for a reduced rate of withholding tax under a tax treaty, the non-U.S. holder may obtain a refund of any amounts withheld in excess of that rate by filing a refund claim with the IRS. Each non-U.S. holder should consult its own tax advisor regarding U.S. federal withholding tax on distributions, including such non-U.S. holder s eligibility for a lower rate and the availability of a refund of any excess U.S. federal tax withheld. Special certification and other requirements apply to certain non-U.S. holders that are pass-through entities rather than corporations or individuals.

If dividends paid to a non-U.S. holder are effectively connected with its conduct of a trade or business within the United States (and, if required by a tax treaty, the dividends are attributable to a permanent establishment or fixed base that the non-U.S. holder maintains in the United States) Entegris and other payors generally are not required to withhold tax from the dividends, so long as the non-U.S. holder has furnished to Entegris or another payor a valid IRS Form W-8ECI or an acceptable substitute form upon which the non-U.S. holder represents, under penalties of perjury, that (a) the non-U.S. holder is a non-U.S. person, and (b) the dividends are effectively connected with the non-U.S. holder s conduct of a trade or business within the United States and are includible in its gross income. Effectively connected dividends are taxed at rates applicable to U.S. citizens, resident aliens or domestic U.S. corporations, as applicable.

Effectively connected dividends received by a corporate non-U.S. holder, may, under certain circumstances, be subject to an additional branch profits tax at a 30% rate (or such lower rate as may be specified by an applicable income tax treaty).

*Sale or Other Disposition of Entegris Common Stock*

Gain on the sale or disposition of Entegris common stock should be subject to tax in the same manner as described above in relation to gain recognized on the receipt of cash in lieu of fractional shares pursuant to the merger under this section entitled **Non-U.S. Holders Tax Consequences of the Merger** beginning on page 185.

**FATCA Withholding**

Pursuant to Sections 1471 through 1474 of the Code and the U.S. Treasury Regulations (including recently proposed U.S. Treasury Regulations) and official guidance promulgated thereunder (commonly referred to as

Table of Contents

FATCA ), a 30% withholding tax, which is referred to as FATCA withholding, may be imposed on certain payments to non-U.S. holders or to certain foreign financial institutions, investment funds and other non-U.S. persons receiving payments on behalf of a non-U.S. holder if such non-U.S. holder or such persons receiving payments on behalf of a non-U.S. holder fail to comply with certain information reporting requirements. Payments of dividends that a non-U.S. holder receives in respect of Entegris common stock could be affected by this withholding if such non-U.S. holder is subject to the FATCA information reporting requirements and fails to comply with them or if such non-U.S. holder holds common stock through a non-U.S. person (e.g., a foreign bank or broker) that fails to comply with these requirements (even if payments to such non-U.S. person would not otherwise have been subject to FATCA withholding). Non-U.S. holders should consult their own tax advisors regarding the relevant U.S. law and other official guidance on FATCA withholding.

**Backup Withholding and Information Reporting**

A U.S. holder may, under certain circumstances, be subject to information reporting and backup withholding (at a rate of 24%) with respect to certain payments, unless such holder properly establishes an exemption or provides its correct tax identification number and otherwise complies with the applicable requirements of the backup withholding rules.

A non-U.S. holder may be subject to information reporting and, in certain circumstances, backup withholding will apply, unless such non-U.S. holder certifies under penalties of perjury that it is a non-U.S. holder (and the payor does not have actual knowledge or reason to know that the holder is a U.S. person as defined under the Code) or such holder otherwise establishes an exemption from backup withholding.

Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules may be refunded or credited against a payee s U.S. federal income tax liability, if any, so long as such payee furnishes the required information to the IRS in a timely manner.

Table of Contents

## COMPARISON OF STOCKHOLDERS RIGHTS

If the merger is completed, Versum stockholders will receive Entegris common stock. Subject to the approval by Entegris stockholders of the Entegris charter proposal, the certificate of incorporation of Entegris will be amended and restated as of the effective time as provided in the merger agreement and the amended and restated certificate of incorporation of Entegris, which is attached to this joint proxy statement/prospectus as Annex B, and which, as amended, is referred to as the combined company charter. The current by-laws of Entegris will be the by-laws of the combined company as of the effective time, which are referred to as the combined company by-laws. The proposed amended and restated certificate of incorporation of Entegris is described in the section entitled **The Merger Governance of the Combined Company** beginning on page 124.

Entegris and Versum are both Delaware corporations subject to the DGCL. If the merger is completed, the rights of Entegris stockholders and Versum stockholders who become Entegris stockholders through the exchange of shares will continue to be governed by the DGCL, but will also be governed by the combined company charter and the combined company by-laws.

The following description summarizes certain material differences between the rights of Versum stockholders and the rights of Entegris stockholders, immediately following the completion of the merger and the other transactions contemplated by the merger agreement (i.e., stockholders of the combined company). This does not purport to be a complete statement of all those differences, or a complete description of the specific provisions referred to in this summary. The identification of specific differences is not intended to indicate that other equally significant or more significant differences do not exist. Stockholders should read carefully the relevant provisions of the DGCL, the proposed combined company charter, the combined company by-laws, the Versum certificate of incorporation, which is referred to as the Versum charter, and the Versum bylaws. Copies of the documents referred to in this summary may be obtained as described under the section entitled **Where You Can Find More Information** beginning on page 213.

| Versum | Combined Company |
|---|---|
| *Authorized Capital Stock* | |
| Versum s authorized capital stock consists of 250,000,000 shares of common stock, par value $1.00 per share, and 25,000,000 shares of preferred stock, par value $1.00 per share. | The combined company is authorized to issue 405,000,000 shares, consisting of (i) 400,000,000 shares of common stock, par value $0.01 per share, and (ii) 5,000,000 shares of preferred stock, $0.01 par value per share. |
| As of the close of business on March 11, 2019, the latest practicable date prior to the date of this joint proxy statement/prospectus, Versum had 109,143,954 shares of Versum common stock and no shares of preferred stock issued and outstanding. | As of the close of business on March 11, 2019, the latest practicable date prior to the date of this joint proxy statement/prospectus, Entegris had 135,513,636 shares of Entegris common stock and no shares of preferred stock issued and outstanding. |

| | |
|---|---|
| | Entegris currently expects to issue up to 135,443,896 shares of common stock to Versum stockholders pursuant to the merger agreement, assuming a maximum of 120,932,050 shares of Entegris common stock that will be exchanged pursuant to the exchange ratio provided for in the merger agreement. |
| *Rights of Preferred Stock* | |
| The Versum board of directors is authorized, without further action by Versum stockholders, to issue shares of | The combined company charter provides authorization for the board of directors to fix for each |

Table of Contents

| Versum | Combined Company |
|---|---|
| preferred stock and to fix by resolution the designations, preferences and relative, participating, optional or other special rights, and such qualifications, limitations or restrictions thereof, including, without limitation, redemption rights, dividend rights, liquidation preferences and conversion or exchange rights of any class or series of preferred stock, and to fix the number of classes or series of preferred stock, the number of shares constituting any such class or series and the voting powers for each such class or series. | series of preferred stock the designation, powers, preferences rights, qualifications, limitations and restrictions of the shares of each such series. |
| | The number of authorized shares of preferred stock may be changed (but not below the number of shares then outstanding) by an affirmative vote of the holders of a majority of common stock, without a vote of the holders of preferred stock, unless a vote of any such holders is required pursuant to the terms of any designation of such stock. |
| No shares of Versum preferred stock were outstanding as of the date of this joint proxy statement/prospectus. | |
| | No shares of Entegris preferred stock were outstanding as of the date of this joint proxy statement/prospectus. |
| *Voting Rights* | |
| The holders of Versum common stock are entitled to one vote for each share of Versum common stock having voting power held by such stockholder. For votes on matters other than for the election of directors, all matters presented to Versum stockholders at a meeting at which a quorum is present will be approved where the votes cast by Versum stockholders present in person or represented by proxy at the meeting and entitled to vote on the matter in favor of such matter exceed the votes cast by such stockholders against such matter (unless a greater number of affirmatives votes is required by the Versum charter, the Versum bylaws, the rules or regulations of any stock exchange applicable to Versum, or any law or regulation applicable to Versum or its securities). | Each holder of shares of combined company stock is entitled to one vote for each share of common stock held by the stockholder on the record date for any action, on all matters on which the stockholders are entitled to vote. Such right is subject to the voting rights of the holders of preferred stock, if any. |
| | The combined company by-laws provide that a majority of the votes properly cast is required in an uncontested election of directors, and a plurality of the votes properly cast is required in a contested election of directors. On any other question than an election of directors, a majority of the votes properly cast is required, except when a larger vote is required by law or the combined company charter or the combined company by-laws. |
| The Versum bylaws provide that a nominee for director shall be elected to the board of directors only upon the vote of a majority of the votes cast (where a majority of the votes cast means that votes cast for such nominee s election exceed the votes cast against such nominee s election). Abstentions and broker non-votes are not counted as votes cast either for or against a director s election. | |
| | Under the combined company charter, the affirmative vote of the holders of at least 75% of the then outstanding shares of capital stock of the combined company entitled to vote generally in the election of directors is necessary for the approval of: |

| | |
|---|---|
| Notwithstanding the general voting requirement, the Versum bylaws state that a nominee for director shall also be elected by a plurality of the votes cast at any meeting of Versum stockholders for which the secretary of Versum determines, as of the record date for such meeting, that the number of nominees exceeds the number of directors to be elected. | any alteration, amendment or repeal of the bylaws; |
| | any amendment or repeal, or adoption of any provisions inconsistent with the provision of the combined company charter relating to the alteration, amendment or repeal of the bylaws; |
| | any amendment or repeal, or adoption of any provisions inconsistent with the provision of the combined company charter |

Table of Contents

| Versum | Combined Company |
| --- | --- |
| | which prohibits stockholder action by written consent; and |
| | any amendment or repeal, or adoption of any provisions inconsistent with the provision of the combined company charter governing special meetings of stockholders. |
| *Quorum* | |
| The Versum bylaws provide that, at any meeting of Versum stockholders, the presence in person or by proxy of holders of Versum common stock entitled to cast a majority of votes at a meeting of Versum stockholders constitute a quorum at such meeting, except where the presence of a larger number may be required by law. | The combined company by-laws provide that, at any meeting of the stockholders, the presence in person or by proxy of a majority of the shares entitled to vote at a stockholders meeting constitutes a quorum, except where the presence of a larger number may be required by law. |
| Additionally, the Versum bylaws provide that where a separate vote by a class or classes is required, a majority of the shares of such class or classes present in person or represented by proxy constitutes a quorum entitled to take action with respect to that vote on that matter. | |
| *Stockholder Rights Plans* | |
| As of March 11, 2019, Versum currently has a stockholder rights plan in effect, which is referred to as the Versum rights plan. The Versum board of directors adopted the Versum rights plan on February 28, 2019 to preserve the ability of the Versum board of directors to protect the interests of Versum stockholders in transactions that may result in an acquisition of control of Versum, including tender offers and open market purchases of Versum s securities. In general terms, and subject to certain exceptions, the Versum rights plan works by significantly diluting the stock ownership of any person or group that acquires 12.5%, or more, of the outstanding Versum common stock without the approval of the Versum board of directors. On February 28, 2019, the Versum board of directors authorized and declared a dividend of one preferred share purchase right for each outstanding share of Versum common stock. The dividend is payable to the stockholders of record of Versum on March 11, 2019. Subject to certain exceptions, each such right, when it becomes exercisable, entitles the registered holder to | As of March 11, 2019, Entegris does not currently have a stockholder rights plan in effect. |

purchase from Versum one one-thousandth of a share of Series A Junior Participating Preferred Stock, par value of $1.00 per share, of Versum at a price of $200 per one one-thousandth of a share of such Series A Junior Participating Preferred Stock, subject to adjustment. In addition, one right will automatically attach to each

Table of Contents

| Versum | Combined Company |
| --- | --- |
| share of Versum common stock that becomes outstanding between March 11, 2019 and the earliest of the distribution date under the Versum rights plan, the redemption of the rights or the expiration of the rights. Until the distribution date under the Versum rights plan, the rights will be evidenced by the certificates representing shares of Versum common stock then outstanding, and no separate certificates will be distributed. The rights will separate from the shares of Versum common stock on the distribution date, and thereafter, separate certificates will evidence the rights. Following the distribution date, in the event that any person or group becomes an acquiring person under the Versum rights plan, each right entitles the holder, other than the acquiring person, to purchase Versum common stock (or in certain circumstances a combination of common and preferred stock) with a then current market value of twice the purchase price. On March 14, 2019, Versum entered into an amendment to the Versum rights plan to remove references to the defined concept of Acting in Concert from the Versum rights plan. | |
| *Stockholder Inspection Rights; Stockholder Lists* | |
| Under Section 220 of the DGCL, a stockholder or his agent has a right to inspect the corporation s stock ledger, a list of all of its stockholders and its other books and records during the usual hours of business upon written demand stating his purpose (which must be reasonably related to such person s interest as a stockholder). If the corporation refuses to permit such inspection or refuses to reply to the request within five business days of the demand, the stockholder may apply to the Chancery Court for an order to compel such inspection. | Under Section 220 of the DGCL, a stockholder or his agent has a right to inspect the corporation s stock ledger, a list of all of its stockholders and its other books and records during the usual hours of business upon written demand stating his purpose (which must be reasonably related to such person s interest as a stockholder). If the corporation refuses to permit such inspection or refuses to reply to the request within five business days of the demand, the stockholder may apply to the Chancery Court for an order to compel such inspection. |
| The Versum bylaws provide that the officer who has charge of the Versum s stock ledger shall prepare, at least ten days before every meeting of stockholders, a complete list of the stockholders entitled to vote at the meeting, arranged in alphabetical order, showing the address of each stockholder and the number of shares registered in the name of each stockholder. Such list shall be open to the examination of any Versum stockholder, for any purpose germane to the meeting, for a period of at least ten days prior to the meeting, at the principal place of business of Versum during normal business hours. The list shall be produced and kept at the time and place of the meeting during the whole time | The combined company by-laws provide that a complete list of the stockholders entitled to vote at each meeting of the stockholders, arranged in alphabetical order, with the address of each and the number of voting shares held by each, must be prepared by the office who has charge of the stock ledger of the combined company and made available at the principal place of business of the combined company, at least ten days before every meeting, and must at all times during the usual hours for business in said ten-day period and during the time of said meeting be open to examination |

thereof, and be subject to the inspection of any Versum stockholder who may be present. The list shall presumptively determine the identity of Versum stockholders entitled to vote at the meeting and the number of shares held by each of them.

by any stockholder. The list shall also be produced and kept at the time and place of the meeting during the whole of the meeting and may be inspected by any stockholder who is present.

Table of Contents

| Versum | Combined Company |
|---|---|
| *Number of Directors* | |
| The Versum charter provides that the business and affairs of Versum shall be managed by or under the direction of the Versum board of directors. Subject to the rights of the holders of any class or series of preferred stock, the number of directors on the Versum board of directors will be not less than five, nor more than fifteen, with the exact number of directors to be fixed exclusively by the Versum board of directors. There are currently seven Versum directors. | The combined company charter and the combined company by-laws provide for a minimum of three directors. The exact number of directors is fixed by resolution adopted by a majority vote of those present at any meeting of the board at which there is a quorum. The Entegris board of directors currently has eight members. |
| *Election of Directors* | |
| The Versum bylaws provide that a nominee for director shall be elected to the Versum board of directors only upon the vote of a majority of the votes cast (where a majority of the votes cast means that votes cast for such nominee s election exceed the votes cast against such nominee s election). Abstentions and broker non-votes are not counted as votes cast either for or against a director s election. | *General*<br><br>The combined company s governance documents provide that all directors are elected on an annual basis for a term of one year until his or her successor is elected and qualified, subject to prior death, resignation or removal. |
| Notwithstanding the general voting requirement, the Versum bylaws state that a nominee for director shall also be elected by a plurality of the votes cast at any meeting of Versum stockholders for which the secretary of Versum determines, as of the record date for such meeting, that the number of nominees exceeds the number of directors to be elected. | The combined company by-laws provide that a vote of the majority of votes properly cast (meaning the number of shares voted for a nominee must exceed the number of shares voted against such nominee) is necessary to elect a director in an uncontested election. However, the combined company by-laws provide that in a contested election, the directors are elected by a plurality of the votes cast. |
| | The combined company by-laws provide that a director standing for re-election must tender an irrevocable resignation in advance of the meeting for the election of directors, which resignation is effective if the director fails to receive the required majority vote in an uncontested election and the board of directors accepts such resignation. |
| | *Composition of the Board of Directors after the Closing* |

The combined company charter provides that, as of the effective time, the board of directors of the combined company will be composed of:

four Entegris designees;

four Versum designees, including the chairman of the Versum board of directors; and

the Entegris CEO.

Table of Contents

| Versum | Combined Company |
| --- | --- |
| | See also the sections entitled **Removal of Directors** and **The Merger Governance of the Combined Company** beginning on pages 193 and 124, respectively. |
| *Filling Vacancies on the Board of Directors* | |
| The Versum charter provides that, subject to the rights of the holders of any class or series of preferred stock, vacancies on the board of directors by any reason may be filled by vote of a majority of Versum s whole board of directors. The remaining directors may elect a successor to hold office for the unexpired term of the director whose place is vacant and until the election of his successor. | Any vacancy on the Entegris board of directors shall be filled by vote of a majority of the directors then in office, although less than a quorum, or by a sole remaining director. A director elected to fill a vacancy will have the same remaining term as that of his or her predecessor. A director chosen to fill a position resulting from an increase in the number of directors shall hold office until the next election of directors. |
| | See also the sections entitled **Election of Directors** and **The Merger Governance of the Combined Company** beginning on pages 192 and 124, respectively. |
| *Cumulative Voting* | |
| Under the DGCL, stockholders may cumulate their votes and either cast them for one candidate or distribute them among two or more candidates in the election of directors only if expressly authorized in a corporation s certificate of incorporation. The Versum charter does not authorize cumulative voting. | The combined company charter and the combined company by-laws do not authorize cumulative voting. |
| *Removal of Directors* | |
| Under the DGCL, directors of a corporation may be removed, with or without cause, by a majority vote of stockholders unless the Versum charter provides otherwise or under certain circumstances involving classified boards. The Versum charter does not modify the general DGCL standard. | The combined company charter states that any member of the board of directors may be removed, with or without cause, by the holders of a majority of the then outstanding shares entitled to vote generally in the election of directors. |
| | *Removal of the Chairman of the Board of Directors during Specified Post-Merger Period* |
| | Subject to the approval by Entegris stockholders of the Entegris charter proposal, the combined company |

charter provides that, during the three years following the effective time of the merger, which is referred to as the specified post-merger period, unless 75% of the then-serving directors adopts a resolution to the contrary, the removal of, or the failure to designate, appoint or elect, the Versum chairman as of immediately prior to the effective time to serve as the chairman of the board of directors of the combined company, shall require the affirmative vote of 75% of the then-serving directors.

See also the section entitled **The Merger Governance of the Combined Company** beginning on page 124.

Table of Contents

| Versum | Combined Company |
|---|---|
| *Director Nominations by Stockholders* | |
| The Versum bylaws provide that a Versum stockholder must give advance written notice to Versum of a director nomination. The notice must be in writing and delivered to the corporate secretary of Versum by the date not later than 90 days, nor earlier than 120 days, prior to the anniversary date of the annual meeting for the preceding year; except that in the event that the date of the current year s annual meeting is advanced by more than 30 days or delayed by more than 60 days, from such anniversary date, or if no such meeting was held in the preceding year, such notice must be delivered not earlier than the 120th day prior to such current year s annual meeting and not later than the close of business on the later of the 90th day prior to such annual meeting or the 10th day following the day on which public announcement of the date of such meeting is first made. The voting requirements for election of Versum directors are discussed above (see the section entitled **Election of Directors** beginning on page 192). | The combined company by-laws provide that a stockholder must give advance written notice to the combined company of a director nomination. The notice must be in writing and received by the corporate secretary not later than 90 days, nor earlier than 120 days, prior to the anniversary date of the annual meeting for the preceding year, except, however, that if the annual meeting is not held within 30 days before or after such anniversary date, then notice must be received by the secretary not later of the close of business on the 10th day following the date on which the notice of the meeting was mailed or such public disclosure was made, whichever occurs first. |
| In addition to the general requirements for Versum stockholder proposals discussed below (see the section entitled **Stockholder Proposals** beginning on page 196), any stockholder notice relating to the nomination of Versum directors must contain: | Any stockholder notice relating to the nomination of directors must contain: |
| the name, age, business address and residence address of such person and the principal occupation or employment of the nominee; | the name, age, business address, and if known, residence address of each nominee; |
| a representation that the stockholder is a holder of record of stock of Versum entitled to vote at such meeting and intends to appear in person or by proxy at the meeting to nominate the person or persons specified in the notice; | the principal occupation or employment of each nominee; |
| a description of all agreements, arrangements, or understandings between any covered person, each nominee and any other person or persons related to the nomination of each nominee, in addition to all direct and indirect material relationships or other compensation and other material | the number of shares of the combined company beneficially owned by each nominee; |
| | any other information regarding each nominee required in proxy solicitations pursuant to Regulation 14A of the Exchange Act; |
| | each nominee s written consent to serve as a director of the combined company if elected; |

monetary agreements, arrangements and understandings during the past three years between any covered person, each nominee and any other such person or persons;

all information that would be reasonably relevant to a determination by the board of directors as to whether each nominee proposed by such stockholder is

a statement whether such nominee, if elected, has agreed to tender an irrevocable resignation in advance of the meeting for the election of directors to be effective if, at the next meeting, the director does not receive the majority vote in an uncontested election and the board of directors accepts such resignation;

the name and address of the nominating stockholder, as they appear on the books of the combined company;

the class and number of shares of the combined company beneficially owned by the nominating stockholder and by such beneficial owner as of the date of notice;

Table of Contents

| Versum | Combined Company |
| --- | --- |
| independent within the meaning of all applicable securities law and stock exchange requirements; | |
| all information that would be relevant to a determination by the Versum board of directors (or any relevant committee thereof) as to whether each nominee proposed by such stockholder meets any standards for board membership set forth by the Versum board of directors (or any committee thereof) in any publicly available documents; | a description of any agreement, arrangement or understanding (whether or not in writing) with respect to the business between or among the nominating stockholder or beneficial owner and any other person, including any agreements that would be required to be reported pursuant to Item 5 or 6 of the Exchange Act Schedule 13D (regardless of whether the requirement to file a Schedule 13 D is applicable to such shareholder or beneficial owner); |
| such other information regarding each nominee proposed by such stockholder as would have been required to be included in a proxy statement filed pursuant to the proxy rules of the SEC had such nominee been nominated by the Versum board of directors; | a description of any agreement, arrangement or understanding (whether or not in writing, including any derivative or short positions, profit interests, options, hedging transactions, and borrowed or loaned shares) that has been entered into by, or on behalf of, such stockholder or beneficial owner, the effect or intent of which is to mitigate loss, manage risk or benefit from changes in the owner with respect to any class or series of the combined company s capital stock, or increase or decrease the voting power of the stockholder or beneficial owner with respect to share of capital stock of the combined company, including the notional number of shares that are the subject of such agreement, arrangement or understanding; |
| the consent of each nominee to serve as a Versum director if so elected; and | |
| a completed and signed questionnaire, representation and agreement for each nominee. | |
| | a description of any agreement, arrangement or understanding (whether or not in writing) between or among the nominating stockholder or beneficial owner and any other person relating to acquiring holding, voting or disposing of any shares of stock of the combined company, including the number of shares that are the subject of such agreement, arrangement or understanding; and |
| | a description of all direct and indirect compensation and any other material agreement, arrangement, understanding or relationship during the past three years between or among the nominating stockholder and its affiliates and associates, or others with whom |

such stockholder is acting in concert, on the one hand, including, without limitation, all

Table of Contents

| Versum | Combined Company |
| --- | --- |
| | information that would be required to be disclosed pursuant to Item 404 promulgated under regulation S-K if the nominating stockholder making the nomination, or any affiliate or associate of such stockholder or person with whom the stockholder is acting in concert, were the registrant for purposes of such rule and the nominee were a director or executive officer of such registrant. |
| *Stockholder Proposals* | |
| The Versum bylaws provide that for business to be properly brought before an annual meeting by a Versum stockholder, such stockholder must have given timely written notice. The notice must be in writing and delivered to the corporate secretary of Versum by the date not later than 90 days, nor earlier than 120 days, prior to the anniversary date of the annual meeting for the preceding year; except that in the event that the date of the current year s annual meeting is advanced by more than 30 days or delayed by more than 60 days, from such anniversary date, or if no such meeting was held in the preceding year, such notice must be delivered not earlier than the 120th day prior to such current year s annual meeting and not later than the close of business on the later of the 90th day prior to such annual meeting or the 10th day following the day on which public announcement of the date of such meeting is first made. | The combined company by-laws provide that a stockholder must give advance written notice to the combined company of any proposal for business to be transacted at an annual meeting of stockholders. The notice must be in writing and received by the corporate secretary not later than 90 days, nor earlier than 120 days, prior to the anniversary date of the annual meeting for the preceding year, except, however, that if the annual meeting is not held within 30 days before or after such anniversary date, then notice must be received by the secretary not later of the close of business on the 10th day following the date on which the notice of the meeting was mailed or such public disclosure was made, whichever occurs first. |
| Any such notice by the stockholder shall include: | Any stockholder notice relating to a matter other than the nomination of directors must contain: |
| a brief description of the business desired to be brought before the meeting; | a brief description of the business desired to be brought before the annual meeting and the reasons for conducting such business at the annual meeting; |
| the name and address of the stockholder proposing such business and each other covered person; | any substantial (as that term is used in Item 5 of Schedule 14A of the Exchange Act) interest in such business of such stockholder and/or of the beneficial owner, if any, on whose behalf the business is being proposed; |
| a representation that the stockholder is a holder of record of stock of Versum entitled to vote at such meeting and intends to appear in person or by proxy at the meeting to propose such business; | |

the name of each person with whom such stockholder or any other covered person has any agreement, arrangement or understanding for the purpose of acquiring, holding, voting, or disposing of any shares of capital of Versum, or to cooperate in obtaining, changing, or influencing the control of

the name and address of the stockholder proposing such business, as they appear in Entegris books, and of such beneficial owner;

the class and number of shares of Entegris beneficially owned by the stockholder and by such beneficial owner as of the date of notice;

Table of Contents

| Versum | Combined Company |
| --- | --- |
| Versum or related to any item of business described in the first bullet point above; | |
| a description of the material interest of a covered person in each item of business described in the first bullet point above; | a representation that the stockholder will notify Entegris in writing within five business days after the record date for such meeting of the class or series and number of shares of capital stock of Entegris owned of record by the stockholder and such beneficial owner as of the record date for the meeting; |
| a list of the class or series and number of shares of capital stock of Versum which are owned beneficially and of record by each covered person and documentary evidence of such record or beneficial ownership and, with respect to any shares of stock of Versum but not of record by such covered person, and the number of shares of stock of Versum owned beneficially but not of record by such covered person, and the number of shares of stock of Versum held by such nominee holder; | a representation that the stockholder intends to appear in person or by proxy at the meeting to bring such business before the meeting; |
| | the class or series and number of shares of capital stock of Entegris that are beneficially owned by the stockholder or beneficial owner, and each of their associates, as of the date of notice; |
| a list of all derivative securities and other derivatives, transactions, agreements or arrangements the effect or intent of which is to mitigate loss to, or to manage risk or benefit of stock price changes for, any covered person or increase or decrease the voting power or pecuniary or economic interest of any covered person with respect to stock of Versum, in each case, to which any covered person is a counterparty and which relate to any shares of capital stock of Versum, a description of all economic terms of all such derivative securities and other derivatives, transactions, agreements or arrangements, and copies of all agreements and other documents relating to each such derivative securities and other derivatives, transactions, agreements or arrangements; | a description of any agreement, arrangement or understanding (whether or not in writing) with respect to the business between or among the nominating stockholder or beneficial owner and any other person, including any agreements that would be required to be reported pursuant to Item 5 or 6 of the Exchange Act Schedule 13D (regardless of whether the requirement to file a Schedule 13D is applicable to such shareholder or beneficial owner); |
| a list of all transactions by any covered person involving any shares of capital stock of Versum or any derivative securities or other derivatives, transactions, agreements or arrangements related to any shares of capital stock of Versum within 60 days of the date of the notice; | a description of any agreement, arrangement or understanding (whether or not in writing) and included any derivative or short positions, profit interests, options, hedging transactions, and borrowed or on behalf of, such stockholder or beneficial owner, the effect or intent of which is to mitigate loss, manage risk or benefit from changes in the owner with respect to any class or series of Entegris capital stock, or increase or decrease the voting power of the stockholder or beneficial owner with respect to share of capital stock of the combined company, including the notional |

all other information that, as of the date of the notice, would be required to be filed on Schedule 13D or in a proxy statement or other filing required to be made in connection with solicitations of proxies by any covered person in support of any item of business described pursuant to the first bullet point above;

number of shares that are the subject of such agreement, arrangement or understanding;

a description of any agreement, arrangement or understanding (whether or not in writing) between or among or such

Table of Contents

| Versum | Combined Company |
| --- | --- |
| a description of any direct or indirect interest of any covered person in the proposal being put forth or in any contract with Versum, any of its affiliates, or any of its principal competitors; | stockholder or beneficial owner and any other person relating to acquiring holding, voting or disposing of any shares of stock of the combined company, including the number of shares that are the subject of such agreement, arrangement or understanding; |
| a list of any equity interest held by any covered person in any principal competitor of Versum or any derivative securities held by any covered person and other derivatives, transactions, agreements or arrangements to which any covered person is a counterparty and which relate to any shares of capital stock of any principal competitor of Versum, a description of all agreements and other documents relating to each such derivative securities and other derivatives or similar arrangements; | a covenant that the stockholder will notify the combined company within five business days after the record date for such meeting as to the status of the seventh through the tenth bullet points of the foregoing requirements; |
| a description of any pending or threatened litigation in which any covered person is a party or material participant involving Versum or any of its officers or directors, or any affiliate of Versum; and | a representation (1) as to whether the stockholder or beneficial owner will engage in a solicitation with respect to such proposal and, if so, the name of each participant (as defined in Item 4 of Schedule 14A under the Exchange Act) in such solicitation and whether such person or groups intend to deliver a proxy statement and/or form of proxy to holders of at least the percentage of the combined company s outstanding capital stock required to approve or adopt the business to be proposed by the stockholder; and (2) that the information provided in the notice is accurate and complete as of the date of such notice; and |
| if the stockholder intends to solicit proxies in support of any of such stockholder s proposals, a representation to that effect. | |
| | such stockholder s and beneficial owner s written consent to public disclosure of information provided in the notice. |
| *Stockholder Action by Written Consent* | |
| The DGCL provides that, unless otherwise stated in the certificate of incorporation, any action which may be taken at an annual meeting or special meeting of stockholders may be taken without a meeting, if a consent in writing is signed by the holders of the outstanding stock having the minimum number of votes necessary to authorize the action at a meeting of stockholders. The Versum charter expressly provides that any action required or permitted to be taken by Versum stockholders must be effected at a duly called | The DGCL provides that, unless otherwise stated in the certificate of incorporation, any action which may be taken at an annual meeting or special meeting of stockholders may be taken without a meeting, if a consent in writing is signed by the holders of the outstanding stock having the minimum number of votes necessary to authorize the action at a meeting of stockholders. The combined company charter provides that no action will be taken by stockholders except at |

annual or special meeting of Versum and may not be effected by any consent in writing by such stockholders.

an annual or special meeting of stockholders.

Table of Contents

| Versum | Combined Company |
| --- | --- |
| *Certificate of Incorporation Amendments* | |
| The Versum charter provides that Versum has the right to amend, alter, change or repeal any provision of the charter in any manner provided by the Versum charter, the Versum bylaws or the DGCL. The affirmative vote of the holders of a majority of the combined voting power of the then-outstanding shares of all classes and series of capital stock of Versum entitled generally to vote in the election of directors of Versum, voting together as a single class, is required for stockholders to adopt, amend, alter or repeal any provision of the Versum charter. | *General*<br><br>Under Section 242 of the DGCL, the certificate of incorporation may be amended upon a resolution of the board of directors and approved by:<br><br>the holders of a majority of the outstanding shares entitled to vote; and<br><br>a majority of the outstanding shares of each class entitled to a class vote, if any.<br><br>Whenever the certificate of incorporation requires a vote of a greater number or proportion than is required by this section, then the provision of the certificate of incorporation requiring such greater vote shall not be altered, amended or repealed except by such greater vote.<br><br>The combined company charter provides that the affirmative vote of the holders of at least 75% of the then outstanding shares of capital stock of the combined company entitled to vote generally in the election of directors, is required to amend or repeal, or adopt any provisions inconsistent with:<br><br>Article VI (amendment of the combined company by-laws);<br><br>Article XI (no stockholder action by written consent in lieu of a meeting); and |

Article XII (ability to call a special meeting of stockholders).

*Amending Certain Provisions of the Combined Company Charter during the Specific Post-Merger Period*

Subject to the approval by Entegris stockholders of the Entegris charter proposal, the combined company charter provides that, during the specified post-merger period, the provisions of the combined company charter added pursuant to the amended and restated certificate of incorporation of Entegris governing the specified post-merger period, may not be modified, amended or repealed without the approval of 75% of the then-serving directors.

Additional information about amendments to the combined company charter can be found under the section entitled **The Merger Governance of the Combined Company** beginning on page 124.

Table of Contents

| Versum | Combined Company |
|---|---|
| *Bylaw Amendments* | |
| The Versum charter provides that the Versum board of directors is expressly authorized to adopt, amend and repeal the Versum bylaws without shareholder assent or vote. Any adoption, amendment or repeal of the Versum bylaws by the Versum board of directors requires approval by the majority of the whole board of directors. | The combined company charter provides that the board of directors of the combined company is expressly authorized to adopt, amend or repeal the combined company by-laws, subject to the rights of stockholders entitled to vote with respect thereto to alter and repeal such bylaws. |
| In addition to any requirements of law and any other provision of the Versum charter or certain resolutions adopted by the Versum board of directors (and notwithstanding the fact that a lesser percentage may be specified by law), the affirmative vote of the holders of a majority of the combined voting power of the then outstanding shares of all classes and series of capital stock of Versum entitled generally to vote in the election of directors of Versum, voting together as a single class, is required for Versum stockholders to adopt, amend, alter or repeal any provision of the Versum bylaws. | Under the combined company charter, the affirmative vote of the holders of at least 75% of the then outstanding shares of capital stock of the combined company entitled to vote generally in the election of directors is necessary for the approval of (a) any alteration, amendment or repeal of the combined company by-laws and (b) any amendment or repeal, or adoption of any provisions inconsistent with the provision of the combined company charter relating to the alteration, amendment or repeal of the combined company by-laws. |
| *Special Meetings of Stockholders* | |
| The Versum charter and the Versum bylaws provide that, unless otherwise required by law and subject to the terms of any class or series of preferred stock, special meetings of Versum stockholders for any purpose or purposes may be called at any time solely by: (a) the chairman of the Versum board of directors or (b) a majority of the whole Versum board of directors, and will be held at such place, on such date, and at such time as designated in the notice. | The combined company by-laws provide that special meetings of stockholders may be called by only the chairman of the board of directors, the chief executive officer (or by the president in the absence of a chief executive officer) or by the Entegris board of directors. |
| At any special meeting of Versum stockholders, the only business conducted or considered is what is specified in Versum s notice of meeting. | |
| Additionally, the Versum bylaws provide that stockholders are not permitted to propose business to be brought before a special meeting, except that any stockholder may seek to nominate a person for election to the board of directors at a special meeting called for the purpose of electing directors set forth in Versum s notice of such special meeting in | |

compliance with requirements for the nomination of Versum directors (see the section entitled **Director Nominations by Stockholders** beginning on page 194).

Table of Contents

| Versum | Combined Company |
|---|---|
| *Notice of Meetings of Stockholders* | |
| The Versum bylaws provide that, except as otherwise provided by law, the notice of any meeting is to be given not less than ten nor more than 60 days before the date of the meeting to each Versum stockholder entitled to vote at such meeting. | Under the combined company by-laws, written notice of place, date, hour and purpose of each annual or special meeting of stockholders, must be given to each stockholder entitled to vote and to each stockholder entitled to notice by law no less than ten but not more than 60 days prior to the date of the meeting. |
| *Limitation of Personal Liability of Directors* | |
| The Versum charter provides that, to the fullest extent permitted by the DGCL, no director of Versum is personally liable to Versum or any of its stockholders for monetary damages for breach of fiduciary duty as a director, except for liability: | Under Section 102(b)(7) of the DGCL, the certificate of incorporation may eliminate or limit the liability of a director for monetary damages, so long as it does not eliminate or limit the liability of a director: |
| for any breach of the director s duty of loyalty to Versum or its stockholders; | for any breach of the director s duty of loyalty to the corporation or its stockholders; |
| for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law; | for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law; |
| under Section 174 of the DGCL (i.e., unlawful payment of dividends or unlawful purchase or redemption of stock); or | under Section 174 of the DGCL (i.e., unlawful payment of dividends or unlawful purchase or redemption of stock); or |
| for any transaction from which the director derived an improper personal benefit. | for any transaction from which the director derived an improper personal benefit. |
| | The combined company charter adopts this standard. |
| *Indemnification of Directors and Officers* | |
| The DGCL authorizes corporations to limit or eliminate the personal liability of directors to corporations and their stockholders for monetary damages for breaches of directors fiduciary duties as directors, and the Versum charter includes such an exculpation provision. Pursuant to the Versum charter and Versum bylaws, each person who is or | The combined company by-laws provide that the combined company s directors, officers, employees and agents may be indemnified by the combined company to such extent as is permitted by the laws of the State of Delaware and as the bylaws may from time to time provide. |

was one of Versum s directors or officers shall be indemnified by Versum as of right to the fullest extent permitted by the DGCL.

The right to indemnification conferred by Versum includes the right to be paid by Versum the expenses incurred in defending any action, suit or proceeding in advance of its final disposition, subject to the receipt by Versum of undertakings as may be legally defined. In any action by an indemnitee to enforce a right to indemnification or by Versum to recover advances made, the burden of proving that the indemnitee is not entitled to be indemnified is placed on Versum.

*Mandatory Indemnification*

The combined company by-laws provide that the combined company shall indemnify, to the fullest extent permitted by Delaware law, any person who was or is a defendant or is threatened to be made a defendant to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative, by reason of the fact that such person:

is or was a director or officer of the combined company; or

Table of Contents

| Versum | Combined Company |
| --- | --- |
| | is or was serving at the request of the combined company as a director, officer or trustee of another corporation or of a partnership, joint venture, trust or other enterprise, including service with respect to an employee benefit plan, whether the basis of such proceeding is alleged action, |
| | against all expense, liability and loss (including attorneys fees) reasonably incurred or suffered by such person in connection with such action, suit or proceeding. Where such indemnitee of the combined company initiates a proceeding to enforce rights to such indemnification, the combined company shall indemnify any such indemnitee if the proceeding was authorized by the combined company s board of directors. |
| | The combined company by-laws further authorize the combined company to pay in advance, to the fullest extent permitted by the DGCL, for expenses incurred in connection with defending any such proceeding in advance of its final disposition, provided however that if the DGCL requires such advancement of expenses for a director or officer, such person must furnish a written undertaking to repay any advances if it is ultimately determined that he or she is not entitled to indemnification. |
| | The combined company may maintain insurance covering certain liabilities that may be incurred by directors, officers, employees or agents in the performance of their duties. |
| | The combined company may, to the extent authorized by the board of directors, indemnify and advance expenses to any employee or agent of the combined company to the fullest extent permitted by the |

combined company by-laws with respect to the directors and officers of the combined company.

*Change of Control Laws*

In general, Section 203 of the DGCL, subject to certain exceptions set forth therein, prohibits a business combination between a corporation and an interested stockholder within three years of the time such stockholder became an interested stockholder, unless (a) prior to such time, the board of directors of the corporation approved either the business combination or the transaction that resulted in the stockholder becoming an interested stockholder, (b) upon consummation of the

In general, Section 203 of the DGCL, subject to certain exceptions set forth therein, prohibits a business combination between a corporation and an interested stockholder within three years of the time such stockholder became an interested stockholder, unless (a) prior to such time, the board of directors of the corporation approved either the business combination or the transaction that resulted in the stockholder becoming an interested stockholder,

Table of Contents

| Versum | Combined Company |
| --- | --- |
| transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, exclusive of shares owned by directors who are also officers and by certain employee stock plans, or (c) at or subsequent to such time, the business combination is approved by the board of directors of the corporation and authorized by the affirmative vote at a stockholders meeting of at least 66 2/3% of the outstanding voting stock of the corporation which is not owned by the interested stockholder. | (b) upon consummation of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, exclusive of shares owned by directors who are also officers and by certain employee stock plans, or (c) at or subsequent to such time, the business combination is approved by the board of directors of the corporation and authorized by the affirmative vote at a stockholders meeting of at least 66 2/3% of the outstanding voting stock of the corporation which is not owned by the interested stockholder. |
| Because the Versum charter and the Versum bylaws do not contain a provision expressly electing not to be governed by Section 203 of the DGCL, Versum is subject to Section 203 of the DGCL. | The combined company charter provides that the combined company expressly elects to be governed by Section 203 of the DGCL. |
| *Forum Selection* | |
| The Versum charter provides that, unless the Versum board of directors determines or consents in writing to the selection of an alternative forum, the sole and exclusive forum for certain legal actions will be the Court of Chancery of the State of Delaware. However, if (and only if) the Court of Chancery of the State of Delaware dismisses any such action for lack of subject matter jurisdiction, the action may be brought in another court sitting in the State of Delaware. | The combined company charter and the combined company by-laws do not contain a provision designating a sole and exclusive forum for stockholder claims. |

Table of Contents

## NO APPRAISAL RIGHTS

Appraisal rights are statutory rights that, if applicable under law, enable stockholders to dissent from an extraordinary transaction, such as a merger, and to demand that the corporation pay the fair value for their shares as determined by a court in a judicial proceeding instead of receiving the consideration offered to the stockholders in connection with the transaction. Under the DGCL, stockholders do not have appraisal rights if the shares of stock they hold are either listed on a national securities exchange or held of record by more than 2,000 holders. Notwithstanding the foregoing, appraisal rights are available if stockholders are required by the terms of the merger agreement to accept for their shares anything other than (a) shares of stock of the surviving corporation, (b) shares of stock of another corporation that will either be listed on a national securities exchange or held of record by more than 2,000 holders, (c) cash in lieu of fractional shares or (d) any combination of the foregoing.

Because the merger is of Versum with and into Entegris and holders of Entegris common stock will continue to hold their shares following completion of the merger, holders of Entegris common stock are not entitled to appraisal rights.

Holders of Versum common stock who do not vote in favor of the merger will not have rights to an appraisal of the fair value of their shares. Under the DGCL, appraisal rights are not available for shares listed on a national securities exchange unless the stockholders of such shares are required by the terms of the merger agreement to receive in exchange for their shares anything other than shares of stock of the surviving corporation, shares of stock of any other corporation listed on a national securities exchange, cash in lieu of fractional shares, or any combination of the foregoing. Because Versum stockholders are not required by the terms of the merger agreement to accept for their shares anything other than shares of Entegris common stock and cash in lieu of fractional shares, holders of Versum common stock will not be entitled to appraisal rights in the merger.

Table of Contents

## LEGAL MATTERS

The validity of the shares of Entegris common stock offered hereby will be passed upon for Entegris by Wachtell, Lipton, Rosen & Katz. Certain U.S. federal income tax consequences relating to the transactions will be passed upon for Entegris by Wachtell, Lipton, Rosen & Katz and for Versum by Simpson Thacher & Bartlett LLP.

Table of Contents

## EXPERTS

The consolidated financial statements of Entegris as of December 31, 2018 and 2017, and for each of the years in the three-year period ended December 31, 2018, and management s assessment of the effectiveness of internal control over financial reporting as of December 31, 2018 have been incorporated by reference herein in reliance upon the reports of KPMG LLP, independent registered public accounting firm, incorporated by reference herein, and upon the authority of said firm as experts in accounting and auditing. The audit report covering the December 31, 2018 financial statements refers to a change to the method of accounting for revenue due to the adoption of FASB Accounting Standards Codification (Topic 606), Revenue from Contracts with Customers. The audit report on the effectiveness of internal control over financial reporting as of December 31, 2018, contains an explanatory paragraph that states Entegris acquired SAES Pure Gas during 2018, and management excluded from its assessment of the effectiveness of Entegris internal control over financial reporting as of December 31, 2018, SAES Pure Gas internal control over financial reporting associated with total assets of $434 million and total revenues of $62 million included in the consolidated financial statements of Entegris as of and for the year ended December 31, 2018. The audit report on the effectiveness of internal control over financial reporting of Entegris also excluded an evaluation of the internal control over financial reporting of SAES Pure Gas.

The consolidated financial statements of Versum as of September 30, 2018 and 2017, and for each of the years in the three-year period ended September 30, 2018, and management s assessment of the effectiveness of internal control over financial reporting as of September 30, 2018 have been incorporated by reference herein in reliance upon the reports of KPMG LLP, an independent registered public accounting firm, incorporated by reference herein, and upon the authority of said firm as experts in accounting and auditing. The audit report covering the September 30, 2018 consolidated financial statements refers to a change in the method of accounting for certain inventories.

Table of Contents

## CERTAIN BENEFICIAL OWNERS OF ENTEGRIS COMMON STOCK

To Entegris knowledge, the following table sets forth certain information regarding the beneficial ownership of Entegris common stock as of March 11, 2019 (except as noted in the footnotes below) and with respect to:

- each person known by Entegris to beneficially own 5% or more of the outstanding shares of Entegris common stock;
- each member of the Entegris board of directors;
- each named executive officer of Entegris; and
- the members of the Entegris board of directors and Entegris executive officers as a group.

Entegris has determined beneficial ownership in accordance with the rules of the SEC. Except as indicated by the footnotes below, Entegris believes, based on the information furnished to Entegris, that the persons and entities named in the table below have sole voting and investment power with respect to all shares of Entegris common stock that he, she or it beneficially owns.

For persons included in the tables below, also shown are shares over which the person could have acquired voting power or investment power within 60 days after March 11, 2019. Voting power includes the power to direct the voting of shares held, and investment power includes the power to direct the disposition of shares held.

**Security Ownership of Entegris Directors and Executive Officers**

Unless otherwise noted below, the address of each beneficial owner listed in the table below is c/o Entegris, Inc., 129 Concord Road, Billerica, Massachusetts 01821.

| Name of Beneficial Owner | Common Stock Beneficially Owned Directly or Indirectly | Common Stock Acquirable Within 60 Days[1] | Total Common Stock Beneficially Owned | Percentage of Shares of Common Stock Outstanding[2] |
|---|---|---|---|---|
| **Directors and Named Executive Officers:** | | | | |
| Michael A. Bradley | 49,803 | | 49,803 | * |
| R. Nicholas Burns | 43,772 | | 43,772 | * |
| James F. Gentilcore | 18,498 | | 18,498[3] | * |
| James P. Lederer | 14,868 | | 14,868 | * |
| Paul L. H. Olson | 41,014 | | 41,014 | * |
| Azita Saleki-Gerhardt | 3,897 | | 3,897 | * |

| | | | | |
|---|---|---|---|---|
| Brian F. Sullivan | 94,698 | | 94,698 | * |
| Bertrand Loy | 486,173 | 461,474 | 947,647 | * |
| Gregory B. Graves | 39,226 | 36,179 | 75,405 | * |
| Todd J. Edlund | 113,363 | 86,029 | 199,392 | * |
| Susan Rice | 5,488 | 4,665 | 10,153 | * |
| Clint Haris | 23,337 | 8,889 | 32,226 | * |
| **Current Directors and Executive Officers as a Group (18 persons)** | 1,125,061 | 844,066[4] | 1,969,127 | 1.5% |

* Represents less than 1%

(1) Included in the shares listed as beneficially owned are the following number of shares subject to acquisition through the exercise of stock options under Entegris stock option plans which the following named executive officers have the right to acquire within 60 days following March 11, 2019: Mr. Loy 461,474 shares; Mr. Graves 36,179 shares; Mr. Edlund 86,029 shares; Ms. Rice 4,665 shares and Mr. Haris 8,889.

Table of Contents

(2) Calculated based on 135,513,636 outstanding shares of Entegris common stock as of March 11, 2019.
(3) Includes 18,498 shares indirectly owned through a family trust.
(4) Includes 844,066 shares subject to acquisition by executive officers and directors within 60 days following March 11, 2019 including those described in footnote 1 above.

**Security Ownership of Other Beneficial Owners**

Based on information available to Entegris as of March 11, 2019, Entegris knew of no person who beneficially owned more than 5% of Entegris common stock, except as set forth below:

| Name and address of beneficial owner | Amount and nature of beneficial ownership | Percent of class[1] |
|---|---|---|
| Vanguard Group, Inc.<br>100 Vanguard Blvd.<br>Malvern, PA 19355 | 12,988,165[2] | 9.58% |
| BlackRock, Inc.<br>55 East 52nd Street<br>New York, NY 10055 | 9,993,518[3] | 7.37% |
| GMT Capital Corp.<br>2100 RiverEdge Parkway, Suite 840<br>Atlanta, GA 30328 | 8,074,480[4] | 5.96% |
| T. Rowe Price Associates, Inc.<br>100 E. Pratt Street<br>Baltimore, MD 21202 | 7,067,398[5] | 5.22% |

(1) Calculated based on 135,513,636 outstanding shares of Entegris common stock as of March 11, 2019.
(2) Based on information set forth in the Schedule 13G filed with the SEC on February 11, 2019 by Vanguard Group, Inc., a registered investment advisor ( Vanguard ), relating to Entegris common stock, Vanguard exercises sole dispositive power with respect to 12,689,894 of such shares, shared dispositive power with respect to 298,271 of such shares, sole voting power with respect to 294,442 of such shares and shared voting power with respect to 18,429 of such shares.
(3) Based on information set forth in the Schedule 13G filed with the SEC on February 4, 2019, by BlackRock, Inc., a parent holding company ( BlackRock ), relating to Entegris common stock, BlackRock exercises sole dispositive power with respect to 9,993,518 shares, shared dispositive power with respect to no shares, sole voting power with respect to 9,682,355 shares and shared voting power with respect to no shares.

(4) Based on information set forth in the Schedule 13G filed with the SEC on February 13, 2019 by GMT Capital Corp. ( GMT Capital ) relating to Entegris common stock, as owned by: (i) Bay Resource Partners, L.P. ( Bay I ) 1,265,810 shares, (ii) Bay II Resource Partners, L.P. ( Bay II ) 2,281,000 shares, (iii) Bay Resource Partners Offshore Master Fund, L.P. ( Offshore Fund ) 4,182,010 shares, (iv) GMT Capital 8,074,480 shares and (v) Thomas E. Claugus 8,074,480 shares. GMT Capital, the general partner of Bay I and Bay II, has the power to direct the affairs of Bay and Bay II, including the voting and disposition of shares. As the discretionary investment manager of the Offshore Fund and certain other accounts, GMT Capital has power to direct the voting and disposition of shares held by the Offshore Fund and such accounts. Mr. Claugus is the President of GMT Capital and in that capacity directs the operations of each of Bay and Bay II and the voting and disposition of shares held by the Offshore Fund and separate client accounts managed by GMT Capital.

(5) Based on information set forth in the Schedule 13G filed with the SEC on February 14, 2019 by T. Rowe Price Associates, Inc. ( T. Rowe Price ), relating to Entegris common stock, T. Rowe Price exercises sole dispositive power with respect to 7,067,398 of such shares, shared dispositive power with respect to no shares, sole voting power with respect to 1, 540,591 and shared voting power with respect to no shares.

Table of Contents

## CERTAIN BENEFICIAL OWNERS OF VERSUM COMMON STOCK

To Versum s knowledge, the following table and accompanying footnotes show information as of March 11, 2019 (except as noted in the footnotes below) regarding the beneficial ownership of Versum common stock by:

- each person known by Versum to beneficially own more than 5% of the outstanding shares of Versum common stock;
- each member of the Versum board of directors;
- each named executive officer of Versum; and
- the members of the Versum board of directors and Versum s executive officers as a group.

Versum has determined beneficial ownership in accordance with the rules of the SEC. Except as indicated by the footnotes below, Versum believes, based on the information furnished to Versum, that the persons and entities named in the table below have sole voting and investment power with respect to all shares of Versum common stock that he, she or it beneficially owns.

For persons included in the tables below, also shown are shares over which the person could have acquired voting power or investment power within 60 days after March 11, 2019. Voting power includes the power to direct the voting of shares held, and investment power includes the power to direct the disposition of shares held.

**Security Ownership of Versum Directors and Executive Officers**

Each of Versum s executive officers and directors listed below has sole voting and investment power over the shares of common stock reflected in the table and their address is c/o Versum Materials, Inc., 8555 South River Parkway, Tempe, Arizona 85284.

| Name of Beneficial Owner | Common Stock Beneficially Owned Directly or Indirectly | Shares of Common Stock Acquirable Within 60 Days[1] | Total Common Stock Beneficially Owned[2] | Percentage of Shares of Common Stock Outstanding |
|---|---|---|---|---|
| **Directors and Named Executive Officers:** | | | | |
| George G. Bitto | 52,586 | 45,343 | 97,929 | * |
| Jacques Croisetière | 16,605 | | 16,605 | * |
| Seifi Ghasemi | 204,287 | | 204,287 | * |
| Patrick F. Loughlin | 12,361 | 92,919 | 105,280 | * |

| | | | | |
|---|---|---|---|---|
| Guillermo Novo | 74,836 | 147,272 | 222,108 | * |
| Yi Hyon Paik | 6,855 | | 6,855 | * |
| Thomas J. Riordan | 20,330 | | 20,330 | * |
| Susan C. Schnabel | 33,876 | | 33,876 | * |
| Edward C. Shober | 8,516 | 8,887 | 17,403 | * |
| Michael W. Valente | 16,417 | 3,225 | 19,642 | * |
| Alejandro D. Wolff | 6,870 | | 6,870 | * |
| **Directors and Executive Officers as a Group (12 persons)** | 455,689 | 224,006 | 679,695 | * |

* Represents less than 1%

(1) Represents shares of Versum common stock issuable upon exercise of options that are currently exercisable as of March 11, 2019 and that will become exercisable within 60 days thereafter.

(2) Represents the total number of shares listed under the Shares of Common Stock Beneficially Owned and Shares of Common Stock Acquirable Within 60 Days columns.

Table of Contents

**Security Ownership of Other Beneficial Owners**

Based on information available to Versum as of March 11, 2019, Versum knew of no person who beneficially owned more than 5% of Versum common stock, except as set forth below:

| Name and Address of Beneficial Owner | Amount and Nature of Beneficial Ownership | Percent of Class |
|---|---|---|
| The Vanguard Group[1]<br><br>100 Vanguard Boulevard,<br><br>Malvern, PA 19355 | 10,687,257 | 9.8% |
| BlackRock, Inc.[2]<br><br>55 East 52nd Street,<br><br>New York, NY 10055 | 9,719,505 | 8.9% |
| State Farm Mutual Automobile Insurance Company[3]<br><br>One State Farm Plaza,<br><br>Bloomington, IL 61710 | 7,696,550 | 7.1% |
| Iridian Asset Management LLC[4]<br><br>276 Post Road West,<br><br>Westport, CT 06880 | 7,138,272 | 6.5% |
| Boston Partners[5]<br><br>One Beacon Street, 30th floor,<br><br>Boston, MA 02108 | 5,837,916 | 5.4% |

(1) Based on information set forth in the Schedule 13G/A filed with the SEC by The Vanguard Group on February 11, 2019 relating to Versum common stock as of December 31, 2018, and reporting sole voting power over 59,157 shares, shared voting power over 22,200 shares, sole dispositive power over 10,615,906 shares and shared dispositive power over 71,351 shares.

(2) Based on information set forth in the Schedule 13G/A filed with the SEC by BlackRock, Inc. on February 6, 2019 relating to Versum common stock as of December 31, 2018, and reporting sole voting power over 9,275,784 shares and sole dispositive power over 9,719,505 shares.

(3) Based on information set forth in the Schedule 13G filed with the SEC jointly by State Farm Mutual Automobile Insurance Company and certain related entities on February 5, 2019 relating to Versum common stock as of December 31, 2018, and reporting sole voting and dispositive power over 7,696,550 shares.

(4) Based on information set forth in the Schedule 13G/A filed with the SEC by Iridian Asset Management LLC on February 6, 2019 relating to Versum common stock as of December 31, 2018, and reporting shared voting power over 7,138,272 shares and shared dispositive power over 7,138,272 shares.

(5) Based on information set forth in the Schedule 13G filed with the SEC by Boston Partners on February 14, 2019 relating to Versum common stock as of December 31, 2018, and reporting sole voting power over 4,613,325 shares, shared voting power over 5,406 shares and sole dispositive power over 5,837,917 shares.

Table of Contents

## STOCKHOLDER PROPOSALS

### Entegris

Entegris will hold an annual meeting of stockholders in 2019, which is referred to in this joint proxy statement/prospectus as the Entegris 2019 annual meeting, regardless of whether the merger has been completed.

Any stockholder proposals intended to be presented at the Entegris 2019 annual meeting and considered for inclusion in Entegris proxy materials must have been received by Entegris corporate secretary no later than the close of business Eastern Time on November 28, 2018. Such proposals must have been sent to: Corporate Secretary, Entegris, Inc., 129 Concord Road, Billerica, Massachusetts 01821. Such proposals must also meet the other requirements and procedures prescribed by Rule 14a-8 under the Exchange Act relating to stockholder proposals.

Under the Entegris by-laws, nominees for director submitted by stockholders must have been received no earlier than January 9, 2019 and not later than February 8, 2019. Such proposals must also meet the requirements set forth in Entegris by-laws.

### Versum

Versum currently does not expect to hold its 2020 annual meeting of stockholders except to the extent required by applicable law and the rules of the NYSE.

Under the SEC s rules and regulations, any stockholder desiring to submit a proposal to be included in the proxy statement for Versum s 2020 annual meeting of stockholders must submit such proposal to Versum s principal executive offices located at 8555 South River Parkway, Tempe, Arizona 85284, to the attention of Versum s corporate secretary on or before August 22, 2019. In addition, all stockholder proposals requested to be included in the proxy statement for Versum s 2020 annual meeting of stockholders must also comply with the requirements set forth in the federal securities laws, including Rule 14a-8 under the Exchange Act, in order to be included in the proxy statement and proxy card for Versum s 2020 annual meeting of stockholders.

The Versum bylaws establish advance notice procedures with regard to certain matters to be brought before an annual meeting of stockholders, including nominations of persons for election as directors and other stockholder proposals submitted outside the processes of Rule 14a-8 under the Exchange Act. In general, to be timely, notice of such proposals must be received by Versum s corporate secretary not less than 90 days nor more than 120 days prior to the anniversary date of the immediately preceding annual meeting and must contain specified information concerning the matters to be brought before such annual meeting and the stockholder proposing such matters. Therefore, to be presented at the Versum s 2020 annual meeting of stockholders, such a notice must be received by Versum on or after October 1, 2019, but no later than October 31, 2019. If the date of the annual meeting is more than 30 days earlier or more than 60 days later than the anniversary date of the prior year s annual meeting, notice must be received not earlier than the close of business on the 120th calendar day prior to such annual meeting nor later than the close of business on the later of the 90th day prior to such annual meeting or the 10th calendar day following the day on which public announcement of the date of such annual meeting is first made.

All notices of proposals by Versum stockholders, whether or not to be included in Versum s proxy materials, should be mailed to Versum s principal executive offices located at 8555 South River Parkway, Tempe, Arizona 85284, to the attention of Versum s corporate secretary.

211

Table of Contents

## HOUSEHOLDING OF PROXY MATERIALS

SEC rules permit companies and intermediaries such as brokers to satisfy delivery requirements for proxy statements and notices with respect to two or more stockholders sharing the same address by delivering a single proxy statement or a single notice addressed to those stockholders. This process, which is commonly referred to as householding, provides cost savings for companies. Some brokers household proxy materials, delivering a single proxy statement or notice to multiple stockholders sharing an address unless contrary instructions have been received from the affected stockholders. Once you have received notice from your broker that they will be householding materials to your address, householding will continue until you are notified otherwise or until you revoke your consent. If, at any time, you no longer wish to participate in householding and would prefer to receive a separate proxy statement or notice, or if your household is receiving multiple copies of these documents and you wish to request that future deliveries be limited to a single copy, please notify your broker.

Requests for additional copies of this joint proxy statement/prospectus should be directed to, as applicable: Entegris, Inc., 129 Concord Road, Billerica, Massachusetts 01821, Telephone (978) 436-6500, or Versum Materials, Inc., 8555 South River Parkway, Tempe, Arizona 85284, Telephone (602) 282-1000.

Table of Contents

## WHERE YOU CAN FIND MORE INFORMATION

Entegris and Versum file annual, quarterly and current reports, proxy statements and other information with the SEC. The SEC maintains an internet site that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC, including both Entegris and Versum, which you can access at www.sec.gov. In addition, you may obtain free copies of the documents Entegris files with the SEC, including the registration statement on Form S-4, of which this joint proxy statement/prospectus forms a part, by going to Entegris Internet website at www.entegris.com, and you may obtain free copies of the documents Versum files with the SEC by going to Versum s Internet website at www.versummaterials.com. The Internet website addresses of Entegris and Versum are provided as inactive textual references only. The information provided on the Internet websites of Entegris and Versum, other than copies of the documents listed below that have been filed with the SEC, is not part of this joint proxy statement/prospectus and, therefore, is not incorporated herein by reference.

Statements contained in this joint proxy statement/prospectus, or in any document incorporated by reference into this joint proxy statement/prospectus regarding the contents of any contract or other document, are not necessarily complete and each such statement is qualified in its entirety by reference to the full text of that contract or other document filed as an exhibit with the SEC. The SEC allows Entegris and Versum to incorporate by reference into this joint proxy statement/prospectus documents Entegris and Versum file with the SEC including certain information required to be included in the registration statement on Form S-4 of which this joint proxy statement/prospectus forms a part. This means that Entegris and Versum can disclose important information to you by referring you to those documents. The information incorporated by reference into this joint proxy statement/prospectus is considered to be a part of this joint proxy statement/prospectus, and later information that Entegris and Versum file with the SEC will update and supersede that information. Each of Entegris and Versum incorporate by reference the documents listed below and any documents subsequently filed by it pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act and before the date of its applicable special meeting.

**Entegris (SEC File No. 001-32598):**

- Annual Report on Form 10-K for the fiscal year ended December 31, 2018 (filed with the SEC on February 11, 2019);
- The information in Entegris definitive proxy statement on Schedule 14A for Entegris 2019 annual meeting of stockholders, filed with the SEC on March 20, 2019;
- Current Report on Form 8-K (excluding any information and exhibits furnished under Item 2.02 of 7.01 thereof) filed with the SEC on February 13, 2019; and
- The description of Entegris common stock contained in Amendment No. 2 to Entegris Registration Statement on Form S-3, filed with the SEC on September 2, 2009, including any amendment or report filed for the purpose of updating such description.

These documents contain important information about Entegris business and Entegris financial performance. A copy of each of these documents is being furnished together with the copy of this joint proxy statement/prospectus that is being sent to Entegris stockholders and Versum stockholders.

You may request a copy of this joint proxy statement/prospectus or any of the documents incorporated by reference into this joint proxy statement/prospectus or other information concerning Entegris, without charge, by written or telephonic request to:

Entegris, Inc.

129 Concord Road

Billerica, Massachusetts 01821

Attention: Corporate Secretary

Telephone: (978) 436-6500

or from the SEC through the SEC website at the address provided above.

Table of Contents

**Versum (SEC File No. 001-37644):**

- Annual Report on Form 10-K for the fiscal year ended September 30, 2018, filed with the SEC on November 21, 2018;
- Definitive Proxy Statement on Schedule 14A for Versum s 2019 annual meeting filed with the SEC on December 20, 2018;
- Quarterly Report on Form 10-Q for the quarterly period ended December 31, 2018, filed with the SEC on February 7, 2019; and
- Current Reports on Form 8-K (excluding any information and exhibits furnished under Item 2.02 or 7.01 thereof) filed with the SEC on January 28, 2019, January 29, 2019, February 13, 2019, February 28, 2019, March 14, 2019 and March 19, 2019.

These documents contain important information about Versum s business and Versum s financial performance. A copy of each of these documents is being furnished together with the copy of this joint proxy statement/prospectus that is being sent to Entegris stockholders and Versum stockholders.

You may request a copy of this joint proxy statement/prospectus or any of the documents incorporated by reference into this joint proxy statement/prospectus or other information concerning Versum, without charge, by written or telephonic request to:

Versum Materials, Inc.

8555 South River Parkway

Tempe, Arizona 85284

Attention: Corporate Secretary

Telephone: (602) 282-1000

or from the SEC through the SEC website at the address provided above.

Table of Contents

**Annex A**

EXECUTION VERSION

AGREEMENT AND PLAN OF MERGER

between

VERSUM MATERIALS, INC.

and

ENTEGRIS, INC.

Dated as of January 27, 2019

Table of Contents

**TABLE OF CONTENTS**


| | | Page |
|---|---|---|
| | Article I | |
| | The Merger | |
| 1.1. | The Merger | A-1 |
| 1.2. | Closing | A-2 |
| 1.3. | Effective Time | A-2 |
| | Article II | |
| | Merger Consideration; Effect of the Merger on Capital Stock | |
| 2.1. | Merger Consideration; Conversion of Shares of Versum Common Stock | A-2 |
| 2.2. | Conversion of Shares of Versum Common Stock | A-2 |
| 2.3. | Treatment of Equity Awards | A-3 |
| | Article III | |
| | Delivery of Merger Consideration; Procedures for Surrender | |
| 3.1. | Exchange Agent | A-5 |
| 3.2. | Procedures for Surrender | A-5 |
| 3.3. | Distributions with Respect to Unexchanged Shares of Versum Common Stock; Voting | A-6 |
| 3.4. | No Transfers | A-6 |
| 3.5. | Fractional Shares | A-6 |
| 3.6. | Termination of Exchange Fund | A-7 |
| 3.7. | Lost, Stolen or Destroyed Certificates | A-7 |
| 3.8. | Withholding Rights | A-7 |
| 3.9. | Adjustments to Prevent Dilution | A-7 |
| 3.10. | No Liability | A-8 |
| | Article IV | |
| | Governance and Additional Matters | |
| 4.1. | Combined Company Governance and Additional Matters | A-8 |
| | Article V | |
| | Mutual Representations and Warranties of Versum and Entegris | |
| 5.1. | Organization, Good Standing and Qualification | A-9 |
| 5.2. | Subsidiaries | A-9 |
| 5.3. | Corporate Authority; Approval | A-9 |
| 5.4. | Governmental Filings; No Violations; Certain Contracts | A-10 |
| 5.5. | Reports; Internal Controls | A-10 |
| 5.6. | Financial Statements | A-12 |
| 5.7. | Absence of Certain Changes or Events | A-12 |
| 5.8. | Litigation and Liabilities | A-12 |
| 5.9. | Employee Benefits | A-13 |

5.10. Labor Matters A-14
5.11. Compliance with Laws; Licenses A-15
5.12. Takeover Statutes A-16
5.13. Environmental Matters A-16
5.14. Tax Matters A-17

Table of Contents


| | | Page |
|---|---|---|
| 5.15. | Intellectual Property | A-18 |
| 5.16. | Insurance | A-19 |
| 5.17. | Material Contracts | A-19 |
| 5.18. | Title to Assets | A-20 |
| 5.19. | Real Property | A-21 |
| 5.20. | Affiliate Transactions | A-21 |
| 5.21. | No Other Representations or Warranties; Non-Reliance | A-21 |

Article VI

Individual Representations and Warranties of Versum and Entegris

| | | |
|---|---|---|
| 6.1. | Entegris Capital Structure | A-22 |
| 6.2. | Entegris Recommendation and Fairness | A-23 |
| 6.3. | Entegris Brokers and Finders | A-23 |
| 6.4. | Entegris Voting Requirements | A-23 |
| 6.5. | Versum Capital Structure | A-23 |
| 6.6. | Versum Recommendation and Fairness | A-24 |
| 6.7. | Versum Brokers and Finders | A-24 |
| 6.8. | Versum Voting Requirements | A-24 |

Article VII

Covenants

| | | |
|---|---|---|
| 7.1. | Interim Operations | A-24 |
| 7.2. | Acquisition Proposals; Change of Recommendation | A-28 |
| 7.3. | Proxy/Prospectus Filing; Information Supplied | A-32 |
| 7.4. | Stockholders Meetings | A-33 |
| 7.5. | Cooperation; Efforts to Consummate | A-34 |
| 7.6. | Status; Notifications | A-36 |
| 7.7. | Financing and Indebtedness | A-37 |
| 7.8. | Information; Access and Reports | A-37 |
| 7.9. | Stock Exchange Listing and Delisting | A-38 |
| 7.10. | Publicity | A-38 |
| 7.11. | Employee Benefits | A-39 |
| 7.12. | Certain Tax Matters | A-40 |
| 7.13. | Expenses | A-40 |
| 7.14. | Indemnification; Directors and Officers Insurance | A-41 |
| 7.15. | Takeover Statutes | A-42 |
| 7.16. | Dividends | A-42 |
| 7.17. | Section 16 Matters | A-43 |
| 7.18. | Stockholder Litigation | A-43 |

Article VIII

Conditions

| | | |
|---|---|---|
| 8.1. | Conditions to Each Party s Obligation to Effect the Merger | A-43 |
| 8.2. | Conditions to Obligations of Entegris | A-44 |
| 8.3. | Conditions to Obligation of Versum | A-45 |

Table of Contents


| | | Page |
|---|---|---|
| | Article IX | |
| | Termination | |
| 9.1. | Termination by Mutual Written Consent | A-46 |
| 9.2. | Termination by Either Versum or Entegris | A-46 |
| 9.3. | Termination by Entegris | A-46 |
| 9.4. | Termination by Versum | A-47 |
| 9.5. | Effect of Termination and Abandonment | A-47 |
| | Article X | |
| | Miscellaneous and General | |
| 10.1. | Survival | A-50 |
| 10.2. | Amendment; Waiver | A-50 |
| 10.3. | Counterparts | A-50 |
| 10.4. | Governing Law and Venue; Submission to Jurisdiction; Selection of Forum; Waiver of Trial by Jury | A-50 |
| 10.5. | Specific Performance | A-51 |
| 10.6. | Notices | A-51 |
| 10.7. | Definitions | A-52 |
| 10.8. | Entire Agreement | A-62 |
| 10.9. | Third-Party Beneficiaries | A-62 |
| 10.10. | Fulfillment of Obligations | A-62 |
| 10.11. | Non-Recourse | A-62 |
| 10.12. | Severability | A-63 |
| 10.13. | Interpretation; Construction | A-63 |
| 10.14. | Successors and Assigns | A-63 |
| 10.15. | Financing Parties | A-63 |

Exhibit A Form Amended and Restated Certificate of Incorporation of the Combined Company

Table of Contents

AGREEMENT AND PLAN OF MERGER

AGREEMENT AND PLAN OF MERGER (hereinafter called this **Agreement**), dated as of January 27, 2019, is entered into by and between Versum Materials, Inc., a Delaware corporation (**Versum**) and Entegris, Inc., a Delaware corporation (**Entegris** and together with Versum, the **Parties** and each, a **Party**).

RECITALS

**WHEREAS**, the Parties intend that, on the terms and subject to the conditions set forth in this Agreement, Versum will merge with and into Entegris (the **Merger**), with Entegris surviving the Merger, pursuant to and in accordance with the provisions of the General Corporation Law of the State of Delaware (the **DGCL**);

**WHEREAS**, the board of directors of Versum (the **Versum Board**) has unanimously (a) determined that this Agreement and the transactions contemplated by this Agreement, including the Merger, are fair to, and in the best interests of, Versum and the holders of shares of Versum s common stock, par value $1.00 per share (the **Versum Common Stock**), (b) approved and declared advisable this Agreement and the transactions contemplated by this Agreement, including the Merger, on the terms and subject to the conditions set forth in this Agreement, (c) directed that this Agreement be submitted to the holders of shares of Versum Common Stock for their adoption and (d) resolved to recommend that the holders of shares of Versum Common Stock vote in favor of the adoption this Agreement;

**WHEREAS**, the board of directors of Entegris (the **Entegris Board**) has unanimously (a) determined that this Agreement, including the Charter Amendment (as defined below) and the Merger (the **Transactions**) are fair to, and in the best interests of, Entegris and the holders of shares of Entegris s common stock, par value $0.01 per share (the **Entegris Common Stock**), (b) approved and declared advisable this Agreement and the Transactions, including the Merger, on the terms and subject to the conditions set forth in this Agreement, (c) directed that the Share Issuance (as defined below) and this Agreement be submitted to the holders of shares of Entegris Common Stock for their approval and adoption, and the Charter Amendment be submitted to the holders of shares of Entegris Common Stock for their adoption and (d) resolved to recommend that the holders of shares of Entegris Common Stock vote in favor of the adoption of this Agreement and the approval of the Share Issuance on the terms and subject to the conditions set forth in this Agreement, and in favor of the adoption of the Charter Amendment;

**WHEREAS**, it is intended that, for federal income Tax purposes, the Merger shall qualify as a reorganization under the provisions of Section 368(a) of the Internal Revenue Code of 1986, as amended (the **Code**), and this Agreement is intended to be and is adopted as a plan of reorganization for purposes of Sections 354 and 361 of the Code; and

**WHEREAS**, Versum and Entegris desire to make certain representations, warranties, covenants and agreements in connection with this Agreement and set forth certain conditions to the Merger.

**NOW, THEREFORE**, in consideration of the foregoing premises and the representations, warranties, covenants and agreements set forth in this Agreement, the Parties agree as follows:

ARTICLE I

THE MERGER

1.1. The Merger. On the terms and subject to the conditions set forth in this Agreement, (a) at the Effective Time (as defined below), Versum shall be merged with and into Entegris in accordance with the DGCL

A-1

and the separate corporate existence of Versum shall thereupon cease, (b) Entegris shall be the surviving corporation in the Merger (sometimes hereinafter referred to as the **Combined Company**) and (c) the Merger shall have such other effects as provided in the DGCL.

1.2. Closing. The closing of the Merger (the **Closing**) shall take place at the offices of Simpson Thacher & Bartlett LLP, 425 Lexington Avenue, New York, NY, at 9:00 a.m. (New York Time) on the third (3rd) Business Day following the day on which the last to be satisfied or (to the extent permissible) waived of the conditions set forth in Article VIII (other than those conditions that by their nature are to be satisfied or waived at the Closing (so long as such conditions are reasonably capable of being satisfied), but subject to the satisfaction or (to the extent permissible) waiver of those conditions) shall be satisfied or (to the extent permissible) waived in accordance with this Agreement or at such other date, time or place (or by means of remote communication) as Versum and Entegris may mutually agree in writing (the date on which the Closing actually occurs, the **Closing Date**).

1.3. Effective Time. As soon as practicable following, and on the date of, the Closing, Versum and Entegris will cause a certificate of merger relating to the Merger (the **Certificate of Merger**) to be executed, acknowledged and filed with the Secretary of State of the State of Delaware as provided in Section 251 of the DGCL. The Merger shall become effective at the time when the Certificate of Merger has been duly filed with and accepted by the Secretary of State of the State of Delaware, or at such later date and time as may be agreed by the Parties in writing and specified in the Certificate of Merger (such date and time, the **Effective Time**).

ARTICLE II

MERGER CONSIDERATION; EFFECT OF THE MERGER ON CAPITAL STOCK

2.1. Merger Consideration; Conversion of Shares of Versum Common Stock. At the Effective Time, by virtue of the Merger and without any action on the part of the Parties or any holder of any capital stock of Versum, each share of Versum Common Stock issued and outstanding immediately prior to the Effective Time other than Excluded Shares (such shares of Versum Common Stock, the **Eligible Shares**) shall automatically be converted into, and become exchangeable for 1.120 (the **Exchange Ratio**) shares of Entegris Common Stock (such number of shares of Entegris Common Stock, the **Merger Consideration**). At the Effective Time, all Excluded Shares shall, as a result of the Merger and without any action on the part of the Parties or any holder of such Excluded Shares, be cancelled and shall cease to exist, and no payment shall be made in respect of such shares.

2.2. Conversion of Shares of Versum Common Stock. At the Effective Time, as a result of the Merger and without any action on the part of the Parties or any holder of any capital stock of Versum, all of the Eligible Shares shall represent the right to receive the Merger Consideration pursuant to this Article II, shall cease to be outstanding, shall be cancelled and shall cease to exist as of the Effective Time, and each certificate formerly representing any of the Eligible Shares (each, a **Certificate**) and each book-entry account formerly representing any non-certificated Eligible Shares (each, a **Book-Entry Share**) shall thereafter represent only the right to receive the Merger Consideration and the right, if any, to receive pursuant to Section 3.5 cash in lieu of fractional shares into which such Eligible Shares have been converted pursuant to this Section 2.2 and any dividends or other distributions pursuant to Section 3.3; provided, that nothing in this Agreement (including this Article II and Article III) shall (a) affect the right of the holders of shares of Versum Common Stock to receive any dividend or other distribution which was declared on Versum Common Stock, and the record date of which occurred, prior to the Effective Time in accordance with the provisions of this Agreement or (b) give holders of Versum Common Stock the right to receive any dividend or other distribution declared on Entegris Common Stock and for which the record date occurred prior to the Effective Time in accordance with the provisions of this Agreement.

Table of Contents

2.3. Treatment of Equity Awards. This Section 2.3 shall govern the treatment of such Party s equity awards in connection with the Transactions.

(a) Versum Options. At the Effective Time, each outstanding option to purchase shares of Versum Common Stock granted under the Versum Prior Stock Plan (each, a **Versum Option**) shall be deemed fully vested and exercisable, and each Versum Option shall, automatically and without any action on the part of the holder thereof, cease to represent an option to purchase shares of Versum Common Stock and shall be assumed and converted into an option to purchase a number of shares of Entegris Common Stock (each such option, a **Converted Versum Option**) equal to the product of (i) the number of shares of Versum Common Stock subject to such Versum Option immediately prior to the Effective Time and (ii) the Exchange Ratio (rounded down to the nearest whole share number), with an exercise price per share equal to (A) the exercise price per share of Versum Common Stock of such Versum Option immediately prior to the Effective Time divided by (B) the Exchange Ratio (rounded up to the nearest whole cent); provided, however, that the exercise price and the number of shares of Entegris Common Stock purchasable pursuant to Converted Versum Options shall be determined in a manner consistent with the requirements of Section 409A of the Code; provided, further, that in the case of any Versum Option to which Section 422 of the Code applies, the exercise price and the number of shares of Entegris Common Stock purchasable pursuant to such Converted Versum Option shall be determined in accordance with the foregoing, subject to such adjustments as are necessary in order to satisfy the requirements of Section 424(a) of the Code. Except as specifically provided above, following the Effective Time, each Converted Versum Option shall continue to be governed by the same terms and conditions (including, as applicable, exercisability and forfeiture terms) as were applicable to the corresponding former Versum Option immediately prior to the Effective Time.

(b) RSUs. At the Effective Time, each outstanding time vesting restricted stock unit granted under the Versum Stock Plan (each, a **Versum RSU**) and under the Versum Prior Stock Plan (each, a **Prior Plan Versum RSU**) corresponding to shares of Versum Common Stock shall, in each case, be canceled and converted into that number of restricted stock units corresponding to shares of Entegris Common Stock (each, a **Replacement RSU**) equal to the product of (i) the number of shares of Versum Common Stock subject to such Versum RSU or Prior Plan Versum RSU immediately prior to the Effective Time and (ii) the Exchange Ratio. Each Replacement RSU shall (A) vest and settle on terms (including acceleration events) at least as favorable as were applicable to the corresponding Versum RSU or Prior Plan Versum RSU immediately prior to the Effective Time; and (B) vest in full to the extent the holder of a Replacement RSU is subject to a Covered Termination, with such Replacement RSU settled in shares of Entegris Common Stock as soon as practicable, but in no event later than five (5) Business Days following, such Covered Termination, or such later time as required to comply with Section 409A of the Code.

(c) Versum PSUs. At the Effective Time, each outstanding restricted stock unit corresponding to shares of Versum Common Stock and subject to performance-based vesting criteria, including market-based restricted stock units and performance-based restricted stock units (each, a **Versum PSU**), shall be converted into that number of replacement restricted stock units corresponding to shares of Entegris Common Stock (each, a **Substitute RSU**) equal to the product of (i) the number of shares of Versum Common Stock subject to such Versum PSU and (ii) the Exchange Ratio. For purposes of clause (i) of the immediately preceding sentence, the number of shares of Versum Common Stock subject to a Versum PSU immediately prior to the Effective Time shall equal the number of Versum PSUs that would have vested pursuant to the terms of the applicable award agreement if the applicable performance period ended immediately prior to the Effective Time, based on actual performance through such truncated period, as determined in the good faith discretion of the compensation committee of the Versum Board (the **Versum Compensation Committee**) (which determination shall be effective as of the Effective Time). Following the Effective Time, the Substitute RSUs covered by this Section 2.3(c) shall (A) vest and settle on terms (including acceleration events) at least as favorable as were applicable to the corresponding Versum PSU immediately prior to the Effective Time and (B) vest in full to the extent the holder of a Substitute RSU is subject to a Covered

Termination, with such Substitute RSU settled in

shares of Entegris Common Stock as soon as practicable, but in no event later than five (5) Business Days following, such Covered Termination, or such later time as required to comply with Section 409A of the Code.

(d) Versum Deferred Director Awards. At the Effective Time, each deferred stock unit (each, a **Versum DSU**) held in a participant s stock account under the Versum Deferred Compensation Plan for Directors (the **Director Deferral Plan**) shall be fully vested and shall be converted into the right to receive a number of shares of Entegris Common Stock equal to the product of (i) the number of shares of Versum Common Stock covered by the Versum DSUs held in such participant s Director Deferral Plan stock account and (ii) the Exchange Ratio, with such shares distributed to such participant no later than thirty (30) Business Days following the Closing Date.

(e) Versum Dividend Equivalent Rights. Any Versum dividend equivalent rights associated with any Versum RSU, Prior Plan Versum RSU, Versum PSU or Versum DSU (collectively, the **Versum Dividend Equivalents**) (i) credited in the form of additional Versum RSUs, Prior Plan Versum RSUs, Versum PSUs or Versum DSUs shall be treated in the same manner as the award to which such dividend equivalent rights relate in accordance with this Section 2.3 and (ii) credited in the form of cash shall be paid at the same time or times the award to which such dividend equivalent rights relate is paid or settled in accordance with this Section 2.3, in each case, consistent with the terms of the Versum Stock Plan, Versum Prior Stock Plan or other Versum Benefit Plan immediately prior to the Effective Time. Following the Effective Time, each Replacement RSU and Substitute RSU shall accrue and be entitled to dividend equivalents to the same extent as the related Versum RSU, Prior Plan Versum RSU or Versum PSU.

(f) Versum Actions. At or prior to the Effective Time, Versum and the Versum Board (and the Versum Compensation Committee), as applicable, shall adopt any resolutions and take any actions that are necessary to effectuate the treatment of Versum Options, Versum RSUs, Prior Plan Versum RSUs, Versum PSUs, Versum DSUs and Versum Dividend Equivalents (collectively, the **Versum Equity Awards**) pursuant to Section 2.3(a) through Section 2.3(e).

(g) Entegris Actions. Entegris shall take all actions that are necessary for the treatment of Versum Equity Awards pursuant to Section 2.3(a) through Section 2.3(e), including the reservation, issuance and listing of Entegris Common Stock as necessary to effect the transactions contemplated by this Section 2.3. If registration of any plan interests in any Benefit Plan or the shares of Entegris Common Stock issuable in satisfaction of any (i) Versum Equity Awards or (ii) Converted Versum Options, Replacement RSUs or Substitute RSUs (collectively, **Converted Awards**) following the Effective Time (and giving effect to this Section 2.3) is required under the Securities Act of 1933, as amended (the **Securities Act**), Entegris shall file with the Securities and Exchange Commission (the **SEC**) as soon as reasonably practicable on or after the Closing Date a registration statement on Form S-8 with respect to such interests or Entegris Common Stock, and shall use its reasonable best efforts to maintain the effectiveness of such registration statement for so long as the relevant Versum Stock Plan, Versum Prior Stock Plan or other Versum Benefit Plans, Versum Equity Awards or Converted Awards, as applicable, remain outstanding or in effect and such registration of interests therein or the shares of Entegris Common Stock issuable thereunder continues to be required.

(h) Future Grants of Equity Awards. Notwithstanding anything in Section 2.3(a) through Section 2.3(e) to the contrary, but subject to Section 7.1(a), to the extent the terms of any Versum Equity Award or Entegris Equity Award (i) granted on or after the date of this Agreement and not in violation of this Agreement or (ii) mutually agreed by the Parties and a holder of any Versum Equity Award (or Converted Award) or Entegris Equity Award expressly provide for treatment in connection with the occurrence of the Effective Time that is different from the treatment prescribed by this Section 2.3, then in each case of clause (i) and (ii), the terms of such Versum Equity Award (or Converted Award) or Entegris Equity Award, as applicable or so agreed by the Parties and such holder, shall control (and the applicable provisions of this Section 2.3 shall not apply).

Table of Contents

ARTICLE III

DELIVERY OF MERGER CONSIDERATION; PROCEDURES FOR SURRENDER

3.1. Exchange Agent. Entegris shall deposit or cause to be deposited with an exchange agent selected by Entegris with Versum s prior approval (which approval shall not to be unreasonably withheld, conditioned or delayed) to serve as the exchange agent (the **Exchange Agent**), for the benefit of the holders of Eligible Shares, (a) at or prior to the Effective Time, an aggregate number of shares of Entegris Common Stock to be issued in non-certificated book-entry form sufficient to deliver the number of shares of Entegris Common Stock required to be delivered in respect of Eligible Shares pursuant to Section 2.1 and (b) as promptly as reasonably practicable following the Effective Time, an aggregate amount of cash in U.S. Dollars sufficient to deliver the amounts required to be delivered in respect of Eligible Shares pursuant to Section 3.5. In addition, Entegris shall deposit or cause to be deposited with the Exchange Agent, as necessary from time to time after the Effective Time, any dividends or other distributions, if any, to which the holders of Eligible Shares may be entitled pursuant to Section 3.3 with both a record and payment date after the Effective Time and prior to the surrender of such Eligible Shares (such shares of Entegris Common Stock, cash and the amount of any dividends or other distributions deposited with the Exchange Agent pursuant to this Section 3.1 being the **Exchange Fund**). The Exchange Fund shall not be used for any purpose other than a purpose expressly provided for in this Agreement. The cash portion of the Exchange Fund may be deposited or invested by the Exchange Agent as reasonably directed by Entegris; provided, that no such deposit or investment (or any loss resulting therefrom) shall affect the amount of cash payable to former holders of Versum Common Stock pursuant to the provisions of this Article III. Any interest and other income resulting from such deposit may become part of the Exchange Fund, and any amounts in excess of the amounts payable pursuant to this Agreement shall be promptly returned to Entegris.

3.2. Procedures for Surrender.

(a) With respect to Certificates, as promptly as reasonably practicable (but in any event within three (3) Business Days) after the Effective Time, the Combined Company shall cause the Exchange Agent to mail to each holder of record of each such Certificate (i) a notice advising such holder of the effectiveness of the Merger, (ii) a letter of transmittal in customary form specifying that delivery shall be effected, and risk of loss and title to a Certificate shall pass, only upon delivery of the Certificate (or affidavit of loss in lieu of a Certificate as provided in Section 3.7) to the Exchange Agent or transfer of Book-Entry Shares not held through DTC (each, a **Non-DTC Book-Entry Share**) to the Exchange Agent (including customary provisions with respect to delivery of an agent s message with respect to Non-DTC Book-Entry Shares) (the **Letter of Transmittal**) and (iii) instructions for surrendering a Certificate (or affidavit of loss in lieu of a Certificate as provided in Section 3.7) to the Exchange Agent. Upon surrender to the Exchange Agent of a Certificate (or affidavit of loss in lieu of a Certificate as provided in Section 3.7) together with a duly executed and completed Letter of Transmittal and such other documents as may reasonably be required pursuant to such instructions, the Combined Company shall cause the Exchange Agent to mail to each holder of record of any such Certificate in exchange therefore, as promptly as reasonably practicable thereafter, (A) a statement reflecting the number of whole shares of Entegris Common Stock, if any, that such holder is entitled to receive in non-certificated book-entry form pursuant to Article II in the name of such record holder and (B) a check in the amount (after giving effect to any required Tax withholdings as provided in Section 3.8) of (x) any cash in lieu of fractional shares plus (y) any unpaid cash dividends and any other dividends or other distributions that such holder has the right to receive pursuant to this Article III. Any Certificate that has been so surrendered shall be cancelled by the Exchange Agent.

(b) With respect to Non-DTC Book-Entry Shares, as promptly as reasonably practicable (but in any event within three (3) Business Days) after the Effective Time, the Combined Company shall cause the Exchange Agent to mail to each holder of record of a Non-DTC Book-Entry Share (i) a notice advising such holder of the effectiveness of the

Merger, (ii) a Letter of Transmittal and (iii) instructions for transferring the Non-DTC Book-

Entry Shares to the Exchange Agent. Upon surrender to the Exchange Agent of Non-DTC Book-Entry Shares by book-receipt of an agent s message by the Exchange Agent in accordance with the terms of the Letter of Transmittal and accompanying instructions, Entegris shall cause the Exchange Agent to mail to each holder of record of any such Non-DTC Book-Entry Shares in exchange therefore, as promptly as reasonably practicable (but in any event within three (3) Business Days) after the Effective Time, (A) a statement reflecting the number of whole shares of Entegris Common Stock, if any, that such holder is entitled to receive in non-certificated book-entry form pursuant to Article II in the name of such record holder and (B) a check in the amount (after giving effect to any required Tax withholdings as provided in Section 3.8) of (x) any cash in lieu of fractional shares plus (y) any unpaid cash dividends and any other dividends or other distributions that such holder has the right to receive pursuant to this Article III.

(c) With respect to Book-Entry Shares held through DTC, Versum and Entegris shall cooperate to establish procedures with the Exchange Agent and DTC to ensure that the Exchange Agent will transmit to DTC or its nominees as soon as practicable after the Effective Time, upon surrender of Eligible Shares held of record by DTC or its nominees in accordance with DTC s customary surrender procedures, the Merger Consideration, cash in lieu of fractional shares of Entegris Common Stock, if any, and any unpaid cash dividends and any other dividends or other distributions, in each case, that such holder has the right to receive pursuant to this Article III.

(d) No interest will be paid or accrued on any amount payable for Eligible Shares pursuant to this Article III.

3.3. Distributions with Respect to Unexchanged Shares of Versum Common Stock; Voting. All shares of Entegris Common Stock to be issued pursuant to the Merger shall be deemed issued and outstanding as of the Effective Time and whenever a dividend or other distribution is declared by Entegris in respect of Entegris Common Stock, the record date for which is at or after the Effective Time, that declaration shall include dividends or other distributions in respect of all shares issuable pursuant to this Agreement. No dividends or other distributions in respect of shares of Entegris Common Stock with a record date at or after the Effective Time shall be paid to any holder of any unsurrendered Certificate until the Certificate (or affidavit of loss in lieu of a Certificate as provided in Section 3.7) is surrendered for exchange in accordance with this Article III. Subject to applicable Law, there shall be issued or paid to the holder of record of the whole shares of Entegris Common Stock issued in exchange for Eligible Shares in accordance with this Article III, without interest, (a) at the time of such surrender, the dividends or other distributions with a record date at or after the Effective Time theretofore payable with respect to such whole shares of Entegris Common Stock and not paid, and (b) at the appropriate payment date, the dividends or other distributions payable with respect to such whole shares of Entegris Common Stock with a record date at or after the Effective Time and prior to surrender but with a payment date subsequent to surrender.

3.4. No Transfers. From and after the Effective Time, there shall be no transfers on the stock transfer books of Versum of the shares of Versum Common Stock that were outstanding immediately prior to the Effective Time. From and after the Effective Time, the holders of Certificates or Book-Entry Shares shall cease to have any rights with respect to such shares of Versum Common Stock except as otherwise provided herein or by applicable Law. If, after the Effective Time, Certificates are presented to the Combined Company for any reason, they shall be cancelled and exchanged as provided in this Agreement.

3.5. Fractional Shares. Notwithstanding anything in this Agreement to the contrary, no fractional shares of Entegris Common Stock will be issued upon the conversion of shares of Versum Common Stock pursuant to Section 2.1. All fractional shares of Entegris Common Stock that a holder of Eligible Shares would be otherwise entitled to receive pursuant to Section 2.1, but for this Section 3.5, shall be aggregated and such holder shall be entitled to receive a cash payment, without interest, in lieu of any such fractional share, equal to the product (rounded to the nearest whole cent) of (a) the amount of such fractional share interest in a share of Entegris Common Stock to which such holder would, but for this Section 3.5, be entitled under Section 2.1, and (b) an amount equal to the average of the daily volume

weighted average price per share of Entegris Common Stock on

the NASDAQ (as such daily volume weighted average price per share is reported by Bloomberg L.P. or, if not reported therein, in another authoritative source mutually selected by Entegris and Versum) calculated for the ten (10) consecutive Trading Days ending on the second (2nd) full Trading Day immediately prior to (and not including) the Closing Date. No holder of Eligible Shares shall be entitled by virtue of the right to receive cash in lieu of fractional shares of Entegris Common Stock described in this Section 3.5 to any dividends, voting rights or any other rights in respect of any fractional share of Entegris Common Stock. The payment of cash in lieu of fractional shares of Entegris Common Stock is not a separately bargained-for consideration but merely represents a mechanical rounding-off of the fractions in the exchange.

3.6. Termination of Exchange Fund. Any portion of the Exchange Fund (including the proceeds of any deposit of the Exchange Fund and any shares of Entegris Common Stock) that remains unclaimed as of the date that is six (6) months after the Closing Date shall be delivered to Entegris. Any holder of Eligible Shares who has not theretofore complied with this Article III shall thereafter look only to Entegris for delivery of the Merger Consideration, cash in lieu of fractional shares of Entegris Common Stock, if any, and any unpaid cash dividends and any other dividends or other distributions, in each case, that such holder has the right to receive pursuant to this Article III.

3.7. Lost, Stolen or Destroyed Certificates. In the event that any Certificate shall have been lost, stolen or destroyed, upon the making of an affidavit of that fact by the Person claiming such Certificate to be lost, stolen or destroyed and the posting by such Person of a bond in customary amount and upon such terms as may be required as indemnity against any claim that may be made against it with respect to such Certificate, the Exchange Agent will issue in exchange for such lost, stolen or destroyed Certificate, the Merger Consideration, cash in lieu of fractional shares of Entegris Common Stock, if any, and any unpaid cash dividends and any other dividends or other distributions, in each case, payable or issuable pursuant to this Article III, as if such lost, stolen or destroyed Certificate had been surrendered.

3.8. Withholding Rights. Each of Entegris, the Combined Company, the Exchange Agent and any other withholding agent shall be entitled to deduct and withhold from the consideration otherwise payable pursuant to this Agreement to any holder of shares of Versum Common Stock and Versum Equity Awards, such amounts as it is required to deduct and withhold with respect to the making of such payment under the Code or any other applicable state, local or foreign Tax Law. To the extent that amounts are so withheld by Entegris, the Combined Company, the Exchange Agent or such other withholding agent, as applicable, such withheld amounts (a) shall be timely remitted by Entegris, the Combined Company, the Exchange Agent or such other withholding agent, as applicable, to the applicable Governmental Entity, and (b) shall be treated for all purposes of this Agreement as having been paid to the holder of shares of Versum Common Stock and Versum Equity Awards in respect of which such deduction and withholding was made by Entegris, the Combined Company, the Exchange Agent, or such other withholding agent.

3.9. Adjustments to Prevent Dilution. Notwithstanding anything in this Agreement to the contrary, if, from the date of this Agreement to the earlier of the Effective Time and termination in accordance with Article IX, the issued and outstanding shares of Versum Common Stock or securities convertible or exchangeable into or exercisable for shares of Versum Common Stock or the issued and outstanding shares of Entegris Common Stock or securities convertible or exchangeable into or exercisable for shares of Entegris Common Stock, shall have been changed into a different number of shares or securities or a different class by reason of any reclassification, stock split (including a reverse stock split), stock dividend or distribution, recapitalization, merger, issuer tender or exchange offer, or other similar transaction, or a stock dividend with a record date within such period shall have been declared, then the Merger Consideration shall be equitably adjusted to provide the holders of shares of Versum Common Stock and Entegris Common Stock the same economic effect as contemplated by this Agreement prior to such event, and such items, so adjusted shall, from and after the date of such event, be the Merger Consideration. Nothing in this Section 3.9 shall be construed to permit the Parties to take any action except to the extent consistent with, and not otherwise prohibited by,

the terms of this Agreement.

3.10. No Liability. None of Versum, Entegris, the Combined Company or the Exchange Agent shall be liable to any Person in respect of any portion of the Merger Consideration delivered to a public official pursuant to any applicable abandoned property, escheat or similar Law. If any Certificate or Book-Entry Share has not been surrendered prior to seven (7) years after the Effective Time, or immediately prior to such earlier date on which any shares of Entegris Common Stock, any cash in lieu of fractional shares of Entegris Common Stock and any unpaid cash dividends and any other dividends or other distributions, in each case, that a holder of any Eligible Shares has the right to receive pursuant to this Article III in respect of such Certificate or Book-Entry Share would otherwise escheat to or become property of any Governmental Entity, any such shares, cash, dividends or other distributions in respect of such Certificate or Book-Entry Share shall, to the extent permitted by applicable Law, become the property of Entegris, free and clear of all claims or interests of any Person previously entitled thereto.

ARTICLE IV

GOVERNANCE AND ADDITIONAL MATTERS

4.1. Combined Company Governance and Additional Matters.

(a) The Certificate of Incorporation of the Combined Company. Subject to receipt of the Entegris Charter Vote (as defined below), at the Effective Time, the certificate of incorporation of Entegris, as in effect immediately prior to the Effective Time, shall be amended and restated as set forth in Exhibit A (the **"Charter Amendment"**), and as so amended shall be the certificate of incorporation of the Combined Company, until thereafter amended as provided therein or by applicable Law.

(b) The Bylaws of the Combined Company. At the Effective Time, the bylaws of Entegris, as in effect immediately prior to the Effective Time, shall be the bylaws of the Combined Company until thereafter amended as provided therein, the certificate of incorporation of the Combined Company or by applicable Law.

(c) Board of Directors of the Combined Company. Prior to the Effective Time, Entegris shall take all actions necessary (including by securing and causing to be delivered to Entegris (with evidence thereof provided to Versum) the resignations of then-serving directors of the Entegris Board) to cause, in each case, effective as of the Effective Time: (i) the number of directors constituting the full board of directors of the Combined Company (the **"Combined Company Board"**) to be nine (9); (ii) the Combined Company Board to be composed of: (A) four (4) directors, who prior to the Effective Time were directors of Entegris (other than the Entegris CEO), designated by Entegris prior to the Effective Time (the **"Entegris Designees"**); (B) four (4) directors, who prior to the Effective Time were directors of Versum, designated by Versum prior to the Effective Time, including the Chairman of Versum as of immediately prior to the Effective Time (the **"Versum Designees"**); and (C) the Chief Executive Officer of Entegris as of immediately prior to the Effective Time (the **"Entegris CEO"**); and (iii) all of the Versum Designees to be appointed, elected and approved as directors of the Combined Company Board effective as of the Effective Time by a vote of at least a majority of the Entegris Board in office as of immediately prior to the Effective Time. Each of the Entegris Designees and Versum Designees shall meet the independence standards of NASDAQ or the NYSE as may be applicable with respect to the Combined Company as of the Effective Time.

(d) Chairman. Prior to the Effective Time, the Parties shall take all actions necessary to cause, effective as of the Effective Time, the Chairman of Versum as of immediately prior to the Effective Time to be appointed to serve as the Chairman of the Combined Company Board, pursuant to, and in accordance with, the Charter Amendment.

(e) Committees of the Combined Company Board. The initial composition of the Audit and Finance Committee, Compensation Committee and Nominating and Governance Committee, respectively, shall be mutually agreed by the

Parties prior to Closing.

(f) Chief Executive Officer of the Combined Company. Prior to the Effective Time, Entegris shall take all actions necessary to cause, effective as of the Effective Time, the Entegris CEO to be appointed to serve as the Chief Executive Officer of the Combined Company.

(g) Name and Trading Symbol. The name of the Combined Company as of the Effective Time shall be Entegris, Inc. and the ticker symbol of the Combined Company as of the Effective Time shall be ENTG .

(h) Headquarters. As of the Effective Time, the headquarters of the Combined Company shall be located at 129 Concord Road, Billerica, Massachusetts 01821.

ARTICLE V

MUTUAL REPRESENTATIONS AND WARRANTIES OF VERSUM AND ENTEGRIS

Except as set forth in the Reports of Versum or Entegris, as applicable, filed with or furnished to the SEC during the period from January 1, 2018 through the Business Day prior to the date of this Agreement (excluding any disclosures set forth or referenced in any risk factor section or in any other section to the extent they are forward-looking statements or cautionary, predictive or forward-looking in nature) or in the corresponding sections or subsections of the disclosure letter delivered to Versum by Entegris (the **Entegris Disclosure Letter**) or delivered to Entegris by Versum (the **Versum Disclosure Letter** and, each of the Entegris Disclosure Letter and the Versum Disclosure Letter, a **Disclosure Letter**) concurrently with the execution and delivery of this Agreement (it being agreed that for purposes of the representations and warranties set forth in this Article V, disclosure of any item in any section or subsection of the Entegris Disclosure Letter or Versum Disclosure Letter, as applicable, shall be deemed disclosure with respect to any other section or subsection of the Entegris Disclosure Letter or Versum Disclosure Letter, as applicable, to which the relevance of such item is reasonably apparent), Entegris hereby represents and warrants to Versum and Versum hereby represents and warrants to Entegris that:

5.1. Organization, Good Standing and Qualification. Such Party and each of its Subsidiaries is a legal entity duly organized, validly existing and in good standing (with respect to jurisdictions which recognize such concept) under the Laws of its respective jurisdiction of organization and has all requisite corporate or similar power and authority to own, lease and operate its properties and assets and to carry on its business as currently conducted and is qualified to do business and is in good standing as a foreign corporation or other legal entity in each jurisdiction where the ownership, leasing or operation of its assets or properties or conduct of its business requires such qualification, except as would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect on such Party. Versum has made available to Entegris, and Entegris has made available to Versum, complete and correct copies of such Party s Organizational Documents, each as amended prior to the execution of this Agreement.

5.2. Subsidiaries. Section 5.2 of such Party s Disclosure Letter sets forth such Party s or its Subsidiaries capital stock, equity interest or other direct or indirect ownership interest in any other Person other than (a) securities in a publicly traded company held for investment by such Party or any of its Subsidiaries and consisting of less than one percent (1%) of the outstanding capital stock of such company and (b) capital stock, equity interests or other direct or indirect ownership interests or securities of direct or indirect wholly-owned Subsidiaries of such Party. Such Party does not own, directly or indirectly, any voting interest in any Person that requires an additional filing by any Party under the HSR Act.

5.3. Corporate Authority; Approval. Such Party has all requisite corporate power and authority and has taken all corporate action necessary in order to execute, deliver and perform its obligations under this Agreement and to consummate the Transactions, and the execution and delivery of this Agreement and the consummation of the

Transactions by such Party have been duly authorized by all necessary corporate action on the part of such

Party, in each case subject only to, in the case of Entegris (a) approval of the issuance of shares of Entegris Common Stock pursuant to this Agreement (the **Share Issuance**) by the holders of shares of Entegris Common Stock representing a majority of votes properly cast on the Share Issuance at a meeting of Entegris stockholders duly called and held for such purpose, (b) adoption of this Agreement by the holders of a majority of the outstanding shares of Entegris Common Stock entitled to vote on such matter at a meeting of Entegris stockholders duly called and held for such purpose (the approval and adoption in clauses (a) and (b), together, the **Requisite Entegris Vote**) and (c) adoption of the Charter Amendment by the holders of a majority of the outstanding shares of Entegris Common Stock entitled to vote on such matter at a meeting of Entegris stockholders duly called and held for such purpose (the **Entegris Charter Vote**), and in the case of Versum, adoption of this Agreement by the holders of a majority of the outstanding shares of Versum Common Stock entitled to vote on such matter at a meeting of Versum stockholders duly called and held for such purpose (the **Requisite Versum Vote**). This Agreement has been duly executed and delivered by such Party and constitutes a valid and binding agreement of such Party enforceable against such Party in accordance with its terms, subject to bankruptcy, insolvency, fraudulent transfer, reorganization, moratorium and similar Laws of general applicability relating to or affecting creditors rights and to general equity principles (the **Bankruptcy and Equity Exception**).

5.4. Governmental Filings; No Violations; Certain Contracts.

(a) Other than the filings, notices, reports, consents, registrations, approvals, permits, expirations of waiting periods or authorizations (**Filings**) (i) pursuant to the DGCL, HSR Act, the Exchange Act and the Securities Act, (ii) required to be made with the NYSE or NASDAQ, as applicable, (iii) pursuant to federal and state securities, takeover and blue sky Laws and (iv) included in Section 5.4(b) of the Versum Disclosure Letter as Requisite Regulatory Approvals (collectively, the **Approvals**), no filings, notices, reports, consents, registrations, approvals, permits or authorizations are required to be made or obtained by such Party with, nor are any required to be obtained by such Party with or from, any Governmental Entity, in connection with the execution, delivery and performance of this Agreement by such Party and the consummation of the Transactions except as would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect on such Party.

(b) Subject to obtaining the Requisite Entegris Vote, the Entegris Charter Vote and the Requisite Versum Vote, as applicable, the execution, delivery and performance of this Agreement by such Party do not, and the consummation of the Transactions will not, constitute or result in (i) a breach or violation of, or a default under, the Organizational Documents of such Party or any of its Subsidiaries, (ii) with or without notice, lapse of time or both, a breach or violation of, a termination (or right of termination) of or default under, the creation or acceleration of any obligations under or the creation of an Encumbrance on any of the assets of such Party or any of its Subsidiaries pursuant to, any Contract binding upon such Party or any of its Subsidiaries or, assuming (solely with respect to performance of this Agreement and consummation of the Transactions) compliance with the matters referred to in Section 5.4(b), under any Law to which such Party or any of its Subsidiaries is subject or (iii) any change in the rights or obligations of any party under any Contract binding upon such Party or any of its Subsidiaries, except, in the case of clause (ii) or (iii) above, as would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect on such Party.

5.5. Reports; Internal Controls.

(a) Such Party has filed or furnished, as applicable, on a timely basis, all forms, schedules, prospectuses, statements, certifications, reports and documents required to be filed or furnished by it with the SEC pursuant to the Exchange Act or the Securities Act since January 1, 2017 (the **Applicable Date**) (the forms, schedules, prospectuses, statements, reports and documents filed or furnished to the SEC since the Applicable Date and those filed or furnished to the SEC subsequent to the date of this Agreement, including any amendments thereto, such Party s **Reports**). Each of such

Party s Reports, at the time of its filing or being furnished (and, in the case of registration statements and proxy statements, on the dates of effectiveness and the dates of mailing,

respectively), complied, or if not yet filed or furnished, will comply in all material respects with the applicable requirements of the Securities Act, the Exchange Act and the Sarbanes-Oxley Act and the rules and regulations thereunder. As of their respective dates (or, if amended or superseded by a filing prior to the date of this Agreement, then as of the date of such filing), such Party s Reports did not, and any of such Party s Reports filed with or furnished to the SEC subsequent to the date of this Agreement will not, contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements made therein, in light of the circumstances in which they were made, not misleading. No Subsidiary of such Party is subject to periodic reporting requirements of the Exchange Act other than as part of such Party s consolidated group or required to file any form, report or other document with the SEC, the NYSE, NASDAQ, any other stock exchange or comparable Governmental Entity other than routine and ordinary filings (such as filings regarding ownership holdings or transfers).

(b) Such Party is, and has been at all times since the Applicable Date, in compliance in all material respects with the applicable listing and corporate governance rules and regulations of the NYSE or NASDAQ, as applicable. Except as permitted by the Exchange Act, including Sections 13(k)(2) and 13(k)(3) thereunder, or the rules and regulations promulgated by the SEC, since the enactment of the Sarbanes-Oxley Act, neither such Party nor any of its Affiliates has made, arranged or modified (in any material way) any extensions of credit in the form of a personal loan to any executive officer or director of such Party.

(c) Since the Applicable Date, such Party has maintained disclosure controls and procedures required by Rule 13a-15(e) or 15d-15(e) under the Exchange Act. Such disclosure controls and procedures are effective to ensure that information required to be disclosed by such Party under the Exchange Act is recorded and reported within the time periods specified in the Exchange Act and all such information required to be disclosed under the Exchange Act is accumulated and communicated to the management of such Party, as appropriate, to allow timely decisions regarding required disclosure.

(d) Neither Party is a party to, or has any commitment to become a party to, any joint venture, partnership agreement or any similar Contract (including any Contract relating to any transaction, arrangement or relationship between or among such Party, on the one hand, and any unconsolidated Affiliate, including any structured finance, special purpose or limited purpose entity or Person, on the other hand (such as any arrangement described in Section 303(a)(4) of Regulation S-K of the SEC)) where the purpose or effect of such arrangement is to avoid disclosure of any material transaction involving, or material liabilities of, such Party in such Party s consolidated financial statements.

(e) Such Party maintains internal control over financial reporting (as defined in Rule 13a-15(f) or 15d-15(f), as applicable, under the Exchange Act). Such internal control over financial reporting is effective in providing reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with United States generally accepted accounting principles ( **GAAP** ) and includes policies and procedures that (i) pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of the assets of such Party, (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with GAAP, and that receipts and expenditures of such Party are being made only in accordance with authorizations of management and directors of such Party, and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of such Party s assets that could have a material effect on its financial statements. The records, systems, controls, data and information of such Party and its Subsidiaries that are used in the systems of disclosure controls and procedures and of financial reporting controls and procedures described above are recorded, stored, maintained and operated under means that are under the exclusive ownership and direct control of such Party or a wholly owned Subsidiary of such Party or its accountants, except as would not reasonably be expected to adversely affect or disrupt, in any material respect, such Party s systems of disclosure controls and procedures and of

financial reporting controls and procedures or the reports generated thereby.

(f) Since the Applicable Date, none of such Party s auditors, such Party s board of directors and the audit committee of the board of directors of such Party has received any oral or written notification of (i) any significant deficiency in the design or operation of its internal controls over financial reporting that are reasonably likely to adversely affect such Party s ability to record, process, summarize and report financial information and has identified for such Party s auditors, such Party s board of directors and the audit committee of the board of directors of such Party any material weakness in internal controls over financial reporting and (ii) any fraud, whether or not material, that involves management or other employees who have a significant role in such Party s internal controls over financial reporting. Since the Applicable Date, no material complaints from any source regarding accounting, internal accounting controls or auditing matters, and no concerns from such Party s employees regarding questionable accounting or auditing matters, have been received by such Party. Since the Applicable Date, no attorney representing such Party or any of its Subsidiaries, whether or not employed by such Party or any of its Subsidiaries, has reported evidence of a material violation of securities Laws or breach of fiduciary duty or similar violation by such Party or any of its officers, directors, employees or agents to such Party s chief legal officer, audit committee (or other committee designated for the purpose) pursuant to the rules adopted pursuant to Section 307 of the Sarbanes-Oxley Act or such Party s policy contemplating such reporting, including in instances not required by those rules.

5.6. Financial Statements. The financial statements of such Party included in the Reports of such Party at the time filed (and, in the case of registration statements and proxy statements, on the dates of effectiveness and the dates of mailing, respectively) complied as to form in all material respects with applicable accounting requirements and with the published rules and regulations of the SEC with respect thereto, were prepared in all material respects in accordance with GAAP during the periods involved (except as may be indicated in the notes thereto or, in the case of unaudited statements, as permitted by Form 10-Q of the SEC), and fairly present in all material respects (subject in the case of unaudited statements to normal, recurring audit adjustments which are not material, and to any other adjustments described therein, including the notes thereto and subject to restatements filed with the SEC prior to the date of this Agreement) the consolidated financial position of such Party and its consolidated Subsidiaries as at the dates thereof and the consolidated results of their operations and cash flows for the periods then ended.

5.7. Absence of Certain Changes or Events. (a) Since January 1, 2018 through the date of this Agreement, except in connection with the negotiation and execution of this Agreement, such Party and its Subsidiaries have conducted their businesses in all material respects in the Ordinary Course.

(b) Since January 1, 2018, there has not been any Effect that has had or would, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect on such Party.

5.8. Litigation and Liabilities.

(a) There are no Proceedings (other than arising from or relating to the Merger or any of the other transactions contemplated by this Agreement) before any Governmental Entity pending against or, to the Knowledge of such Party, threatened in writing against such Party or any of its Subsidiaries, or any of their respective properties or assets, except as would not, individually or in the aggregate, reasonably be expected to (i) have a Material Adverse Effect on such Party or (ii) prevent or materially delay the consummation of the Transactions.

(b) Except for obligations and liabilities (i) reflected or reserved against in such Party s most recent consolidated balance sheets (or the notes thereto) included in such Party s Reports filed prior to the date of this Agreement, (ii) incurred in the Ordinary Course since the date of such Party s most recent consolidated balance sheets included in such Party s Reports filed prior to the date of this Agreement, or (iii) incurred in connection with or contemplated by this Agreement, there are no obligations or liabilities of such Party or any of its Subsidiaries that would be required by GAAP to be set forth on a consolidated balance sheet of such Party, whether or not accrued, contingent or otherwise,

except as would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect on such Party.

Table of Contents

(c) Neither such Party nor any of its Subsidiaries is a party to or subject to the provisions of any material judgment, order, writ, injunction, decree or award of any Governmental Entity, except as would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect on such Party. There has not been since the Applicable Date nor are there currently any internal investigations or inquiries being conducted by such Party, such Party s board of directors (or any committee thereof) or any third party at the request of any of the foregoing concerning any material financial, accounting, tax, conflict of interest, self-dealing, fraudulent or deceptive conduct or other misfeasance or malfeasance issues.

5.9. Employee Benefits.

(a) Section 5.9(a) of such Party s Disclosure Letter sets forth an accurate and complete list of each material Benefit Plan of such Party (except for (i) Benefit Plans that are filed publicly with the SEC and (ii) Non-U.S. Benefit Plans, which list of Non-U.S. Benefit Plans shall be provided within fifteen (15) days following the date of this Agreement).

(b) With respect to each material Benefit Plan of such Party (except, with respect to clauses (i) and (ii), for Benefit Plans that are filed publicly with the SEC), such Party has made available (or, with respect to material Non-U.S. Benefit Plans, will make available within fifteen (15) Business Days following the date of this Agreement) to the other Party, to the extent applicable, accurate and complete copies of (i) the Benefit Plan document, including any amendments thereto, and all related trust documents, insurance contracts or other funding vehicles or (ii) a written description of such Benefit Plan if such plan is not set forth in a written document or such written document is not available prior to the date of this Agreement. With respect to each material Benefit Plan of such Party, such Party has made available to the other party or will make available as promptly as possible after the date of this Agreement (but in no event later than fifteen (15) Business Days following the date of this Agreement), accurate and complete copies of (A) to the extent a written description was provided prior to the date hereof because the Benefit Plan document was unavailable, the Benefit Plan document, including any amendments thereto, (B) all related trust documents, insurance contracts or funding vehicles, (C) the most recently prepared actuarial report and (D) all material correspondence to or from any Governmental Entity received since the Applicable Date with respect to any Benefit Plan of such Party.

(c) (i) Each Benefit Plan (including any related trusts), other than multiemployer plans within the meaning of Section 3(37) of ERISA and Non-U.S. Benefit Plans, has been established, operated and administered in compliance in all material respects with its terms and applicable Laws, including ERISA and the Code, (ii) all contributions or other amounts payable by such Party or any of its Subsidiaries with respect to each Benefit Plan in respect of current or prior plan years have been paid or accrued in accordance with GAAP in all material respects and (iii) there are no pending or, to the Knowledge of such Party, threatened (in writing) claims (other than routine claims for benefits) or Proceedings by a Governmental Entity by, on behalf of or against any Benefit Plan or any trust related thereto that would reasonably be expected to result in any material liability to such Party or any of its Subsidiaries.

(d) With respect to each material ERISA Plan, such Party has made available to the other Party or will make available as promptly as possible after the date of this Agreement (but in no event later than fifteen (15) Business Days following the date of this Agreement), to the extent applicable, accurate and complete copies of (i) the most recent summary plan description together with all summaries of material modifications thereto, (ii) the most recent Internal Revenue Service ( **IRS** ) determination or opinion letter and (iii) the most recent annual report (Form 5500 or 990 series and all schedules and financial statements attached thereto).

(e) Each ERISA Plan that is intended to be qualified under Section 401(a) of the Code has been determined by the IRS to be qualified and the plan s related trust to be exempt from federal income Taxes under Sections 401(a) and 501(a) of the Code, respectively, and to the Knowledge of such Party, nothing has occurred that would adversely affect the qualification or Tax exemption of any such ERISA Plan. With respect to any ERISA Plan, neither such

Party nor any of its Subsidiaries has engaged in a transaction in connection with which

such Party or any of its Subsidiaries reasonably could be subject to either a material civil penalty assessed pursuant to Section 409 or 502(i) of ERISA or a material Tax imposed pursuant to Section 4975 or 4976 of the Code.

(f) No Party or its ERISA Affiliates (i) maintains, sponsors or contributes to, or has within the past six (6) years maintained, sponsored or contributed to, or has any material liability with respect to, any defined benefit plan, whether or not subject to Title IV of ERISA, excluding any multiemployer plan ; or (ii) has an obligation to contribute (as defined in ERISA Section 4212) to a multiemployer plan .

(g) No Controlled Group Liability has been incurred by such Party or its ERISA Affiliates that has not been satisfied in full, and no condition exists that presents a material risk to such Party or its ERISA Affiliates of incurring any such material liability.

(h) Except as required by applicable Law or pursuant to a collective bargaining agreement, no Benefit Plan provides retiree or post-employment medical, disability, life insurance or other welfare benefits to any Person, and none of such Party or any of its Subsidiaries has any obligation to provide such benefits (excluding such Benefit Plan that provides for employer payment or subsidy of COBRA premiums).

(i) Neither the execution and delivery of this Agreement, stockholder or other approval of this Agreement or the consummation of the Transactions could, either alone or in combination with another event, (i) entitle any Employee to severance pay or any increase in severance pay, (ii) accelerate the time of payment or vesting, or increase the amount of compensation due to any such Employee, (iii) directly or indirectly cause either such Party to transfer or set aside any assets to fund any benefits under any Benefit Plan, (iv) otherwise give rise to any liability under any Benefit Plan, (v) limit or restrict the right to merge, terminate or amend any Benefit Plan on or following the Effective Time or (vi) result in any payment (whether in cash or property or the vesting of property) to any disqualified individual (as such term is defined in Treasury Regulation Section 1.280G-1) that would, individually or in combination with any other such payment, constitute an excess parachute payment (as defined in Section 280G(b)(1) of the Code).

(j) Neither such Party nor any of its Subsidiaries has any obligation to provide, and no Benefit Plan or other agreement of such Party of any of its Subsidiaries provides any individual with the right to, a gross up, indemnification, reimbursement or other payment for any excise or additional Taxes, interest or penalties incurred pursuant to Section 409A or Section 4999 of the Code or due to the failure of any payment to be deductible under Section 280G of the Code.

(k) All Benefit Plans that are maintained primarily for the benefit of Employees outside of the United States ( **Non-U.S. Benefit Plans** ) comply in all material respects with their terms, the terms of any collective bargaining, collective labor or works council agreements, and applicable local Law, and to the Knowledge of such Party, all such plans that are intended or required to be funded or book-reserved are funded or book-reserved, as appropriate, based upon reasonable actuarial assumptions and applicable Law. Each Non-U.S. Benefit Plan which, under the Laws of the applicable foreign country, is required to be registered or approved by any Governmental Entity, has been so registered or approved and each Non-U.S. Benefit Plan intended to qualify for special tax treatment meets all the requirements for such treatment. As of the date of this Agreement, there is no material litigation pending or, to the Knowledge of such Party, threatened relating to any Non-U.S. Benefit Plan.

5.10. Labor Matters.

(a) Section 5.10 of such Party s Disclosure Letter sets forth, as of the date of this Agreement, an accurate and complete list of any collective bargaining agreement or other similar material written agreement with a labor union, works council, or similar employee representative group or organization ( **Labor Organization** ) that such Party or its

Subsidiaries is party to, otherwise bound by, or negotiating, as applicable, and copies of such

agreements have been made available to the other Party prior to the date of this agreement or will be made available to the other Party as promptly as practicable following the date of this Agreement (but in no event later than fifteen (15) Business Days following the date of this Agreement). To the Knowledge of such Party, as of the date of this Agreement, there are no activities or Proceedings by any individual, group of individuals, including representatives of any Labor Organizations, seeking to authorize representation of such Party s employees by a Labor Organization or to compel such Party to negotiate on a collective basis with respect to terms and conditions of employment.

(b) As of the date of this Agreement, (i) there is no, and has not been since the Applicable Date, any, strike, lockout, slowdown, work stoppage, unfair labor practice charge or complaint or other labor dispute, or arbitration or grievance pending or, to the Knowledge of such Party, threatened in writing that may interfere with the respective business activities of such Party and its Subsidiaries, (ii) such Party and its Subsidiaries are in compliance with all applicable Laws respecting labor, employment standards, workers compensation, terms and conditions of employment, employment and employment practices, the termination of employment, wages and hours, classification of employees as exempt or non-exempt, immigration, equal employment opportunities (including the prevention of sexual harassment), the provision of meal and rest breaks, pay for all working time, classification of independent contractors, immigration law requirements, and occupational safety and health, and (iii) none of such Party or any of its Subsidiaries has any liability or obligation under the Worker Adjustment and Retraining Notification Act and the regulations promulgated thereunder or any similar state, local or foreign mass layoff or plant closing Law that remains unsatisfied, except, in each of clauses (i), (ii) and (iii), as would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect on such Party.

(c) Except as would not have, and would not reasonably be expected to have, individually or in the aggregate, a Material Adverse Effect on such Party, there have been no written claims or investigations of harassment, discrimination, retaliation or similar actions against any senior manager, officer or director of such Party at any time since the Applicable Date.

5.11. Compliance with Laws; Licenses.

(a) The businesses of such Party and its Subsidiaries have not been since the Applicable Date, and are not being, conducted in violation of any applicable Law, except as would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect on such Party.

(b) Except with respect to regulatory matters covered by Section 7.5, no investigation or review by any Governmental Entity with respect to such Party or any of its Subsidiaries is pending or, to the Knowledge of such Party, threatened in writing, nor has any Governmental Entity indicated an intention to conduct the same, nor has such Party received any notice or communication of material noncompliance with any such Laws that has not been cured or in the process of being cured as of the date of this Agreement, in each case, except as would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect on such Party.

(c) Except as would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect on such Party, (i) such Party and each of its Subsidiaries has obtained and is in compliance with all Licenses necessary for it to own, lease or operate its properties, rights and other assets and to conduct its business and operations as currently conducted in all material respects, (ii) all such Licenses are in full force and effect in all material respects, and (iii) to such Party s Knowledge, there is not currently threatened any revocation, adverse modification or cancellation of any material License.

(d) Except as, individually or in the aggregate, would not reasonably be expected to have a Material Adverse Effect on such Party, since the Applicable Date, such Party and each of its Subsidiaries has at all times conducted all export

transactions in accordance with (i) all applicable U.S. export and re-export controls, including the United States Export Administration Act, Export Administration Regulations, the Arms Export

Control Act and the International Traffic in Arms Regulations, (ii) statutes, executive orders and regulations administered by the U.S. Department of the Treasury s Office of Foreign Assets Control ( **OFAC** ) and the United States Department of State, (iii) import control statutes and regulations administered by the Department of Homeland Security, U.S. Customs and Border Protection, (iv) the anti-boycott regulations administered by the United States Department of Commerce and the U.S. Department of Treasury, and (v) all applicable sanctions, export and import controls and anti-boycott Laws of all other countries in which the business of such Party or any of its Subsidiaries is conducted. Except as, individually or in the aggregate, would not reasonably be expected to have a Material Adverse Effect on such Party, neither such Party nor any of its Subsidiaries has been since the Applicable Date or currently is the subject of a charging letter or penalty notice issued, or to the Knowledge of such Party, an investigation conducted, by a Governmental Entity pertaining to the above statutes or regulations, nor are there any currently pending internal investigations by such Party pertaining to such matters. Neither such Party nor any of its Subsidiaries is currently designated as a sanctioned party under sanctions administered by OFAC, nor are they owned fifty percent (50%) or more by an individual or entity that is so designated. Neither such Party nor any of its Subsidiaries, or, to such Party s Knowledge, any directors, officers, Employees, independent contractors, consultants, agents and other representatives thereof, located, organized or resident in, or doing business in, a country or region that is the target of comprehensive OFAC sanctions (as of the date of this Agreement, including Cuba, Iran, North Korea, Syria and the Crimea region of Ukraine).

(e) Except as, individually or in the aggregate, would not reasonably be expected to have a Material Adverse Effect on such Party, such Party, its Subsidiaries and their respective Representatives are, and since the Applicable Date have been, in compliance in all material respects with: (i) the provisions of the U.S. Foreign Corrupt Practices Act of 1977, as amended (15 U.S.C. §§ 78dd-1, et seq.) ( **FCPA** ), as if its foreign payments provisions were fully applicable to such Party, its Subsidiaries and such Representatives, and (ii) the provisions of all anti-bribery, anti-corruption and anti-money laundering Laws of each jurisdiction in which such Party and its Subsidiaries operate or have operated and in which any agent thereof is conducting or has conducted business involving such Party. No Proceeding by or before any Governmental Entity involving such Party, any of its Subsidiaries or any of their Representatives involving FCPA or any anti-bribery, anti-corruption or anti-money laundering Law is pending or, to the Knowledge of such Party, threatened, except as, individually or in the aggregate, would not reasonably be expected to have a Material Adverse Effect on such Party.

5.12. Takeover Statutes. No fair price , moratorium , control share acquisition or other similar anti-takeover statute or regulation (each, a **Takeover Statute** ) or any anti-takeover provision in such Party s Organizational Documents is applicable to such Party, the shares of Versum Common Stock, in the case of Versum, the shares of Entegris Common Stock, in the case of Entegris, or the Transactions.

5.13. Environmental Matters. Except for those matters that, individually or in the aggregate, have not had and would not reasonably be expected to have a Material Adverse Effect on such Party: (a) such Party and each of its Subsidiaries is, and to the Knowledge of such Party, has been at all prior times, in compliance with all applicable Environmental Laws, which compliance includes the possession of and compliance with Licenses required pursuant to any Environmental Law for it to own, lease or operate its properties, rights and other assets and to conduct its business and operations as currently conducted and all such Licenses are in full force and effect; (b) to the Knowledge of such Party, there is no presence, and there have been no Releases or threatened Releases, of Hazardous Materials on, under, from or affecting any properties or facilities currently or formerly, owned, leased or operated by such Party or any of its Subsidiaries or any predecessor of any of them, under circumstances that would reasonably be expected to result in any claims or liabilities relating to applicable Environmental Laws against such Party or any of its Subsidiaries or otherwise adversely impact such Party or any of its Subsidiaries; (c) to the Knowledge of such Party, neither such Party nor any of its Subsidiaries nor any other Person whose conduct would result in liability to such Party or any of its Subsidiaries, has Released, placed or disposed of any Hazardous Materials at any other location under

circumstances that would reasonably be expected to result in any claims or liabilities relating to applicable Environmental Laws against such Party or any of its Subsidiaries; (d) neither such Party nor any of its Subsidiaries nor, to the Knowledge of such Party any predecessor of any of them, is subject to any order of or with any Governmental Entity, or any indemnity or other

Contract obligation with any other Person, relating to obligations or liabilities under Environmental Laws or regarding Releases of or exposure to any Hazardous Materials; (e) neither such Party nor any of its Subsidiaries has since the Applicable Date received any written claim, notice or complaint from, or is subject to any Proceeding before, any Governmental Entity relating to or alleging noncompliance with or liability under Environmental Laws or regarding Releases of or exposure to any Hazardous Materials, and no such matter is threatened to the Knowledge of such Party; and (f) to the Knowledge of such Party, there are no other circumstances or conditions involving such Party or any of its Subsidiaries that would reasonably be expected to result in any claim, liability, investigation, or cost pursuant to any Environmental Law with respect to such Party or any of its Subsidiaries.

5.14. Tax Matters.

(a) Except for those matters that, individually or in the aggregate, would not reasonably be expected to have a Material Adverse Effect on such Party:

(i) Such Party and each of its Subsidiaries (A) have prepared in good faith and duly and timely filed (taking into account any extension of time within which to file) all Tax Returns required to be filed by any of them with the appropriate Tax authority and all such filed Tax Returns are complete and accurate in all respects; (B) have paid all Taxes that are shown as due on such filed Tax Returns except for Taxes being contested in good faith and for which adequate reserves have been established in accordance with GAAP; (C) have withheld and paid all Taxes required to have been withheld and paid in connection with amounts paid or owing to any Employee, stockholder, creditor, independent contractor or third party (each as determined for Tax purposes); (D) have complied in all respects with all information reporting (and related withholding) and record retention requirements; and (E) have not waived any statute of limitations with respect to Taxes or agreed to any extension of time with respect to a Tax assessment or deficiency.

(ii) No deficiency with respect to an amount of Taxes that have not been accrued on such Party s financial statements has been proposed, asserted or assessed against such Party or any of its Subsidiaries. There are no pending or threatened in writing disputes, claims, audits, examinations or other Proceedings before any Governmental Entity regarding any Taxes of such Party and its Subsidiaries or the assets of such Party and its Subsidiaries.

(iii) Since the Applicable Date, neither such Party nor any of its Subsidiaries has been informed in writing by any jurisdiction that the jurisdiction believes that such Party or any of its Subsidiaries was required to file any Tax Return that was not filed.

(iv) Neither such Party nor any of its Subsidiaries has any liability for Taxes of any Person (other than such Party or any of its Subsidiaries) arising from the application of Treasury Regulation Section 1.1502-6 (or any similar provision of state, local, or non-U.S. Law), as a transferee or successor, or otherwise by operation of Law.

(v) There are no Encumbrances for Taxes (except Taxes not yet due and payable) on any of the assets of such Party or any of its Subsidiaries.

(vi) Neither such Party nor any of its Subsidiaries is a party to or is bound by any Tax sharing, allocation or indemnification agreement or arrangement (other than (A) such an agreement or arrangement exclusively between or among such Party and its Subsidiaries or (B) a commercial agreement or arrangement entered into the primary purpose of which is not Tax sharing, allocation or indemnification).

(vii) Within the past two (2) years, neither such Party nor any of its Subsidiaries has been a distributing corporation or a controlled corporation within the meaning of Section 355(a)(1)(A) of the Code in a distribution of stock intended

to qualify for tax-free treatment under Section 355 of the Code.

Table of Contents

(viii) Neither such Party nor any of its Subsidiaries has participated in a listed transaction within the meaning of Treasury Regulation Section 1.6011-4(b) or any other transaction requiring disclosure under analogous provisions of Tax Law.

(ix) Neither such Party nor any of its Subsidiaries will be required to include a material item of income (or exclude a material item of deduction) in any taxable period (or portion thereof) beginning after the Closing Date as a result of (A) a change in or incorrect method of accounting occurring prior to the Closing Date, (B) a prepaid amount received, or paid, prior to the Closing Date, (C) a closing agreement as described in Section 7121 of the Code (or any similar provision of state, local, or non-U.S. Law) executed on or prior to the Closing Date, or (D) an election under Section 108(i) of the Code (or any similar provision of state, local, or non-U.S. Law).

(x) Neither such Party nor any of its Subsidiaries has made an election pursuant to Section 965(h) of the Code.

(b) Neither such Party nor any of its Subsidiaries has taken or agreed to take any action or has any reason to believe that any conditions exist that could prevent or impede the Merger from qualifying as a reorganization within the meaning of Section 368(a) of the Code.

5.15. Intellectual Property.

(a) Except as would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect on such Party, (i) such Party and its Subsidiaries, each as applicable, exclusively own all right, title and interest to its Company Intellectual Property free and clear of all Encumbrances (except Permitted Encumbrances), and (ii) such Party s Registered Intellectual Property is subsisting and, to the Knowledge of such Party, is not invalid or unenforceable. Since the Applicable Date, no Party has received any written claim or notice from any Person alleging that the Registered Intellectual Property of such Party is invalid or unenforceable, which claim or allegation if proven or established, individually or in the aggregate, would reasonably be expected to have a Material Adverse Effect on such Party.

(b) Except as would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect on such Party, (i) the operation of the respective businesses of such Party or any of its Subsidiaries and the development, manufacture, use, sale, commercialization or other exploitation of any product, service or other offering currently provided by such Party or its Subsidiaries does not infringe, misappropriate or violate and has not since the Applicable Date infringed, misappropriated, or otherwise violated any Intellectual Property of any other Person, and neither such Party nor any of its Subsidiaries has received any written allegation of same, and (ii) to such Party s Knowledge, no Person is infringing, misappropriating or otherwise violating, or has since the Applicable Date infringed, misappropriated or otherwise violated, such Party s Company Intellectual Property, and neither such Party nor any of its Subsidiaries has alleged same in writing.

(c) Except as would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect on such Party, such Party and each of its Subsidiaries has taken commercially reasonable efforts to protect and maintain its Company Intellectual Property, including using commercially reasonable efforts and taking commercially necessary steps to maintain their material trade secrets in confidence.

(d) Except as would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect on such Party, such Party does not distribute or make available any material proprietary software to third parties pursuant to any license that requires the Party to also license or make available to third parties any material source code owned by such Party.

(e) Except as would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect on such Party, the IT Assets used by such Party or any of its Subsidiaries in the conduct of the

business (i) have not malfunctioned or failed since the Applicable Date and (ii) are sufficient for the current needs of the businesses of such Party and its Subsidiaries.

(f) Except as would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect on such Party, such Party and each of its Subsidiaries has taken commercially reasonable efforts to (i) protect and maintain the confidentiality, integrity and security of its IT Assets and the information stored or contained therein or transmitted thereby from any unauthorized use, access, interruption or modification by any Person, including the implementation of reasonable backup and disaster recovery technology processes and (ii) prevent the introduction of disabling codes or instructions, spyware, Trojan horses, worms, viruses or other software routines that permit or cause unauthorized access to, or disruption, impairment, disablement, or destruction of, software, data or other materials. Except as would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect on such Party, no Person has gained unauthorized access to any IT Assets owned, used, or held for use by such Party or any of its Subsidiaries or the information stored or contained therein or transmitted thereby.

(g) Except as would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect on such Party, (i) such Party and each of its Subsidiaries is in compliance, and has since the Applicable Date complied, with all applicable Laws and its posted policies relating to the collection, storage, use, transfer and any other processing of any Personal Data collected or used by or on behalf of such Party or its Subsidiaries; and (ii) such Party and each of its Subsidiaries has, since the Applicable Date, taken commercially reasonable steps to ensure that all Personal Data is protected against loss and unauthorized access, use, modification or disclosure, and there has been no incident of same.

5.16. Insurance. All fire and casualty, general liability, business interruption, product liability, sprinkler and water damage, workers compensation and employer liability, directors , officers and fiduciaries policies and other liability insurance policies ( **Insurance Policies** ) maintained by such Party or any of its Subsidiaries are with reputable insurance carriers, provide adequate coverage for all normal risks incident to the business of such Party and its Subsidiaries and their respective properties and assets, and are in character and amount at least equivalent to that carried by Persons engaged in similar businesses and subject to the same or similar perils or hazards, in each case, except as would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect on such Party. Each Insurance Policy is in full force and effect and all premiums due with respect to all Insurance Policies have been paid, and neither such Party nor any of its Subsidiaries has taken any action or failed to take any action that (including with respect to the Transactions), with notice or lapse of time or both, would constitute a breach or default, or permit a termination of any of the Insurance Policies, in each case, except as would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect on such Party.

5.17. Material Contracts.

(a) Except for this Agreement, as of the date hereof, none of such Party or its Subsidiaries is a party to or bound by any Contract (other than any purchase orders and other than, except in the case of Section 5.17(a)(i), any lease, sublease, rental or occupancy agreement, license or other Contract that, in each case, provides for the ownership of, leasing of, title to, use of, or any leasehold or other interest in any Real Property, any Benefit Plan or Contract relating to Insurance Policies):

(i) that is a material contract (as such term is defined in Item 601(b)(10) of Regulation S-K of the SEC);

(ii) that materially limits, curtails or restricts or purports to materially limit, curtail or restrict, or, in the case of the Combined Company, would or would purport to materially limit, curtail, or restrict, either (A) the type of business in which such Party or the Combined Company or any of their respective Subsidiaries or Affiliates may engage or the

locations in which any of them may so engage in any business or (B) the ability of

such Party or the Combined Company or any of their respective Subsidiaries or Affiliates to hire or solicit for hire for employment any individual or group as would be material to such Party or the Combined Company and their respective Subsidiaries or Affiliates, taken as a whole, except for non-disclosure or confidentiality agreements entered into in connection with potential acquisitions or dispositions;

(iii) for any joint venture, partnership or similar arrangement, in each case that is material to such Party and its Subsidiaries, taken as a whole;

(iv) that is an indenture, credit agreement, loan agreement, security agreement, guarantee, note, mortgage or other agreement providing for or guaranteeing Indebtedness of any Person in excess of $50 million or that becomes due and payable upon, or provides a right of termination or acceleration as a result of, the consummation of the Transactions, other than Contracts between or among or for the benefit of such Party and any of its wholly owned Subsidiaries or between or among any such wholly owned Subsidiaries and Contracts involving credit facilities of less than $50 million for international operations;

(v) that is with any manufacturer, vendor or other supplier with respect to which manufacturer, vendor or other supplier the aggregate annual spend for the year ended December 31, 2018 exceeded $10 million for such Party and its Subsidiaries, taken as a whole;

(vi) is an acquisition agreement, asset purchase agreement, sale agreement, purchase agreement, stock purchase agreement, put agreement, call agreement or other similar agreement pursuant to which (A) such Party or any of its Subsidiaries would reasonably be expected to be obligated to pay total consideration including assumption of debt after the date of this Agreement in excess of $25 million, (B) any third party has the right to acquire any assets of such Party or any of its Subsidiaries with a fair market value or purchase price of more than $25 million, or (C) any third party has the right to acquire any interests in such Party or any of its Subsidiaries, other than, in the case of clauses (A) and (B), sales of goods or services in the Ordinary Course;

(vii) between such Party and its Subsidiaries, on the one hand, and such Party s Affiliates (other than Subsidiaries of such Party) or other Persons, on the other hand, that would be required to be disclosed under Item 404 of Regulation S-K of the SEC;

(viii) that is related to material Intellectual Property or material IT Assets, excluding non-exclusive licenses (A) entered into in the Ordinary Course or (B) to commercially available software with aggregate payments of less than $5 million. Each such Contract described in this Section 5.17(a), together with all Contracts filed as exhibits to such Party s Reports, is referred to herein as a **Material Contract** .

(b) A copy of each Material Contract, and any amendments thereto, of such Party or its Subsidiaries entered into prior to the date of this Agreement has been made available to the other Party. Except as, individually or in the aggregate, would not reasonably be expected to have a Material Adverse Effect on such Party, (i) each of the Material Contracts is binding on such Party or its Subsidiaries, as the case may be, and to the Knowledge of such Party, each other party thereto, in accordance with its terms and subject to the Bankruptcy and Equity Exception, and is in full force and effect, and (ii) each of such Party and each of its Subsidiaries (to the extent they are party thereto or bound thereby) and, to such Party s Knowledge, each other party thereto has performed all obligations required to be performed by it under each Material Contract. Except as, individually or in the aggregate, would not reasonably be expected to have a Material Adverse Effect on such Party, (A) each of such Party and each of its Subsidiaries is not (with or without notice, lapse of time or both) in breach or default thereunder and, to the Knowledge of such Party, no other party to any Material Contract is (with or without notice, lapse of time or both) in breach or default thereunder, and (B) neither such Party nor any of its Subsidiaries has received written notice from the other party to any Material

Contract of any intention to cancel, terminate, materially change the scope of rights and obligations under or not to renew such Material Contract.

5.18. Title to Assets. Except as would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect on such Party, (i) such Party has good and marketable title to, or in the case of leased

assets, valid leasehold interests in, all of its assets, tangible or intangible, free and clear of any Encumbrances other than Permitted Encumbrances, (ii) such Party or one of its Subsidiaries owns or leases all tangible personal property used in or necessary to conduct its business as currently conducted by such Party and (iii) each such item of tangible personal property is in all respects in good operating condition and repair, ordinary wear and tear excepted.

5.19. Real Property.

(a) Except as would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect on such Party, with respect to the Owned Real Property of such Party, (i) such Party or one of its Subsidiaries, as applicable, has good and marketable title to such Owned Real Property, free and clear of any Encumbrance except for Permitted Encumbrances, and (ii) there are no outstanding options or rights of first refusal to purchase such Owned Real Property, or any portion thereof or interest therein.

(b) With respect to the Leased Real Property of such Party, the lease or sublease for such property is valid, legally binding, enforceable and in full force and effect, and none of such Party or any of its Subsidiaries is in breach of or default under such lease or sublease, and no event has occurred, which, with notice, lapse of time or both, would constitute a breach or default by any of such Party or its Subsidiaries or permit termination, modification or acceleration by any third party thereunder, except in each case as would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect on such Party.

5.20. Affiliate Transactions. To the Knowledge of such Party, there are not, as of the date hereof, any related party transactions, agreements, arrangements or understandings between such Party or its Subsidiaries, on the one hand, and such Party s Affiliates (other than wholly owned Subsidiaries of such Party) or other Persons, on the other hand, in each case, that would be required to be disclosed by such Party under Item 404 of Regulation S-K under the Securities Act.

5.21. No Other Representations or Warranties; Non-Reliance. Except for the representations and warranties made by such Party in this Article V and Article VI and in any certificate delivered by such Party pursuant to Article VII, neither such Party nor any other Person makes any express or implied representation or warranty with respect to such Party or any of its Affiliates or any of their respective businesses, operations, assets, liabilities, conditions (financial or otherwise) or prospects in connection with this Agreement or the Transactions, and such Party expressly disclaims any such other representations or warranties. Each Party expressly disclaims reliance upon any representations, warranties or statements relating to a Party or its Subsidiaries whatsoever, express or implied, beyond those expressly given by such Party in this Article V and Article VI and in any certificate delivered by such Party pursuant to Article VII. In particular, without limiting the foregoing, neither such Party nor any other Person makes or has made, and each Party acknowledges that that neither such Party nor any other Person has made, any representation or warranty to any other Party or any of such other Party s Affiliates or Representatives with respect to (a) any financial projection, forecast, estimate, budget or prospect information relating to such Party, any of its Affiliates or any of their respective businesses that may have been made available to a Party or any of its Representatives (including in certain data rooms, virtual rooms, management presentations or in any other form in expectation of, or in connection with, the Transactions) or (b) except for the representations and warranties made by such Party in this Article V and Article VI and in any certificate delivered by such Party pursuant to Article VII, any oral or written information made available to any other Party or any of such other Party s Affiliates or Representatives in the course of their evaluation of such Party, the negotiation of this Agreement or in the course of the Transactions. Notwithstanding the foregoing, nothing in this Section 5.21 shall limit a Party s remedies in the event of common law fraud arising from the express representations and warranties made by any other Party in this Article V and Article VI.

Table of Contents

ARTICLE VI

INDIVIDUAL REPRESENTATIONS AND WARRANTIES OF VERSUM AND ENTEGRIS

Except as set forth in the Reports of Versum or Entegris, as applicable, filed with or furnished to the SEC during the period from January 1, 2018 through the Business Day prior to the date of this Agreement (excluding any disclosures set forth or referenced in any risk factor section, in any section relating to forward-looking disclosure, or in any other section to the extent they are forward-looking statements or cautionary, predictive or forward-looking in nature) or in the corresponding sections or subsections of the Entegris Disclosure Letter or Versum Disclosure Letter delivered to the other Party concurrently with the execution and delivery of this Agreement (it being agreed that for purposes of the representations and warranties set forth in this Article VI, disclosure of any item in any section or subsection of the Entegris Disclosure Letter or Versum Disclosure Letter, as applicable, shall be deemed disclosure with respect to any other section or subsection of the Entegris Disclosure Letter or Versum Disclosure Letter, as applicable, to which the relevance of such item is reasonably apparent), Entegris hereby represents and warrants to Versum, in respect of Section 6.1, Section 6.2, Section 6.3 and Section 6.4 and Versum hereby represents and warrants to Entegris, in respect of Section 6.5, Section 6.6, Section 6.7 and Section 6.8 that:

6.1. Entegris Capital Structure. In the case of Entegris, the authorized share capital of Entegris consists of 400,000,000 shares of Entegris Common Stock, of which 135,144,839 shares (inclusive of zero restricted stock awards granted under the Entegris Stock Plan (each, an **Entegris Restricted Share**) and 202,400 shares held by Entegris in its treasury) were issued and outstanding as of the close of business on January 25, 2019, and 5,000,000 shares of preferred stock, par value $0.01 per share, of Entegris (**Entegris Preferred Stock**), of which no shares were issued and outstanding as of January 25, 2019. Entegris holds 202,400 shares of its capital stock in its treasury as of the close of business on January 25, 2019. All of the outstanding shares of Entegris Common Stock have been, and all shares of Entegris Common Stock to be issued pursuant to this Agreement will be, duly authorized, validly issued, fully paid and nonassessable and free of preemptive rights, and none of the shares of Entegris Common Stock to be issued pursuant to this Agreement will be issued in violation of any applicable Laws or any preemptive or similar rights. Entegris has no shares of Entegris Common Stock or Entegris Preferred Stock reserved for issuance, except that, as of January 25, 2019, there were (a) 8,743,910 shares of Entegris Common Stock reserved for issuance under the Entegris Stock Plan, (b) 1,410,441 shares of Entegris Common Stock reserved for issuance upon the exercise of outstanding options to purchase Entegris Common Stock (each, an **Entegris Option**) having a weighted average exercise price of $18.22 per share, (c) 1,516,984 shares of Entegris Common Stock reserved for issuance upon the settlement or vesting of outstanding Entegris restricted stock units granted under the Entegris Stock Plan (each, an **Entegris RSU**), (d) 377,496 shares of Entegris Common Stock reserved for issuance upon the settlement or vesting of outstanding performance stock units granted under the Entegris Stock Plan (each, an **Entegris PSU**, together with each Entegris Restricted Share, Entegris Option, Entegris RSU and Entegris PSU, the **Entegris Equity Awards**) (assuming achievement of applicable performance goals at maximum value) and (e) 1.9 million shares of Entegris Common Stock reserved for issuance under the Entegris ESPP. Each of the outstanding shares of capital stock or other securities of each of Entegris s Subsidiaries is duly authorized, validly issued, fully paid and nonassessable, and each of the outstanding shares of capital stock or other securities of each of Entegris s Significant Subsidiaries is owned beneficially and of record by Entegris or by a direct or indirect wholly owned Subsidiary of Entegris, free and clear of any pledge, lien, charge, option, hypothecation, mortgage, security interest, adverse right, restriction, prior assignment, license, sublicense or any other encumbrance of any kind or nature whatsoever, whether contingent or absolute, or any agreement, option, right or privilege (whether by Law, Contract or otherwise) capable of becoming any of the foregoing (excluding such transfer restrictions of general applicability as may be provided under the Securities Act, the blue sky Laws of the various States of the United States or similar Law of other applicable jurisdictions, an **Encumbrance**, and any action of correlative meaning, to **Encumber**). As of the date of this Agreement, except as set forth in this Section 6.1, there are no outstanding subscriptions, options, warrants, puts, call

agreements, understandings, claims or other commitments or rights of any type relating to the issuance, sale or transfer by Entegris of any equity securities of Entegris, nor

are there outstanding any securities which are convertible into or exchangeable for any shares of capital stock of Entegris and neither Entegris nor any of its Subsidiaries has any obligation to issue any additional securities or to pay for or repurchase any securities of Entegris. The shares of Entegris Common Stock are, and the shares of Entegris Common Stock to be issued pursuant to this Agreement will be, registered under the Exchange Act. Since January 25, 2019 and through the date of this Agreement, Entegris has not (A) issued any shares of Entegris Common Stock (other than upon the exercise or settlement (as applicable) of Entegris Options, Entegris RSUs or Entegris PSUs outstanding as of January 25, 2019 or (B) granted any Entegris Equity Awards or similar awards. Entegris does not have outstanding any bonds, debentures, notes or other obligations the holders of which have the right to vote (or convertible into or exercisable for securities having the right to vote) with the stockholders of Entegris on any matter.

6.2. Entegris Recommendation and Fairness. In the case of Entegris, the Entegris Board has, at a meeting duly called and held at which all directors of Entegris were present, duly and unanimously adopted resolutions (a) determining that this Agreement and the Transactions are fair to, and in the best interests of, Entegris and the holders of shares of Entegris Common Stock, (b) approving and declaring advisable this Agreement and the Transactions, including the Merger, on the terms and subject to the conditions set forth in this Agreement, (c) directing that the Share Issuance and this Agreement be submitted to the holders of shares of Entegris Common Stock for their approval and adoption, and the Charter Amendment be submitted to the holders of shares of Entegris Common Stock for their adoption and (d) recommending that the holders of shares of Entegris Common Stock vote in favor of the adoption of this Agreement and the approval of the Share Issuance on the terms and subject to the conditions set forth in this Agreement, and in favor of the adoption of the Charter Amendment (the **Entegris Recommendation**), which resolutions have not been subsequently rescinded, modified or withdrawn in any way, except as may be permitted by Section 7.2(e)(ii) or Section 7.2(e)(iii). The Entegris Board has received the opinion of its financial advisor, Morgan Stanley & Co. LLC, to the effect that, as of the date of such opinion, and based upon and subject to the various assumptions made, procedures followed, matters considered, and qualifications and limitations on the scope of the review undertaken by Morgan Stanley & Co. LLC set forth therein, the Exchange Ratio is fair from a financial point of view, to Entegris.

6.3. Entegris Brokers and Finders. Neither Entegris nor any of its Subsidiaries nor any of their respective officers or directors has employed any broker or finder or incurred any liability for any brokerage fees, commissions or finder s fees in connection with the Transactions, except that Entegris has engaged Morgan Stanley & Co. LLC as its financial advisor, the fees and expenses of which will be paid by Entegris.

6.4. Entegris Voting Requirements. The Requisite Entegris Vote and the Entegris Charter votes are the only votes of holders of any securities of Entegris and its Subsidiaries necessary to approve the Transactions.

6.5. Versum Capital Structure. In the case of Versum, the authorized share capital of Versum consists of 250,000,000 shares of Versum Common Stock, of which 109,111,147 shares were issued and outstanding as of the close of business on January 25, 2019, and 25,000,000 shares of preferred stock, par value $0.01 per share, of Versum (**Versum Preferred Stock**), of which no shares were issued and outstanding as of the date of this Agreement. Versum holds no shares of its capital stock in treasury as of the close of business on January 25, 2019. All of the outstanding shares of Versum Common Stock have been duly authorized and are validly issued, fully paid and nonassessable and free of preemptive rights. Versum has no shares of Versum Common Stock or Versum Preferred Stock reserved for issuance, except that, as of January 25, 2019, there were (a) 6,064,234 shares of Versum Common Stock reserved for issuance under the Versum Stock Plan, (b) 455,784 shares of Versum Common Stock reserved for issuance upon the exercise of outstanding Versum Options, and such Versum Options have a weighted average exercise price of $18.66 per share, (c) 495,873 shares of Versum Common Stock reserved for issuance upon the settlement or vesting of outstanding Versum RSUs and Prior Plan Versum RSUs, (d) 1,140,509 shares of Versum Common Stock reserved for issuance upon the settlement or vesting of outstanding Versum PSUs (assuming achievement of applicable

performance goals at maximum value), and (e) 3,170 shares of Versum Common Stock reserved for issuance upon the settlement or vesting of outstanding Versum DSUs. Each of the outstanding shares of capital stock or other securities of each of

Versum s Subsidiaries is duly authorized, validly issued, fully paid and nonassessable, and each of the outstanding shares of capital stock or other securities of each of Versum s Significant Subsidiaries is owned beneficially and of record by Versum or by a direct or indirect wholly owned Subsidiary of Versum, free and clear of any Encumbrance. As of the date of this Agreement, except as set forth in this Section 6.5, there are no outstanding subscriptions, options, warrants, puts, call agreements, understandings, claims or other commitments or rights of any type relating to the issuance, sale or transfer by Versum of any equity securities of Versum, nor are there outstanding any securities which are convertible into or exchangeable for any shares of capital stock of Versum and neither Versum nor any of its Subsidiaries has any obligation to issue any additional securities or to pay for or repurchase any securities of Versum. The shares of Versum Common Stock are registered under the Exchange Act. Since January 25, 2019 and through the date of this Agreement, Versum has not (A) issued any shares of Versum Common Stock (other than upon the exercise or settlement of Versum Equity Awards outstanding as of January 25, 2019) or (B) granted any Versum Equity Awards or similar awards. Versum does not have outstanding any bonds, debentures, notes or other obligations the holders of which have the right to vote (or convertible into or exercisable for securities having the right to vote) with the stockholders of Versum on any matter. Section 6.5 of the Versum Disclosure Letter sets forth, as of the date of this Agreement, the amount of cash dividends accrued with respect to Versum Prior Plan RSUs.

6.6. Versum Recommendation and Fairness. In the case of Versum, the Versum Board has, at a meeting duly called and held at which all directors of Versum were present, duly and unanimously adopted resolutions (a) determining that this Agreement and the transactions contemplated by this Agreement, including the Merger, are fair to, and in the best interests of, Versum and the holders of shares of Versum Common Stock, (b) approving and declaring advisable this Agreement and the transactions contemplated by this Agreement, including the Merger, on the terms and subject to the conditions set forth in this Agreement (c) directing that this Agreement be submitted to the holders of shares of Versum Common Stock for their adoption, and (d) resolving to recommend that the holders of shares of Versum Common Stock vote in favor of the adoption of this Agreement (the **Versum Recommendation** ), which resolutions have not been subsequently rescinded, modified or withdrawn in any way, except as may be permitted by Section 7.2(e)(ii) or Section 7.2(e)(iii). The Versum Board has received the opinion of its financial advisor, Lazard Frères & Co. LLC, to the effect that, as of the date thereof and based upon and subject to the limitations, qualifications and assumptions set forth therein, the Exchange Ratio is fair from a financial point of view, as of the date of such opinion, to the holders of the outstanding shares of Versum Common Stock (other than holders of Excluded Shares).

6.7. Versum Brokers and Finders. Neither Versum nor any of its Subsidiaries nor any of their respective officers or directors has employed any broker or finder or incurred any liability for any brokerage fees, commissions or finder s fees in connection with the Transactions, except that Versum has engaged Lazard Frères & Co. LLC as its financial advisor, the fees and expenses of which will be paid by Versum.

6.8. Versum Voting Requirements. The Requisite Versum Vote is the only vote of holders of any securities of Versum and its Subsidiaries necessary to approve the Transactions.

ARTICLE VII

COVENANTS

7.1. Interim Operations.

(a) Versum and Entegris each covenant and agree as to itself and its Subsidiaries that, after the date of this Agreement and prior to the Effective Time (unless Versum or Entegris, as applicable, shall otherwise approve in writing (which approval shall not be unreasonably withheld, conditioned or delayed)), and except as otherwise expressly contemplated by this Agreement or as set forth in Section 7.1(a) of such Party s Disclosure Letter, (i) the

business of it and its Subsidiaries shall be conducted in all material respects in the Ordinary Course and

(ii) to the extent consistent therewith, it and its Subsidiaries shall use their respective commercially reasonable efforts to preserve their business organizations intact and maintain existing relations and goodwill with Governmental Entities, customers, suppliers, licensors, licensees, distributors, creditors, lessors, Employees and business associates and keep available the services of its and its Subsidiaries present officers, Employees and agents, except as otherwise expressly contemplated by this Agreement.

(b) Without limiting the generality of and in furtherance of Section 7.1(a), from the date of this Agreement until the Effective Time, except as otherwise (w) expressly contemplated by this Agreement, (x) required by applicable Law, (y) as approved in writing by the other Party (which approval shall not be unreasonably withheld, conditioned or delayed) or (z) set forth in Section 7.1(b) of such Party s Disclosure Letter, each Party, on its own account, shall not and shall cause its Subsidiaries not to:

(i) make or propose any change to such Party s Organizational Documents or, except for amendments that would both not materially restrict the operations of such Party s businesses and not reasonably be expected to prevent, materially delay or materially impair the ability of such Party to consummate the Transactions, the Organizational Documents of any of such Party s Subsidiaries;

(ii) other than in the Ordinary Course, except for any such transactions among its direct or indirect wholly owned Subsidiaries, (A) merge or consolidate itself or any of its Subsidiaries with any other Person, or (B) restructure, reorganize or completely or partially liquidate;

(iii) acquire assets outside of the Ordinary Course from any other Person (A) with a fair market value or purchase price in excess of $75 million in the aggregate in any transaction or series of related transactions (including incurring any Indebtedness related thereto), in each case, including any amounts or value reasonably expected to be paid in connection with a future earn-out, purchase price adjustment, release of holdback or similar contingent payment obligation, or (B) that would reasonably be expected to prevent, materially delay or materially impair the ability of such Party to consummate the Transactions, in each case, other than acquisitions of inventory or other goods in the Ordinary Course and transactions among such Party and its direct or indirect wholly owned Subsidiaries or among such Party s direct or indirect wholly-owned Subsidiaries;

(iv) issue, sell, pledge, dispose of, grant, transfer, encumber, or authorize the issuance, sale, pledge, disposition, grant, transfer, lease, license, guarantee or Encumbrance of, or otherwise enter into any Contract or understanding with respect to the voting of, any shares of its capital stock or of any of its Subsidiaries (other than the issuance of shares (A) by its direct or indirect wholly owned Subsidiary to it or another of its direct or indirect wholly owned Subsidiaries, (B) in respect of equity-based awards outstanding as of the date of this Agreement, or (C) granted in accordance with Section 7.1(b)(xvi) or pursuant to the Entegris ESPP, in each of clauses (B) and (C), in accordance with their terms and, as applicable, the plan documents as in effect on the date of this Agreement), or securities convertible or exchangeable into or exercisable for any shares of such capital stock, or any options, warrants or other rights of any kind to acquire any shares of such capital stock or such convertible or exchangeable securities;

(v) create or incur any Encumbrance (other than any Permitted Encumbrances) over any material portion of such Party s and its Subsidiaries consolidated properties and assets that is not incurred in the Ordinary Course on any of its assets or any of its Subsidiaries, except for Encumbrances (A) that are required by or automatically effected by Contracts in place as of the day hereof, (B) that do not materially detract from the value of such assets or (C) that do not materially impair the operations of such Party or any of its Subsidiaries;

(vi) make any loans, advances, guarantees or capital contributions to or investments in any Person (other than to or from Versum and any of its direct or indirect wholly owned Subsidiaries or to or from Entegris and any of its direct or

indirect wholly owned Subsidiaries, as applicable, or in accordance with Section 7.1(b)(xvi)) in excess of $10 million in the aggregate;

(vii) declare, set aside, make or pay any dividend or other distribution, payable in cash, stock, property or otherwise, with respect to any of its capital stock (except for dividends paid by any direct or indirect

wholly owned Subsidiary to it or to any other direct or indirect wholly owned Subsidiary) or modify in any material respect its dividend policy; provided, that (A) Entegris may make, declare and pay one regular quarterly cash dividend in each fiscal quarter in an amount per share of up to $0.07 per quarter with a record date consistent with the record date for each quarterly period and (B) Versum may make, declare and pay one regular quarterly cash dividend in each fiscal quarter in an amount per share of up to $0.08 per quarter and with a record date consistent with the record date for each quarterly period, in each case, solely to the extent (I) such Party has given the other Party sufficient notice prior to the declaration date to enable the Parties to coordinate dividend payments in accordance with to Section 7.16 and (II) such payment is coordinated pursuant to, and permitted by, Section 7.16;

(viii) reclassify, split, combine, subdivide or redeem, purchase (through such Party s share repurchase program or otherwise) or otherwise acquire, directly or indirectly, any of its capital stock or securities convertible or exchangeable into or exercisable for any shares of its capital stock, other than with respect to (A) the capital stock or other equity interests of a direct or indirect wholly owned Subsidiary of such Party or (B) the acquisition of shares of Versum Common Stock or Entegris Common Stock, as applicable, tendered by Employees in connection with a cashless exercise of Versum Options or Entegris Options, as applicable, outstanding as of the date hereof or in order to pay Taxes in connection with the exercise or vesting of Versum equity awards or Entegris equity awards, as applicable, outstanding as of the date hereof or granted in accordance with Section 7.1(b)(xvi), pursuant to the terms of the Versum Stock Plan or Entegris Stock Plan, as applicable, and the applicable award agreement, in the Ordinary Course;

(ix) except to the extent expressly provided by, and consistent with, Section 7.1(b)(ix) of such Party s Disclosure Letter, make or authorize any payment of, or accrual or commitment for, capital expenditures, except any such expenditure (A) not in excess of $25 million in the aggregate during any consecutive twelve (12) month period (other than capital expenditures within the thresholds set forth in Section 7.1(b)(ix) of such Party s Disclosure Letter), (B) expenditures not in excess of $10 million (net of insurance proceeds) in the aggregate that such Party reasonably determines are necessary to avoid a material business interruption or maintain the safety and integrity of any asset or property or (C) paid by any direct or indirect wholly owned Subsidiary to such Party or to any other direct or indirect wholly owned Subsidiary of such Party, in each case in response to any unanticipated and subsequently discovered events, occurrences or developments (provided that such Party will use its reasonable best efforts to consult with the other Party prior to making or agreeing to any such capital expenditure);

(x) other than in the Ordinary Course, enter into any Contract that would have been a Material Contract had it been entered into prior to this Agreement, adversely amend, modify, supplement or waive, terminate, assign, convey, Encumber or otherwise transfer, in whole or in part, rights or interest pursuant to or in any Material Contract other than (A) expirations and renewals of any such Contract in the Ordinary Course in accordance with the terms of such Contract, (B) non-exclusive licenses, covenants not to sue, releases, waivers or other non-exclusive rights under Intellectual Property owned by Versum and its Subsidiaries or Entegris or any of its Subsidiaries, as applicable, in each case, granted in the Ordinary Course, or (C) any agreement among such Party and its direct or indirect wholly owned Subsidiaries or among such Party s direct or indirect wholly owned Subsidiaries;

(xi) other than in the Ordinary Course or with respect to amounts that are not material to such Party and its Subsidiaries, taken as a whole, cancel, modify or waive any debts or claims held by it or any of its Subsidiaries or waive any rights held by it or any of its Subsidiaries except debts or claims among such Party and its direct or indirect wholly owned Subsidiaries or among such Party s direct or indirect wholly owned Subsidiaries;

(xii) settle or compromise, or offer or propose to settle or compromise any material Proceeding, including before a Governmental Entity, except in accordance with the parameters set forth in Section 7.1(b)(xii) of such Party s Disclosure Letter; provided that no such settlement or compromise, or offer in respect thereof,

may involve any injunctive or other non-monetary relief which, in either case, imposes any material restrictions on the business operations of such Party and its Subsidiaries or Affiliates, or, after the Effective Time, the Combined Company;

(xiii) materially amend any material financial accounting policies or procedures, except as required by changes to GAAP;

(xiv) enter into any material closing agreement with respect to Taxes, settle any material Tax claim, audit, assessment or dispute materially in excess of the amount reserved therefore, surrender any right to claim a refund of a material amount of Taxes, or fail to file when due (taking into account any available extensions) any material Tax Return;

(xv) transfer, sell, lease, divest, cancel, abandon, allow to lapse or expire or otherwise dispose of, or permit or suffer to exist the creation of any Encumbrance upon, any assets (tangible or intangible), product lines or businesses material to it and its Subsidiaries, taken as a whole, including capital stock of any of its Subsidiaries, except in connection with (A) sales of or non-exclusive licenses of the foregoing provided in the Ordinary Course, (B) sales of obsolete assets, (C) sales, leases, licenses or other dispositions of assets (not including services) with a fair market value not in excess of $15 million in the aggregate other than pursuant to Material Contracts in effect prior to the date of this Agreement, or entered into after the date of this Agreement in accordance with this Agreement and (D) sales among such Party and its direct or indirect wholly owned Subsidiaries or among such Party s direct or indirect wholly owned Subsidiaries;

(xvi) except as required by the terms of any Benefit Plan as in effect on the date hereof, as permitted under this Agreement or as required by applicable Law, increase or change the compensation or benefits payable to any Employee other than in the Ordinary Course; provided that, notwithstanding the foregoing, except as expressly disclosed in Section 7.1(b)(xvi) of such Party s Disclosure Letter or required pursuant to a Versum Benefit Plan or Entegris Benefit Plan, as applicable, in effect as of the date of this Agreement, the Parties shall not: (A) grant any new long-term incentive or equity-based awards or amend or modify the terms of any such outstanding awards under any Versum Benefit Plan or Entegris Benefit Plan, as applicable, (B) grant any retention or transaction bonuses, (C) increase or change the compensation or benefits payable to any executive officer (other than (x) changes in health and welfare benefits that are generally applicable to all salaried Employees in the Ordinary Course or (y) increases in the base salaries and benefits of any executive officer in the Ordinary Course), (D) terminate, enter into, amend or renew (or communicate any intention to take such action) any material Benefit Plan, other than routine amendments to health and welfare plans (other than severance plans) that do not materially increase benefits or result in a material increase in administrative costs, or, other than as permitted by Section 7.1(b)(xvi) of such Party s Disclosure Letter, adopt any compensation or benefit arrangement that would be a material Benefit Plan if it were in existence as of the date of this Agreement, (E) accelerate the vesting of any compensation for the benefit of any Employee, (F) increase or change the severance terms applicable to any Employee, (G) take any action to fund or secure the payment of any amounts under any Benefit Plan, (H) other than as required by GAAP, change any assumptions used to calculate funding or contribution obligations under any Benefit Plan, or increase or accelerate the funding rate in respect of any Benefit Plan, or (I) terminate the employment of any executive officer (other than for cause) or hire any new executive officer (other than as a replacement hire receiving substantially similar terms of employment); provided, that, to the extent that a Party intends to hire an individual to replace a named executive officer of such Party, such Party shall first consult in good faith with the other Party prior to, and with respect to, the hiring of such individual;

(xvii) recognize any Labor Organization as the representative of any of the employees of the Party or its Subsidiaries, or become a party to, establish, adopt, amend, commence negotiations for or terminate any collective bargaining agreement or other similar written agreement with a Labor Organization, in each case, other than in the

Ordinary Course or as required by applicable Law;

(xviii) incur any Indebtedness (including the issuance of any debt securities, warrants or other rights to acquire any debt security) or guarantee any such Indebtedness, except for (A) Indebtedness for borrowed money incurred in the Ordinary Course under Versum s or Entegris s, as applicable, revolving credit facilities and other lines of credit existing as of the date of this Agreement, (B) guarantees by Versum or any direct or indirect wholly owned Subsidiary of Versum of Indebtedness of Versum or any other direct or indirect wholly owned Subsidiary of Versum, (C) guarantees by Entegris or any direct or indirect wholly owned Subsidiary of Entegris of Indebtedness of Entegris or any other direct or indirect wholly owned Subsidiary of Entegris, (D) Indebtedness incurred in connection with a refinancing or replacement of existing Indebtedness (but in all cases which refinancing or replacement shall not increase the aggregate amount of Indebtedness permitted to be outstanding thereunder and in each case on customary commercial terms consistent in all material respects with the Indebtedness being refinanced or replaced), (E) Indebtedness incurred pursuant to letters of credit, performance bonds or other similar arrangements in the Ordinary Course, (F) interest, exchange rate and commodity swaps, options, futures, forward contracts and similar derivatives or other hedging Contracts (1) not entered for speculative purposes and (2) entered into in the Ordinary Course and in compliance with its risk management and hedging policies or practices in effect on the date of this Agreement (G) Indebtedness incurred by mutual agreement of the Parties in accordance with Section 7.7 or (H) Indebtedness incurred among such Party and its direct or indirect wholly owned Subsidiaries or among such Party s direct or indirect wholly owned Subsidiaries;

(xix) convene any special meeting (or any adjournment or postponement thereof) of each Party s respective stockholders other than the Versum Stockholders Meeting or Entegris Stockholders Meeting, as applicable; or

(xx) agree or commit to do any of the foregoing.

(c) Nothing contained in this Agreement shall give Versum or Entegris, directly or indirectly, the right to control or direct the other Party s operations prior to the Effective Time. Prior to the Effective Time, each Party will exercise, consistent with the terms and conditions of this Agreement, complete control and supervision over its and its Subsidiaries respective operations. Notwithstanding anything in this Agreement to the contrary, no consent of Versum or Entegris shall be required with respect to any matter set forth in this Section 7.1 or elsewhere in this Agreement to the extent that the requirement of such consent would, upon the advice of outside antitrust legal counsel, violate applicable Antitrust Law. Nothing in this Agreement, including any of the actions, rights or restrictions set forth herein, will be interpreted in such a way as to require compliance by any Party if such compliance would result in the violation of any rule, regulation or policy of any applicable Law.

7.2. Acquisition Proposals; Change of Recommendation.

(a) No Solicitation. Except as expressly permitted by this Section 7.2, Versum and Entegris each shall not, and none of their respective Subsidiaries shall, and shall cause their and their respective Subsidiaries directors, officers and employees not to, and not permit its investment bankers, attorneys, accountants and other advisors or representatives to (such directors, officers, employees, investment bankers, attorneys, accountants and other advisors or representatives, collectively, **Representatives**), directly or indirectly:

(i) initiate, solicit, propose, knowingly encourage (including by way of furnishing information) or knowingly take any action designed to facilitate any inquiry regarding, or the making of any inquiry, proposal or offer that constitutes or would reasonably be expected to lead to, an Acquisition Proposal;

(ii) engage in, continue or otherwise participate in any discussions with or negotiations relating to, or otherwise cooperate in any way with, any Acquisition Proposal or any inquiry, proposal or offer that would reasonably be expected to lead to an Acquisition Proposal (other than to state that the terms of this provision prohibit such

discussions or negotiations);

(iii) provide any nonpublic information to any Person in connection with any Acquisition Proposal or any inquiry, proposal or offer that constitutes or would reasonably be expected to lead to an Acquisition Proposal; or

(iv) otherwise knowingly facilitate any effort or attempt to make an Acquisition Proposal or any inquiry, proposal or offer that constitutes or would reasonably be expected to lead to an Acquisition Proposal.

(b) Exceptions. Notwithstanding anything in Section 7.2(a) to the contrary, prior to the time, but not after, in the case of Versum, the Requisite Versum Vote is obtained or, in the case of Entegris, the Requisite Entegris Vote is obtained, in response to an unsolicited, *bona fide* written Acquisition Proposal received after the date of this Agreement (that did not arise from or in connection with a breach of the obligations set forth in this Section 7.2), Versum or Entegris, as applicable, may:

(i) provide information in response to a request therefor (including nonpublic information regarding it or any of its Subsidiaries) to the Person who made such Acquisition Proposal, provided that such information has previously been made available to, or is made available to, Versum or Entegris, as applicable, prior to or substantially concurrently with the time such information is made available to such Person and that, prior to furnishing any such information, Versum or Entegris, as applicable, receives from the Person making such Acquisition Proposal an executed confidentiality agreement containing terms that are generally not less restrictive to the other party than the terms in the Confidentiality Agreement are on Versum or Entegris, as applicable (provided that such confidentiality agreement need not include any standstill terms), and which confidentiality agreement does not prohibit compliance with either of Versum or Entegris with this Section 7.2(b)(i); and

(ii) participate in any discussions or negotiations with any such Person regarding such Acquisition Proposal;

in each case, if, and only if, prior to taking any action described in clauses (i) or (ii) above, the Versum Board or the Entegris Board, as applicable, determines in good faith after consultation with its outside legal counsel that, based on the information then available and after consultation with its financial advisor, such Acquisition Proposal either constitutes a Superior Proposal or could reasonably be expected to result in a Superior Proposal.

(c) Representatives. Any violation of the restrictions contained in this Section 7.2(a) by any of a Party s Representatives shall be deemed to be a breach of this Section 7.2(a) by such Party. The Parties shall use reasonable best efforts to ensure that their respective Representatives are aware of the provisions of this Section 7.2(a).

(d) Notice of Acquisition Proposals. Versum and Entegris each shall promptly (and, in any event, within twenty-four (24) hours) give notice to the other Party if (i) any inquiries, proposals or offers with respect to an Acquisition Proposal are received by, (ii) any information is requested in connection with any Acquisition Proposal from, or (iii) any discussions or negotiations with respect to an Acquisition Proposal are sought to be initiated or continued with, it or any of its Representatives, setting forth in such notice the name of such Person and the material terms and conditions of any proposals or offers (including, if applicable, complete copies of any written requests, proposals or offers, including proposed agreements) and thereafter shall keep the other Party informed, on a current basis (and, in any event, within twenty-four (24) hours), of the status and material terms of any such proposals or offers (including any amendments thereto) and the status of any such discussions or negotiations, including any change in its intentions as previously notified.

Table of Contents

(e) No Change of Recommendation.

(i) Except as permitted by Section 7.2(e)(ii), Section 7.2(e)(iii) or Section 7.2(f), each of the Versum Board and the Entegris Board, including any committee thereof, agrees it shall not:

(A) withhold, withdraw, qualify or modify (or publicly propose or resolve to withhold, withdraw, qualify or modify) the Versum Recommendation or the Entegris Recommendation, as applicable, in a manner adverse to Versum or Entegris, as applicable;

(B) fail to include the Versum Recommendation or the Entegris Recommendation, as applicable, in the Proxy/Prospectus;

(C) fail to recommend against acceptance of a tender or exchange offer by its stockholders pursuant to Rule 14d-2 under the Exchange Act for outstanding shares of Versum Common Stock or Entegris Common Stock, as applicable (other than by Versum or an Affiliate of Versum or Entegris or an Affiliate of Entegris, as applicable), in each case, within ten (10) Business Days after the commencement of such tender offer or exchange offer (or, if earlier, prior to the Versum Stockholders Meeting or Entegris Stockholders Meeting, as applicable) (for the avoidance of doubt, the taking of no position or a neutral position by the Versum Board or the Entegris Board, as applicable, in respect of the acceptance of any such tender offer or exchange offer as of the end of such period shall constitute a failure to recommend against acceptance of any such offer);

(D) approve or recommend, or publicly declare advisable or publicly propose to approve or recommend, or publicly propose to enter into, any letter of intent, memorandum of understanding, agreement in principle, acquisition agreement, merger agreement, option agreement, joint venture agreement, partnership agreement or other agreement (other than a confidentiality agreement referred to in Section 7.2(b) entered into in compliance with Section 7.2(b)) relating to any Acquisition Proposal (an **Alternative Acquisition Agreement**, and any of the actions set forth in the foregoing clauses (A), (B), (C) and (D), a **Change of Recommendation**); or

(E) cause or permit Versum or Entegris, as applicable, to enter into an Alternative Acquisition Agreement.

(ii) Notwithstanding anything in this Agreement to the contrary, prior to the time, but not after, in the case of Versum, the Requisite Versum Vote is obtained or, in the case of Entegris, the Requisite Entegris Vote is obtained, if an unsolicited, *bona fide* written Acquisition Proposal received after the date of this Agreement that did not arise from or in connection with a breach of the obligations set forth in Section 7.2(a) is received by Versum or Entegris, as applicable, and is not withdrawn, and the Versum Board or the Entegris Board, as applicable, determines in good faith, after consultation with its outside legal counsel and its financial advisor that such Acquisition Proposal constitutes a Superior Proposal, the Versum Board or the Entegris Board, as applicable, may (x) effect a Change of Recommendation or (y) terminate this Agreement pursuant to Section 9.3(c) or Section 9.4(c), as applicable, in order to enter into a definitive written agreement with respect to such Superior Proposal; provided, however, that, prior to taking such action described in clauses (x) or (y) above, Versum has given Entegris or Entegris has given Versum, as applicable, written notice of such action and the basis therefor four (4) Business Days in advance, which notice shall set forth in writing that the Versum Board or the Entegris Board, as applicable, intends to consider whether to take such action (such notice, the **Board Recommendation Notice**) and comply in form, substance and delivery with the provisions of Section 7.2(d). After giving such Board Recommendation Notice and prior to taking any action described in clauses (x) or (y) above, Versum or Entegris, as applicable, shall negotiate in good faith with the other Party (to the extent the other Party wishes to negotiate), to make such revisions to the terms of this Agreement as would cause such Acquisition Proposal to cease to be a Superior Proposal. At the end of the four (4) Business Day period, prior to and as a condition to taking any action described in clauses (x) or (y) above, the Versum Board or the

Entegris Board, as applicable, shall take into account any changes to the terms of this Agreement proposed in writing by

the other Party and any other information offered by the other Party in response to the Board Recommendation Notice, and shall have determined in good faith after consultation with its outside legal counsel and its financial advisor that in the case of a Superior Proposal, such Superior Proposal would continue to constitute a Superior Proposal, if such changes offered in writing by the other Party were to be given effect. Any amendment to the financial terms and any other material amendment to any Acquisition Proposal will be deemed to be a new Acquisition Proposal for purposes of Section 7.2(d) and this Section 7.2(e)(ii) and require a new Board Recommendation Notice, except that references in this Section 7.2(e)(ii) to four (4) Business Days shall be deemed to be references to two (2) Business Days and such two (2) Business Day period shall expire at 11:59 p.m. on the second (2nd) Business Day immediately following the day on which such new Board Recommendation Notice is delivered (it being understood and agreed that in no event shall any such additional two (2) Business Day period be deemed to shorten the initial four (4) Business Day period).

(iii) Notwithstanding anything in this Agreement to the contrary, prior to the time, but not after, in the case of Versum, the Requisite Versum Vote is obtained or, in the case of Entegris, the Requisite Entegris Vote is obtained, the Versum Board or the Entegris Board, as applicable, may effect a Change of Recommendation (A) if an Intervening Event has occurred, and (B) prior to taking such action, the Versum Board or Entegris Board, as applicable, determines in good faith, after consultation with its outside legal counsel and its financial advisor, that failure to take such action in response to such Intervening Event would reasonably be expected to be inconsistent with the directors fiduciary duties under applicable Law; provided, however, that prior to making such Change of Recommendation, Versum has given Entegris or Entegris has given Versum, as applicable, a Board Recommendation Notice four (4) Business Days in advance, which notice shall comply in form, substance and delivery with the provisions of Section 7.2(d) and include a reasonably detailed description of such Intervening Event. After giving such Board Recommendation Notice and prior to effecting a Change of Recommendation, Versum or Entegris, as applicable, shall negotiate in good faith with the other Party (to the extent the other Party wishes to negotiate), to make such revisions to the terms of this Agreement. At the end of the four (4) Business Day period, prior to and as a condition to effecting a Change of Recommendation, the Versum Board or the Entegris Board, as applicable, shall take into account any changes to the terms of this Agreement proposed in writing by the other Party and any other information offered by the other Party in response to the Board Recommendation Notice, and shall have determined in good faith after consultation with its outside legal counsel and its financial advisor that (I) such Intervening Event remains in effect and (II) the failure to effect a Change of Recommendation in response to such Intervening Event would reasonably be expected to be inconsistent with the directors fiduciary duties under applicable Law if such changes offered in writing by the other Party were to be given effect.

(f) Certain Permitted Disclosure. Nothing contained in this Section 7.2 shall prohibit Versum or Entegris, as applicable, from (i) complying with its disclosure obligations under applicable United States federal or state Law with regard to an Acquisition Proposal or (ii) making any stop, look and listen or similar communication of the type contemplated by Rule 14d-9(f) under the Exchange Act pending disclosure of its position thereunder; provided, that, the foregoing notwithstanding, neither Entegris nor Versum may effect a Change of Recommendation except in accordance with Section 7.2(e)(ii) or Section 7.2(e)(iii).

(g) Existing Discussions. Versum and Entegris each shall, and shall cause their respective Subsidiaries and shall use its reasonable best efforts to cause their respective Representatives to, immediately cease and cause to be terminated any existing activities, discussions or negotiations with any Person conducted heretofore with respect to any Acquisition Proposal, or proposal that would reasonably be expected to lead to an Acquisition Proposal. Versum and Entegris, as applicable, shall promptly deliver a written notice to each such Person providing only that each of Versum and Entegris, as applicable, is ending all discussions and negotiations with such Person with respect to any Acquisition Proposal, or proposal or transaction that would reasonably be expected to lead to an Acquisition Proposal, which notice shall also request the prompt return or destruction of all confidential information concerning Versum and any of its Subsidiaries or Entegris and any of its Subsidiaries, as applicable, heretofore furnished to such Person by or

on behalf of Versum or Entegris, as

applicable, or any of their respective Subsidiaries, as applicable. Versum and Entegris, as applicable, will promptly terminate all physical and electronic data access previously granted to such Persons.

(h) Standstill Provisions. During the period commencing with the execution and delivery of this Agreement and continuing until the earlier to occur of the termination of this Agreement pursuant to Article IX and the Effective Time, Versum and Entegris, as applicable, shall not terminate, amend, modify or waive any provision of any confidentiality, standstill or similar agreement to which Versum and Entegris, as applicable, or any of their respective Subsidiaries is a party and shall enforce, to the fullest extent permitted under applicable Law, the provisions of any such agreement, including by obtaining injunctions to prevent any breaches of such agreements and to enforce specifically the terms and provisions thereof.

7.3. Proxy/Prospectus Filing; Information Supplied.

(a) As promptly as practicable after the date of this Agreement, Versum and Entegris shall jointly prepare and cause to be filed with the SEC the joint proxy statement relating to the Versum Stockholders Meeting and the Entegris Stockholders Meeting (as amended or supplemented from time to time, the **Proxy/Prospectus** ), and Entegris shall prepare and file with the SEC, Entegris s registration statement on Form S-4 (as amended or supplemented from time to time, the **Registration Statement** , with the Proxy/Prospectus constituting a part thereof). Versum and Entegris each shall use its reasonable best efforts to respond promptly to comments from the SEC and have the Registration Statement declared effective under the Securities Act as promptly as practicable after such filing, to promptly thereafter mail the Proxy/Prospectus (including the Registration Statement) to the respective stockholders of each of Versum and Entegris, and to maintain the effectiveness of the Registration Statement for as long as necessary to consummate the Transactions. Notwithstanding anything in this Agreement to the contrary, the Parties hereby agree that for purposes of this Agreement, the Registration Statement will be deemed to have been declared effective so long as the Parties have abided by any policies and procedures put forth by the SEC relating to making registration statements effective during a federal government shutdown, if applicable.

(b) Each of Versum and Entegris shall promptly notify the other of the receipt of all comments from the SEC and of any request by the SEC for any amendment or supplement to the Registration Statement or the Proxy/Prospectus or for additional information and shall promptly provide to the other copies of all correspondence between it or any of its Representatives and the SEC with respect to the Registration Statement or Proxy/Prospectus. Each of Entegris and Versum shall advise the other, promptly after receipt of notice thereof, of the time of effectiveness of the Registration Statement, the issuance of any stop order relating thereto or the suspension of the qualification of shares of Entegris Common Stock for offering or sale in any jurisdiction, and each of Entegris and Versum shall use its reasonable best efforts to have any such stop order or suspension lifted, reversed or otherwise terminated. Entegris shall use its reasonable best efforts to take any other action required to be taken under any applicable securities Laws, rules or regulations in connection with the Transactions, the issuance of shares of Entegris Common Stock pursuant to this Agreement and the treatment of Versum Options and other Versum Equity Awards pursuant to Section 2.3, and Versum shall furnish all information concerning Versum and the holders of Versum Common Stock, Versum and other Versum Equity Awards as may be reasonably requested in connection with any such action.

(c) Each of Versum and Entegris agrees, as to itself and its Subsidiaries, that none of the information supplied or to be supplied by it or its Subsidiaries for inclusion or incorporation by reference in (i) the Registration Statement will, at the time the Registration Statement becomes effective under the Securities Act, contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances under which they were made, not misleading, and (ii) the Proxy/Prospectus and any amendment or supplement thereto will, at the date of mailing to the stockholders of Versum and Entegris and at the times of the Versum Stockholders Meeting and Entegris Stockholders Meeting, contain any untrue statement of a

material fact or omit to state any material fact required to be stated therein or necessary in order to make the statements therein, in light of the circumstances under

which they were made, not misleading. Versum and Entegris will cause the Proxy/Prospectus and Entegris will cause the Registration Statement to comply as to form in all material respects with the applicable provisions of the Securities Act and the rules and regulations thereunder. If, at any time prior to the Effective Time, either Party obtains knowledge of any information pertaining to it or previously provided by it for inclusion in the Registration Statement or the Proxy/Prospectus that would require any amendment or supplement to the Registration Statement or the Proxy/Prospectus so that any of such documents would not include any untrue statement of a material fact or omit to state any material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading, such Party shall promptly advise the other Party and the Parties shall cooperate in the prompt filing with the SEC of any necessary amendment or supplement to the Proxy/Prospectus and the Registration Statement and, as required by applicable Law, in disseminating the information contained in such amendment or supplement to the Versum stockholders and the Entegris stockholders.

(d) Each of Versum and Entegris will provide their respective legal counsel with a reasonable opportunity to review and comment on drafts of the Proxy/Prospectus, the Registration Statement, responses to any comments from the SEC with respect thereto, and other documents related to the Versum Stockholders Meeting, the Entegris Stockholders Meeting or the issuance of the shares of Entegris Common Stock in respect of the Merger, prior to filing such documents with the applicable Governmental Entity and mailing such documents to the stockholders of Versum and Entegris, as applicable. Each Party will include in the Proxy/Prospectus, the Registration Statement and such other documents related to the Versum Stockholders Meeting, the Entegris Stockholders Meeting or the issuance of the shares of Entegris Common Stock in respect of the Merger all comments reasonably and promptly proposed by the other Party or its legal counsel and each Party agrees that all information relating to Entegris and its Subsidiaries included in the Proxy/Prospectus or the Registration Statement shall be in form and content satisfactory to Entegris, acting reasonably, and all information relating to Versum and its Subsidiaries included in the Proxy/Prospectus or the Registration Statement shall be in form and content satisfactory to Versum, acting reasonably. Notwithstanding the foregoing, the provisions of this Section 7.3(d) shall (i) not apply with respect to information relating to a Change of Recommendation and (ii) in respect of documents filed by a Party that are incorporated by reference in the Registration Statement or Proxy/Prospectus, apply only with respect to the information relating to the other Party or the other Party s business, financial condition or results of operations or the Combined Company.

7.4. Stockholders Meetings.

(a) Versum will take, in accordance with applicable Law and its Organizational Documents, all action necessary to convene the Versum Stockholders Meeting as promptly as practicable after the Registration Statement is declared effective, to consider and vote upon the adoption of this Agreement and to cause such vote to be taken, and shall not postpone or adjourn such meeting except to the extent required by Law, in accordance with Section 7.4(c), or if, as of the time for which the Versum Stockholders Meeting was originally scheduled (as set forth in the Proxy/Prospectus), there are insufficient shares of Versum Common Stock represented (either in person or by proxy) and voting to adopt this Agreement or to constitute a quorum necessary to conduct the business of the Versum Stockholders Meeting. Versum shall, subject to the right of the Versum Board to effect a Change of Recommendation in accordance with Section 7.2(e)(ii) or Section 7.2(e)(iii), use reasonable best efforts to solicit from the stockholders of Versum proxies in favor of the proposal to adopt this Agreement and to secure the Requisite Versum Vote (it being understood that the foregoing shall not require the Versum Board to recommend in favor of the adoption of this Agreement, if a Change of Recommendation has been effected in accordance with Section 7.2(e)(ii) or Section 7.2(e)(iii)).

(b) Entegris will take, in accordance with applicable Law and its Organizational Documents, all action necessary to convene the Entegris Stockholders Meeting as promptly as practicable after the Registration Statement is declared effective, to consider and vote upon the issuance of shares of Entegris Common Stock in the Merger and the approval of the Charter Amendment and to cause such vote to be taken, and shall not postpone or adjourn such meeting except

to the extent required by Law, in accordance with Section 7.4(c) or if,

as of the time for which the Entegris Stockholders Meeting was originally scheduled (as set forth in the Proxy/Prospectus), there are insufficient shares of Entegris Common Stock represented (either in person or by proxy) and voting to adopt this Agreement, approve the Share Issuance or approve the Charter Amendment, as applicable, to constitute a quorum necessary to conduct the business of the Entegris Stockholders Meeting. Entegris shall, subject to the right of the Entegris Board to effect a Change of Recommendation in accordance with Section 7.2(e)(ii) or Section 7.2(e)(iii), use reasonable best efforts to solicit from the stockholders of Entegris proxies in favor of the adoption of this Agreement, the Share Issuance and the Charter Amendment and to secure the Requisite Entegris Vote and the Entegris Charter Vote (it being understood that the foregoing shall not require the Entegris Board to recommend in favor of the adoption of this Agreement, the Share Issuance and the Charter Amendment, if a Change of Recommendation has been effected in accordance with Section 7.2(e)(ii) or Section 7.2(e)(iii)).

(c) Versum and Entegris shall cooperate and use their reasonable best efforts to schedule and convene the Versum Stockholders Meeting and the Entegris Stockholders Meeting on the same date. Versum and Entegris each agrees (i) to provide the other reasonably detailed periodic updates concerning proxy solicitation results on a timely basis and (ii) to give written notice to the other Party one (1) day prior to the Versum Stockholders Meeting or the Entegris Stockholders Meeting, as applicable, and on the day of, but prior to the Versum Stockholders Meeting or the Entegris Stockholders Meeting, as applicable, indicating whether as of such date sufficient proxies representing the Requisite Versum Vote, the Requisite Entegris Vote or the Entegris Charter Vote, as applicable, have been obtained. Notwithstanding the foregoing, if, on a date that is two (2) Business Days prior to the date the Versum Stockholders Meeting or the Entegris Stockholders Meeting, as applicable, is scheduled, (A) Versum or Entegris, as applicable, has not received proxies representing the Requisite Versum Vote, the Requisite Entegris Vote or the Entegris Charter Vote, as applicable, whether or not a quorum is present or (B) it is necessary to ensure that any supplement or amendment to the Proxy/Prospectus is required to be delivered, Versum may, or if Entegris so requests, shall, or Entegris may, or if Versum so requests, shall, postpone or adjourn, or make one or more successive postponements or adjournments of, the Versum Stockholders Meeting or the Entegris Stockholders Meeting, as applicable, as long as the date of the Versum Stockholders Meeting or the Entegris Stockholders Meeting, as applicable, is not postponed or adjourned more than ten (10) days in connection with any one postponement or adjournment or to a date that is no later than three (3) Business Days prior to the Outside Date. In the event that Versum or Entegris, as applicable, postpones or adjourns the Versum Stockholders Meeting or the Entegris Stockholders Meeting, as applicable, the other Party may postpone or adjourn its stockholders meeting such that the Versum Stockholders Meeting and the Entegris Stockholders Meeting are scheduled on the same date.

(d) Without limiting the generality of the foregoing, but subject to each Party s right to terminate this Agreement pursuant to Section 9.3(c) or Section 9.4(c), as applicable, each of Versum and Entegris agrees that its obligations to hold the Versum Stockholders Meeting and the Entegris Stockholders Meeting, as applicable, pursuant to this Section 7.4 shall not be affected by the making of a Change of Recommendation by the Versum Board or the Entegris Board, as applicable, and its obligations pursuant to this Section 7.4 shall not be affected by the commencement of or announcement or disclosure of or communication to Versum or Entegris, as applicable, of any Acquisition Proposal (including any Superior Proposal) or the occurrence or disclosure of an Intervening Event as to Versum or Entegris, as applicable.

(e) The only matters to be voted upon at the Versum Stockholders Meeting and the Entegris Stockholders Meeting are (i) in the case of Versum, the Requisite Versum Vote and routine proposals required in connection with such vote and (ii) in the case of Entegris, the Requisite Entegris Vote and the Entegris Charter Vote and routine proposals required in connection with such vote.

7.5. Cooperation; Efforts to Consummate.

(a) On the terms and subject to the conditions set forth in this Agreement (including Section 7.2), Versum and Entegris shall cooperate with each other and use (and shall cause their respective Subsidiaries to use) their

respective reasonable best efforts to take or cause to be taken all actions, and to do or cause to be done all things, reasonably necessary, proper or advisable on its part under this Agreement and applicable Law to cause the conditions to Closing to be satisfied as promptly as reasonably practicable and advisable (and in any event no later than the Outside Date) and consummate and make effective the Transactions as soon as reasonably practicable, including preparing and filing as promptly as reasonably practicable and advisable all documentation to effect all necessary notices, reports and other Filings (including by filing no later than fifteen (15) Business Days after the date of this Agreement the notification and report form required under the HSR Act), obtaining as promptly as reasonably practicable (and in any event no later than the Outside Date) all actions or nonactions, waivers, consents, registrations, expirations or terminations of waiting periods, approvals, permits and authorizations ( **Consents** ) necessary or advisable to be obtained from any third party or any Governmental Entity in order to consummate the Transactions, executing and delivering any additional instruments necessary to consummate the Transactions and refraining from taking any action that would reasonably be expected to impede, interfere with, prevent or materially delay the consummation of the Transactions.

(b) Versum and Entegris shall jointly develop and consult and cooperate in all respects with one another, and consider in good faith the views of one another, in connection with the form and content of any analyses, appearances, presentations, memoranda, briefs, arguments, opinions and proposals made with, or submitted to, any third party or any Governmental Entity in connection with the Transactions (including the Proxy/Prospectus). Neither Versum nor Entegris shall permit any of its officers or other Representatives to participate in any substantive meeting, telephone call or conference with any Governmental Entity in respect of any Filing, investigation or otherwise relating to the Transactions unless, to the extent reasonably practicable, it consults with the other Party in advance and, to the extent permitted by such Governmental Entity, gives the other Party the opportunity to attend and participate therein. Each of the Parties shall use reasonable best efforts to furnish to each other all information required for any Filing, other than confidential or proprietary information not directly related to the Transactions, and to give the other Party reasonable prior notice of any such Filing and, to the extent practicable, keep the other Party reasonably informed with respect to the status of each Consent sought from a Governmental Entity in connection with the Transactions and the material communications between such Party and such Governmental Entity, and, to the extent practicable, permit the other Party to review and discuss in advance, and consider in good faith the views of the other in connection with any such Filing or communication. Each of the Parties shall promptly furnish the other with copies of all correspondence, Filings (except for the Parties initial HSR Act filings) and material communications between them and their Affiliates and Representatives, on one hand, and any such Governmental Entity or its respective staff on the other hand, with respect to the Transactions in order for such other Party to meaningfully consult and participate in accordance with this Section 7.5, provided that materials furnished pursuant to this Section 7.5 may be redacted as necessary to address reasonable attorney-client or other privilege or confidentiality concerns. Subject to applicable Law, each of Versum and Entegris and their respective Subsidiaries shall not agree to any actions, restrictions or conditions with respect to obtaining any Consent in connection with the Transactions, and neither Party shall directly or indirectly agree to extend any applicable waiting period (including under the HSR Act) or enter into any agreement with a Governmental Entity related to this Agreement or the Transactions, in each case, without the prior written consent of the other Party. In exercising the foregoing rights, each of Versum and Entegris shall act reasonably and as promptly as reasonably practicable.

(c) Subject to Section 7.1(b) of such Party s Disclosure Letter, neither Entegris nor Versum shall, and each of them shall cause their respective Affiliates not to, take any action, including acquiring any asset, property, business or Person (by way of merger, consolidation, share exchange, investment, other business combination, asset, stock or equity purchase, or otherwise), in each case, that could reasonably be expected to materially impair, adversely affect or materially delay obtaining or making any Filing contemplated by this Section 7.5 or the timely receipt thereof.

Table of Contents

(d) Without limiting the generality of the undertakings pursuant to this Section 7.5, but on the terms and subject to the conditions set forth in this Agreement, including Section 7.5(e), each of Versum and Entegris agree to take or cause to be taken the following actions:

(i) subject to applicable Law, the prompt provision to each and every federal, state, local or foreign court or Governmental Entity with jurisdiction over enforcement of any applicable Antitrust Law (each, a **Governmental Antitrust Entity**) of non-privileged information and documents requested by any Governmental Antitrust Entity or that are necessary, proper or advisable to permit consummation of the Transactions;

(ii) the prompt use of its reasonable best efforts to take all reasonably necessary, proper or advisable steps to (A) avoid the entry of, and (B) resist, vacate, modify, reverse, suspend, prevent, eliminate or remove any actual, anticipated or threatened temporary, preliminary or permanent injunction or other order, decree, decision, determination or judgment entered or issued, or that becomes reasonably foreseeable to be entered or issued, in any Proceeding or inquiry of any kind, in the case of each of the foregoing clauses (A) and (B), that would reasonably be expected to delay, restrain, prevent, enjoin or otherwise prohibit or make unlawful the consummation of the Transactions, including (I) the defense through litigation (excluding any appeals) on the merits of any claim asserted in any court, agency or other Proceeding by any person or entity (including any Governmental Antitrust Entity) seeking to delay, restrain, prevent, enjoin or otherwise prohibit consummation of the Transactions and (II) (x) proposing, negotiating, committing to and agreeing to sell, lease, license, divest or otherwise dispose of, or hold separate pending such disposition, (y) agreeing to restrictions or actions that after the Effective Time would limit the Combined Company s or its Subsidiaries or Affiliates freedom of action or operations with respect to, or its ability to retain, one or more of its or its Subsidiaries businesses, product lines or assets or (z) agreeing to enter into, modify or terminate existing contractual relationships, contractual rights or contractual obligations, and promptly effecting the sale, lease, license, divestiture, disposal and holding separate of, assets, operations, rights, product lines, licenses, businesses or interests therein of Versum or Entegris or either of their respective Subsidiaries (and the entry into agreements with, and submission to orders of, the relevant Governmental Antitrust Entity giving effect thereto or to such restrictions or actions) (such sale, lease, license, defense through litigation, divestiture, disposal and holding separate or other action described in clauses (I) or (II), a **Regulatory Remedy**) if such Regulatory Remedy should be reasonably necessary, proper or advisable so as to permit the consummation of the Transactions on a schedule as close as possible to that contemplated herein. Nothing in this Section 8.6(d) shall require either Entegris or Versum to effectuate or agree to effectuate any Regulatory Remedy unless such Regulatory Remedy is conditioned upon the Closing.

(e) Notwithstanding anything in this Section 7.5 to the contrary, neither this Section 7.5 nor the reasonable best efforts standard herein shall require, or be construed to require, Versum or Entegris or any of their respective Subsidiaries or other Affiliates to (i) waive any of the conditions set forth in Article VIII as they apply to such Party, (ii) take, effect or agree to any Regulatory Remedy unless such Regulatory Remedy is conditioned upon the occurrence of the Closing or is effective on or after the Closing or (iii) take, effect or agree to any Regulatory Remedy that individually or in the aggregate with any other Regulatory Remedy to be taken, effected or agreed to, would reasonably be expected to have a material adverse effect on the business, operations, financial condition or results of operations of Versum and its Subsidiaries, taken as a whole, Entegris and its Subsidiaries, taken as a whole, or the Combined Company and its Subsidiaries, taken as a whole, in each case, from and after the Effective Time (a **Burdensome Effect**), it being understood that for purposes of clause (iii) any proceeds received, or expected to be received, from effecting a Regulatory Remedy shall not be taken into consideration in making such determination.

(f) For the avoidance of doubt, Versum and Entegris shall use reasonable best efforts to cooperate with each other and work in good faith in formulating any Regulatory Remedy.

7.6. Status; Notifications. Subject to applicable Law and except as otherwise required by any Governmental Entity, Versum and Entegris each shall keep the other apprised of the status of material matters

relating to completion of the Transactions, including promptly furnishing the other with copies of notices or other substantive communications received by Versum or Entegris, as applicable, or any of its Subsidiaries, from any third party and/or any Governmental Entity with respect to the Transactions.

7.7. Financing and Indebtedness. During the period from the date of this Agreement to the Effective Time, the Parties hereto shall cooperate in good faith to mutually determine and use reasonable best efforts to implement any necessary, appropriate or desirable arrangements, in anticipation of the consummation of the Transactions contemplated by this Agreement, regarding each Party s credit agreements, indentures or other documents governing or relating to Indebtedness of the Parties, including arrangements by way of amendments, consents, redemption, payoff, new financing or otherwise, with respect to retaining or refinancing a Party s credit agreement or senior notes.

7.8. Information; Access and Reports.

(a) Subject to applicable Law and the other provisions of this Section 7.8, Versum and Entegris each shall (and shall cause its Subsidiaries to), upon request by the other, use reasonable best efforts to furnish the other with all information concerning itself, its Subsidiaries, directors, officers and stockholders and such other matters as may be reasonably necessary or advisable in connection with the Proxy/Prospectus, the Registration Statement or any other statement, filing, notice or application made by or on behalf of Entegris, Versum or any of their respective Subsidiaries to any third party or any Governmental Entity in connection with the Transactions, and shall (and shall cause its Subsidiaries to), upon giving of reasonable notice by the other Party, use reasonable best efforts to afford the other Party s officers and other authorized Representatives reasonable access, during normal business hours following reasonable advance notice throughout the period prior to the Effective Time, to its officers, Employees, agents, Contracts, books and records (including the work papers of such Party s independent accountants upon receipt of any required consents from such accountants and subject to the execution of customary access letters), as well as properties, offices and other facilities, and, during such period, each shall (and shall cause its Subsidiaries to) use reasonable best efforts to furnish promptly to the other all information concerning its business, properties and personnel as may reasonably be requested, including in connection with the Proxy/Prospectus, the Registration Statement or any other statement, filing, notice or application made by or on behalf of Entegris, Versum or any of their respective Subsidiaries to any third party or any Governmental Entity in connection with the Transactions.

(b) The foregoing provisions of this Section 7.8 shall not require and shall not be construed to require either Versum or Entegris to permit any access to any of its officers, Employees, agents, Contracts, books or records, or its properties, offices or other facilities, or to permit any inspection, review, sampling or audit, or to disclose or otherwise make available any information that in the reasonable judgment of Versum or Entegris, as applicable, would (i) unreasonably interfere with such Party s or its Subsidiaries business operations, (ii) result in the disclosure of any trade secrets of any third parties, competitively sensitive information, information concerning the valuation of Versum, Entegris or any of their respective Subsidiaries or violate the terms of any confidentiality provisions in any agreement with a third party entered into prior to the date of this Agreement, (iii) result in a violation of applicable Law, including any fiduciary duty, (iv) waive the protection of any attorney-client privilege or (v) result in the disclosure of any personal information that would expose the Party to the risk of liability. In the event that Versum or Entegris, as applicable, objects to any request submitted pursuant to and in accordance with this Section 7.8 and withholds information on the basis of the foregoing clauses (ii) through (v), Versum or Entegris, as applicable, shall inform the other Party as to the general nature of what is being withheld and shall use reasonable best efforts to make appropriate substitute arrangements to permit reasonable disclosure that does not suffer from any of the foregoing impediments. Each of Versum and Entegris, as it deems advisable and necessary, may reasonably designate competitively sensitive material provided to the other as Outside Counsel Only Material or with similar restrictions. Such materials and the information contained therein shall be given only to the outside legal counsel of the recipient, or otherwise as the restriction indicates, and be subject to any additional confidentiality or joint defense agreement

between the Parties. All requests for information made pursuant to this Section 7.8 shall be directed to the Person designated by Versum

or Entegris, as applicable. All information exchanged or made available shall be governed by the terms of the Confidentiality Agreement.

(c) To the extent that any of the information or material furnished pursuant to this Section 7.8 or otherwise in accordance with the terms of this Agreement may include material subject to the attorney-client privilege, work product doctrine or any other applicable privilege, including those concerning pending or threatened Proceedings, the Parties understand and agree that they have a commonality of interest with respect to such matters and it is their desire, intention and mutual understanding that the sharing of such material is not intended to, and shall not, waive or diminish in any way the confidentiality of such material or its continued protection under the attorney-client privilege, work product doctrine or other applicable privilege. All such information that is entitled to protection under the attorney-client privilege, work product doctrine or other applicable privilege shall remain entitled to such protection under these privileges, this Agreement, and under the joint defense doctrine.

(d) No exchange of information or investigation by Entegris or its Representatives shall affect or be deemed to affect, modify or waive the representations and warranties of Versum set forth in this Agreement, and no investigation by Versum or its Representatives shall affect or be deemed to affect, modify or waive the representations and warranties of Entegris set forth in this Agreement.

7.9. Stock Exchange Listing and Delisting. Entegris shall use its reasonable best efforts to cause the shares of Entegris Common Stock to be issued in the Merger to be approved for listing on NASDAQ or the NYSE, subject to official notice of issuance, prior to the Closing Date. Prior to the Closing Date, Versum shall cooperate with Entegris and use reasonable best efforts to take, or cause to be taken, all actions, and do or cause to be done all things, reasonably necessary, proper or advisable on its part under applicable Laws and rules and policies of the NYSE to enable the delisting by the Combined Company of the shares of Versum Common Stock from the NYSE and the deregistration of the shares of Versum Common Stock under the Exchange Act as promptly as practicable after the Effective Time.

7.10. Publicity. The initial press release with respect to the execution of this Agreement shall be a joint release to be reasonably agreed upon by the Parties. Versum and Entegris shall consult with each other before issuing any press release or Financing Disclosure or making any public statement with respect to this Agreement or the Transactions and shall not issue any such press release or Financing Disclosure or make any such public statement without the prior consent of the other, such consent not to be unreasonably withheld, conditioned or delayed; provided, that (a) any such press release, Financing Disclosure or public statement as may be required by applicable Law or any listing agreement with any national securities exchange may be issued prior to such consultation if the Party making the release or statement has used its reasonable best efforts to consult with the other Party on a timely basis and (b) each Party may issue public announcements, include in Financing Disclosure or make other public disclosures regarding this Agreement or the Transactions that consist solely of information previously disclosed in press releases, Financing Disclosures or public statements previously approved by either Party or made by either Party in compliance with this Section 7.10; provided, further, that the first sentence of this Section 7.10 shall not apply to (x) any disclosure of information concerning this Agreement in connection with any dispute between the parties regarding this Agreement and (y) internal announcements to employees which are not made public. Notwithstanding anything in this Section 7.10 to the contrary, neither party shall be (x) required by any provision of this Agreement to consult with or obtain any approval from any other Party with respect to a public announcement or press release issued in connection with the receipt and existence of an Acquisition Proposal and matters related thereto or a Change of Recommendation other than as set forth in Section 7.2. As used above, ( **Financing Disclosure** ) means any reference to, or information in connection with, the Transactions that is included in any documents to be filed with any Person (including the SEC), issued, published and/or distributed by Versum or Entegris in connection with any financing transaction to be entered into by any of those Parties.

Table of Contents

7.11. Employee Benefits.

(a) Entegris shall provide, or shall cause to be provided, (i) the Employees of Versum and its Subsidiaries at the Effective Time who continue to remain employed with Entegris or its Subsidiaries (the **Versum Continuing Employees**) and (ii) the Employees of Entegris and its Subsidiaries at the Effective Time who continue to remain employed with Entegris or its Subsidiaries (the **Entegris Continuing Employees**), during the period commencing at the Effective Time and ending on the one (1)-year anniversary of the Closing Date with: (a) base salary or base wage, annual cash incentive opportunities and long-term cash and equity incentive opportunities, that, in each case, is no less favorable to such Versum Continuing Employee or Entegris Continuing Employee, as applicable, than those provided to such Versum Continuing Employee or Entegris Continuing Employee, as applicable, immediately prior to the Effective Time; (b) severance benefits and protections that are no less favorable to such Versum Continuing Employees or Entegris Continuing Employees, as applicable, than those provided to such Versum Continuing Employees or Entegris Continuing Employees, as applicable, immediately prior to the Effective Time; and (c) health and welfare benefits, pension benefits, and retirement benefits that are no less favorable, in the aggregate, to such Versum Continuing Employees or Entegris Continuing Employees, as applicable, than those provided to such Versum Continuing Employees or Entegris Continuing Employees, as applicable, immediately prior to the Effective Time.

(b) With respect to any Benefit Plan in which any Versum Continuing Employee or Entegris Continuing Employee (collectively, the **Continuing Employees**) first becomes eligible to participate on or after the Effective Time, each Party shall (i) cause any pre-existing conditions or limitations and eligibility waiting periods under any of its group health plans to be waived with respect to the other Party s Continuing Employees and their eligible dependents, (ii) give the other Party s Continuing Employees credit for the plan year in which the Effective Time occurs (or the plan year in which the Continuing Employee first becomes eligible to participate in the applicable Benefit Plan, if later) towards applicable deductibles and annual out-of-pocket limits for medical expenses incurred during the plan year but prior to the Effective Time (or eligibility date, as applicable), for which payment has been made and (iii) give the other Party s Continuing Employees service credit for such Continuing Employee s employment with the other Party for purposes of vesting, benefit accrual and eligibility to participate under each applicable Benefit Plan, as if such service had been performed with such Party, except for benefit accrual under defined benefit pension plans, for purposes of qualifying for subsidized early retirement benefits (unless otherwise required under applicable Law) or to the extent it would result in a duplication of benefits.

(c) The Parties each hereby acknowledge and agree that a change in control (or similar phrase) will occur or will be deemed to occur at the Effective Time under the Versum Benefit Plans. From and after the Effective Time, Entegris shall cause the Combined Company and its Subsidiaries to honor, in accordance with their terms, all Versum Benefit Plans.

(d) Versum may adopt annual bonus or incentive plans for Versum s fiscal year commencing October 1, 2019 that are substantially equivalent to Versum s annual bonus or incentive plans for the fiscal year ended September 30, 2019 (with any material changes subject to prior consultation with Entegris). Versum shall have the right, immediately prior to the Effective Time, to determine with respect to each participant in any annual bonus or incentive program for Versum s fiscal year in which the Closing occurs, a pro-rated bonus or incentive based on actual performance of Versum for the portion of Versum s fiscal year completed prior to the Closing Date, with such bonus or incentive calculated in good faith in the Ordinary Course and paid to each participant at such time as Versum normally pays such bonuses in the Ordinary Course.

(e) Entegris may adopt annual bonus or incentive plans for Entegris s fiscal years commencing January 1, 2019 and January 1, 2020 that are substantially equivalent to Entegris s annual bonus or incentive plans for the fiscal year ended December 31, 2018 (with any material changes subject to prior consultation with Versum). If the Closing Date occurs

following December 31, 2019, Entegris may pay annual cash bonuses earned by Entegris employees for the fiscal year ended December 31, 2019, with such bonus or incentive calculated in good faith in

the Ordinary Course, and Entegris shall pay such amount to each participant at the such time Entegris normally pays such bonuses in the Ordinary Course.

(f) Prior to making any material written communications intended for broad-based and general distribution to any Employee pertaining to compensation or benefit matters that are affected by the Transactions contemplated by this Agreement, each Party shall provide the other Party with a copy of the intended communication, the other Party shall have a reasonable period of time to review and comment on the communication, and the relevant party shall consider any such comments in good faith.

(g) Subject to Section 7.1, nothing contained in this Agreement is intended to (i) be treated as an amendment of any particular Versum Benefit Plan or Entegris Benefit Plan, (ii) prevent Versum, Entegris, the Combined Company or any of their Affiliates from amending or terminating any of their respective Benefit Plans in accordance with their terms, or (iii) prevent Versum, Entegris, the Combined Company or any of their Affiliates, after the Effective Time, from terminating the employment of any Versum Continuing Employee or Entegris Continuing Employee. Nothing contained in this Agreement is intended to create any third-party beneficiary rights in any Employee of Versum, Entegris or any of their Subsidiaries, any beneficiary or dependent thereof, or any collective bargaining representative thereof (including any Labor Organization), with respect to the compensation, terms and conditions of employment and/or benefits that may be provided to any Versum Continuing Employee or Entegris Continuing Employee by Versum, Entegris, the Combined Company or any of their Affiliates or under any Benefit Plan which Versum, Entegris, the Combined Company or any of their Affiliates may maintain.

7.12. Certain Tax Matters.

(a) None of Entegris, Versum or any of their respective Subsidiaries shall take or cause to be taken, or fail to take, any action, whether before or after the Effective Time, that would, or is reasonably likely to, prevent or impede the Merger from qualifying as a reorganization within the meaning of Section 368(a) of the Code.

(b) Each of Entegris and Versum shall use its reasonable best efforts and will cooperate in good faith with one another to obtain the opinions of counsel referred to in Section 8.2(d) and Section 8.3(e). In connection therewith, Entegris shall deliver to Wachtell, Lipton, Rosen & Katz, counsel to Entegris (**Entegris s Counsel**), and Simpson Thacher & Bartlett LLP, counsel to Versum (**Versum s Counsel**), a representation letter dated as of the Closing Date (and, if requested, dated as of the date the Registration Statement shall have been declared effective by the SEC or such other date(s) as determined necessary by counsel in connection with the filing of the Registration Statement or its exhibits) and signed by an officer of Entegris (the **Entegris Tax Representation Letter**), and Versum shall deliver to Entegris s Counsel and Versum s Counsel a representation letter dated as of the Closing Date (and, if requested, dated as of the date the Registration Statement shall have been declared effective by the SEC or such other date(s) as determined necessary by counsel in connection with the filing of the Registration Statement or its exhibits) and signed by an officer of Versum (the **Versum Tax Representation Letter**); provided that, in each case, the representation letter shall be as reasonably necessary or appropriate to allow Entegris s Counsel and Versum s Counsel each to provide the opinions of counsel referred to in Section 8.2(d) and Section 8.3(e).

7.13. Expenses. Except as otherwise provided in Section 9.5(b), Section 9.5(c) or Section 9.5(d), whether or not the Merger is consummated, all costs and expenses incurred in connection with the preparation, negotiation, execution and performance of this Agreement and the Transactions, including all fees and expenses of its Representatives, shall be paid by the Party incurring such expense, except that (i) expenses described on Section 7.13 of the Versum Disclosure Letter shall be paid by Entegris and (ii) expenses incurred (A) in connection with any filing fees in connection with the HSR Act, any other Antitrust Law, the Registration Statement and the printing and mailing of the Proxy/Prospectus and the Registration Statement and (B) in respect of any necessary, appropriate or desirable

arrangements, in anticipation of the consummation of the Transactions contemplated by this Agreement, regarding each Party s credit agreements, indentures or other documents

governing or relating to Indebtedness of the Parties shall be shared equally by Versum and Entegris and (iii) the Combined Company shall pay all charges and expenses, including those of the Exchange Agent, in connection with the transactions contemplated in Article III.

7.14. Indemnification; Directors and Officers Insurance.

(a) From and after the Effective Time, the Combined Company shall indemnify and hold harmless to the fullest extent as such individuals would be indemnified as of the date of this Agreement under applicable Law, Versum s Organizational Documents and any indemnification agreements in effect as of the date of this Agreement, each present and former (determined as of the Effective Time) director and officer of Versum or any of its Subsidiaries or any Person who prior to or at the Effective Time served at the request of Versum or any of its Subsidiaries as a director or officer of another Person in which Versum or any of its Subsidiaries has an equity investment, in each case, when acting in such capacity (the **Indemnified Parties**), against any costs or expenses (including reasonable attorneys fees, costs and expenses), judgments, inquiries, fines, losses, claims, damages or liabilities incurred in connection with, arising out of or otherwise related to any Proceeding, in connection with, arising out of or otherwise related to matters existing or occurring at or prior to the Effective Time, whether asserted or claimed prior to, at or after the Effective Time, including in connection with (i) this Agreement or the Transactions, and (ii) actions to enforce this provision or any other indemnification or advancement right of any Indemnified Party, and the Combined Company shall also advance expenses as incurred to the fullest extent that such individual would have been entitled to under applicable Law, Versum s Organizational Documents and any indemnification agreements in effect as of the date of this Agreement; provided that any Person to whom expenses are advanced provides an undertaking to repay such advances if it is ultimately determined by final adjudication that such Person is not entitled to indemnification.

(b) Prior to the Effective Time, Versum shall and, if Versum is unable to, Entegris shall cause the Combined Company as of the Effective Time to, obtain and fully pay the premium for tail insurance policies for the extension of (i) the directors and officers liability coverage of Versum s existing directors and officers insurance policies, and (ii) Versum s existing fiduciary liability insurance policies, in each case for a claims reporting or discovery period of six (6) years from and after the Effective Time (the **Tail Period**) from one or more insurance carriers with the same or better credit rating as Versum s insurance carrier as of the date of this Agreement with respect to directors and officers liability insurance and fiduciary liability insurance (collectively, **D&O Insurance**) with terms, conditions, retentions and limits of liability that are at least as favorable to the insureds as Versum s existing policies with respect to matters existing or occurring at or prior to the Effective Time (including in connection with this Agreement or the Transactions). If Versum and the Combined Company for any reason fail to obtain such tail insurance policies as of the Effective Time, the Combined Company shall continue to maintain in effect for the Tail Period the D&O Insurance in place as of the date of this Agreement with terms, conditions, retentions and limits of liability that are at least as favorable to the insureds as provided in Versum s existing policies as of the date of this Agreement, or the Combined Company shall purchase comparable D&O Insurance for the Tail Period with terms, conditions, retentions and limits of liability that are at least as favorable as provided in Versum s existing policies as of the date of this Agreement; provided, that in no event shall the aggregate cost of the D&O Insurance exceed during the Tail Period 300% of the current aggregate annual premium paid by Versum for such purpose; and provided, further, that if the cost of such insurance coverage exceeds such amount, the Combined Company shall obtain a policy with the greatest coverage available for a cost not exceeding such amount.

(c) Any Indemnified Party wishing to claim indemnification under this Section 7.14, upon learning of any such Proceeding, shall promptly notify the Combined Company thereof in writing, but the failure to so notify shall not relieve the Combined Company of any liability it may have to such Indemnified Party except to the extent such failure materially prejudices the indemnifying party. In the event of any Proceeding: (i) the Combined Company shall have the right to assume the defense thereof (it being understood that by electing to assume the defense thereof, the

Combined Company will not be deemed to have waived any right to object to the Indemnified Party s entitlement to indemnification hereunder with respect thereto or assumed any liability with

respect thereto), except that if the Combined Company elects not to assume such defense or legal counsel or the Indemnified Party advises that there are issues which raise conflicts of interest between the Combined Company and the Indemnified Party, the Indemnified Party may retain legal counsel satisfactory to them, and the Combined Company shall pay all reasonable and documented fees, costs and expenses of such legal counsel for the Indemnified Party promptly as statements therefor are received; provided, however, that the Combined Company shall be obligated pursuant to this Section 7.14(c) to pay for only one firm of legal counsel for all Indemnified Parties in any jurisdiction unless the use of one legal counsel for such Indemnified Parties would present such legal counsel with a conflict of interest (provided that the fewest number of legal counsels necessary to avoid conflicts of interest shall be used); (ii) the Indemnified Parties shall cooperate in the defense of any such matter if the Combined Company elects to assume such defense, and the Combined Company shall cooperate in the defense of any such matter if the Combined Company elects not to assume such defense; (iii) the Indemnified Parties shall not be liable for any settlement effected without their prior written consent if the Combined Company elects to assume such defense and the Combined Company shall not be liable for any settlement effected without their prior written consent the Combined Company elects not to assume such defense; (iv) the Combined Company shall not have any obligation hereunder to any Indemnified Party if and when a court of competent jurisdiction shall ultimately determine, and such determination shall have become final, that the indemnified action of such Indemnified Party in the manner contemplated hereby is prohibited by applicable Law; and (v) all rights to indemnification in respect of any such Proceedings shall continue until final disposition of all such Proceedings.

(d) During the Tail Period, all rights to indemnification and exculpation from liabilities for acts or omissions occurring at or prior to the Effective Time and rights to advancement of expenses relating thereto now existing in favor of any Indemnified Party as provided in the Organizational Documents of Versum and its Subsidiaries or any indemnification agreement between such Indemnified Party and Versum or any of its Subsidiaries, in each case, as in effect on the date of this Agreement, shall survive the Transactions unchanged and shall not be amended, restated, repealed or otherwise modified in any manner that would adversely affect any right thereunder of any such Indemnified Party.

(e) If the Combined Company or any of their respective successors or assigns (i) shall consolidate with or merge into any other Person and shall not be the continuing or surviving Person of such consolidation or merger or (ii) shall transfer all or substantially all of its properties and assets to any Person, then, and in each such case, proper provisions shall be made so that the successors and assigns of the Combined Company shall assume all of the obligations set forth in this Section 7.14.

(f) The rights of the Indemnified Parties under this Section 7.14 shall survive consummation of the Merger and are in addition to any rights such Indemnified Parties may have under the Organizational Documents of Versum or any of its Subsidiaries, or under any indemnification agreements or other applicable Contracts of Versum or Laws.

(g) This Section 7.14 is intended to be for the benefit of, and from and after the Effective Time shall be enforceable by, each of the Indemnified Parties, who shall be third-party beneficiaries of this Section 7.14.

7.15. Takeover Statutes. If any Takeover Statute is or may become applicable to the Transactions, each of Versum and Entegris and the Entegris Board and Versum Board, respectively, shall grant such approvals and take such actions as are necessary and legally permissible so that the Transactions may be consummated as promptly as practicable on the terms contemplated by this Agreement and otherwise act to eliminate or minimize the effects of such statute or regulation on the Transactions.

7.16. Dividends. Versum and Entegris shall coordinate with each other to designate the same record and payment dates for any quarterly dividends or distributions declared in accordance with this Agreement in any calendar quarter

in which the Closing Date might reasonably be expected to occur, so that holders of shares of Versum Common Stock do not receive dividends on both shares of Versum Common Stock and Entegris

Common Stock received in the Merger in respect of any calendar quarter or fail to receive a dividend on either shares of Versum Common Stock or Entegris Common Stock received in the Merger in respect of any calendar quarter; provided, that the declaration and payment of any dividends on shares of Versum Common Stock or Entegris Common Stock shall be subject to applicable Law and the approval of the Versum Board or Entegris Board, as applicable.

7.17. Section 16 Matters. Versum and Entegris, and the Versum Board and the Entegris Board (or duly formed committees thereof consisting of non-employee directors (as such term is defined for the purposes of Rule 16b-3 promulgated under the Exchange Act)), shall, prior to the Effective Time, take all such actions as are reasonably necessary or appropriate to cause the Transactions and any other dispositions of equity securities of Versum or Entegris (including derivative securities) or acquisitions of shares of Entegris Common Stock (including derivative securities) in connection with the Transactions by any individual who is subject to the reporting requirements of Section 16(a) of the Exchange Act with respect to Versum or Entegris or will become subject to such reporting requirements with respect to Entegris, to be exempt under Rule 16b-3 promulgated under the Exchange Act, to the extent permitted by applicable Laws.

7.18. Stockholder Litigation. Each of Versum and Entegris shall promptly advise the other Party of any litigation commenced after the date hereof against such Party or any of its directors (in their capacity as such) by any stockholders of such Party (on their own behalf or on behalf of such Party) relating to this Agreement or the Transactions, and shall keep the other Party reasonably informed regarding any such litigation. Each of Versum and Entegris shall give the other Party the opportunity to participate in the defense or settlement of any such stockholder litigation, and no such settlement shall be agreed to without the other Party s prior written consent (which consent shall not be unreasonably withheld, conditioned or delayed).

ARTICLE VIII

CONDITIONS

8.1. Conditions to Each Party s Obligation to Effect the Merger. The respective obligation of each Party to effect the Merger is subject to the satisfaction at the Closing or waiver, in whole or in part (to the extent permitted by applicable Law), at or prior to the Closing of each of the following conditions:

(a) Versum Stockholder Approval. The Requisite Versum Vote shall have been obtained in accordance with applicable Law and the certificate of incorporation and bylaws of Versum.

(b) Entegris Stockholder Approval. The Requisite Entegris Vote shall have been obtained in accordance with applicable Law (including the applicable rules of NASDAQ) and the certificate of incorporation and bylaws of Entegris.

(c) Listing. The shares of Entegris Common Stock issuable in accordance with this Agreement (including the shares of Entegris Common Stock issuable upon the exercise of any Converted Versum Options) shall have been approved for listing on NASDAQ or the NYSE, subject to official notice of issuance.

(d) Government Approvals. (i) The waiting period (and any extension thereof) applicable to the consummation of the Transactions under the HSR Act shall have expired or been earlier terminated, (ii) all other authorizations, consents, orders, approvals, filings and declarations, and all expirations of waiting periods, required under the applicable Antitrust Laws of the jurisdictions listed on Section 5.4(b) of the Versum Disclosure Letter shall have been obtained (all authorizations, consents, orders, approvals, filings and declarations and the lapse of all such waiting

periods, including under the HSR Act, such jurisdictions being the **Requisite Regulatory Approvals**), (iii) all such Requisite Regulatory Approvals shall be in full force and effect and (iv) no Governmental Entity of competent jurisdiction shall have enacted, issued, promulgated,

enforced or entered any Law or Governmental Order (whether temporary, preliminary or permanent) in connection with a Requisite Regulatory Approval that (A) requires either Party or any of its respective Subsidiaries to take or commit to take any actions constituting or that would reasonably be expected to have a Burdensome Effect or (B) would otherwise constitute or reasonably be expected to have a Burdensome Effect and is in effect.

(e) Laws or Governmental Orders. No Governmental Entity of competent jurisdiction shall have enacted, issued, promulgated, enforced or entered any Law or Governmental Order (whether temporary, preliminary or permanent) that is in effect and restrains, enjoins, makes illegal or otherwise prohibits the consummation of the Transactions or imposes a Burdensome Effect (it being understood and agreed by the Parties that, with respect to any such Law or Governmental Order that is, or is under, an Antitrust Law, only a Governmental Entity of competent jurisdiction in a jurisdiction listed on Section 5.4(b) of the Versum Disclosure Letter shall constitute a Governmental Entity of competent jurisdiction for purposes of this Section 8.1(e)) (such Law or Governmental Order, a **Relevant Legal Restraint**).

(f) Registration Statement. The Registration Statement shall have become effective in accordance with the provisions of the Securities Act. No stop order suspending the effectiveness of the Registration Statement shall have been issued and remain in effect, and no Proceedings for that purpose shall have commenced or be threatened in writing by the SEC, unless subsequently withdrawn.

8.2. Conditions to Obligations of Entegris. The obligation of Entegris to effect the Merger is also subject to the satisfaction at the Closing or waiver, in whole or in part (to the extent permitted by applicable Law), by Entegris at or prior to the Closing of the following conditions:

(a) Representations and Warranties. (i) Each of the representations and warranties of Versum set forth in Section 5.1 [*Organization, Good Standing and Qualification*], Section 5.3 [*Corporate Authority; Approval*], Section 5.12 [*Takeover Statutes*], Section 6.5 [*Versum Capital Structure*] and Section 6.7 [*Versum Brokers and Finders*] shall have been true and correct in all material respects as of the date of this Agreement and shall be true and correct in all material respects as of the Closing Date (except to the extent that any such representation and warranty expressly speaks as of a particular date or period of time, in which case such representation and warranty shall be so true and correct in all material respects as of such particular date or period of time); (ii) the representations and warranties of Versum set forth in Section 5.7(b) [*Absence of Certain Changes or Events*] shall have been true and correct in all respects as of the date of this Agreement and shall be true and correct in all respects as of the Closing Date; (iii) the representations and warranties of Versum set forth in Section 6.5 [*Versum Capital Structure*] shall have been true and correct in all respects as of the date of this Agreement and shall be true and correct in all respects as of the Closing Date, other than, in each case, *de minimis* inaccuracies; and (iv) each other representation and warranty of Versum set forth in Article V and Article VI shall be true and correct in all respects (without giving effect to any qualification by materiality or Material Adverse Effect contained therein) as of the date of this Agreement and as of the Closing Date (except to the extent that any such representation and warranty expressly speaks as of a particular date or period of time, in which case such representation and warranty shall be so true and correct in all respects as of such particular date or period of time), except, in the case of this clause (iv), for any failure of any such representation and warranty to be so true and correct in all respects (without giving effect to any qualification by materiality or Material Adverse Effect contained therein) that would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect with respect to Versum.

(b) Performance of Obligations of Versum. Versum shall have performed in all material respects the obligations required to be performed by it under this Agreement at or prior to the Closing.

(c) Certificate. Entegris shall have received a certificate of the Chief Executive Officer or the Chief Financial Officer of Versum, certifying that the conditions set forth in Section 8.2(a) and Section 8.2(b) have been satisfied.

Table of Contents

(d) Tax-Free Opinion. Entegris shall have received a written opinion from Entegris s Counsel, in form and substance reasonably satisfactory to Entegris, dated as of the Closing Date, to the effect that for U.S. federal income Tax purposes the Merger will qualify as a reorganization within the meaning of Section 368(a) of the Code. In rendering the opinion described in this Section 8.2(d), Entegris s Counsel shall be entitled to rely on the Entegris Tax Representation Letter and the Versum Tax Representation Letter and such other information as Entegris s Counsel reasonably deems relevant.

8.3. Conditions to Obligation of Versum. The obligation of Versum to effect the Merger is also subject to the satisfaction at the Closing or waiver, in whole or in part (to the extent permitted by applicable Law), by Versum at or prior to the Closing of the following conditions:

(a) Representations and Warranties. (i) Each of the representations and warranties of Entegris set forth in Section 5.1 [*Organization, Good Standing and Qualification*], Section 5.3 [*Corporate Authority; Approval*], Section 5.12 [*Takeover Statutes*], Section 6.1 [*Entegris Capital Structure*] and Section 6.3 [*Entegris Brokers and Finders*] shall have been true and correct in all material respects as of the date of this Agreement and shall be true and correct in all material respects as of the Closing Date (except to the extent that any such representation and warranty expressly speaks as of a particular date or period of time, in which case such representation and warranty shall be so true and correct in all material respects as of such particular date or period of time); (ii) the representations and warranties of Entegris set forth in Section 5.7(b) [*Absence of Certain Changes or Events*] shall have been true and correct in all respects as of the date of this Agreement and shall be true and correct in all respects as of the Closing Date; (iii) the representations and warranties of Entegris set forth in Section 6.1 [*Entegris Capital Structure*] shall have been true and correct in all respects as of the date of this Agreement and shall be true and correct in all respects as of the Closing Date, other than, in each case, *de minimis* inaccuracies; and (iv) each other representation and warranty of Entegris set forth in Article V and Article VI shall be true and correct in all respects (without giving effect to any qualification by materiality or Material Adverse Effect contained therein) as of the date of this Agreement and as of the Closing Date (except to the extent that any such representation and warranty expressly speaks as of a particular date or period of time, in which case such representation and warranty shall be so true and correct in all respects as of such particular date or period of time), except, in the case of this clause (iv), for any failure of any such representation and warranty to be so true and correct in all respects (without giving effect to any qualification by materiality or Material Adverse Effect contained therein) that would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect with respect to Entegris.

(b) Performance of Obligations of Entegris. Entegris shall have performed in all material respects the obligations required to be performed by it under this Agreement at or prior to the Closing.

(c) Certificate. Versum shall have received a certificate of the Chief Executive Officer or the Chief Financial Officer of Entegris, certifying that the conditions set forth in Section 8.3(a) and Section 8.3(b) have been satisfied.

(d) Combined Company Governance Matters. Entegris shall have taken the actions necessary to cause the matters set forth in Section 4.1(c), Section 4.1(d), Section 4.1(e) and Section 4.1(f) to be completed and effective as of the Effective Time.

(e) Tax-Free Opinion. Versum shall have received a written opinion from Versum s Counsel, in form and substance reasonably satisfactory to Versum, dated as of the Closing Date, to the effect that for U.S. federal income Tax purposes the Merger will qualify as a reorganization within the meaning of Section 368(a) of the Code. In rendering the opinion described in this Section 8.3(e), Versum s Counsel shall be entitled to rely on the Versum Tax Representation Letter and the Entegris Tax Representation Letter and such other information as Entegris s Counsel reasonably deems relevant.

Table of Contents

ARTICLE IX

TERMINATION

9.1. Termination by Mutual Written Consent. This Agreement may be terminated and the Merger may be abandoned at any time prior to the Effective Time by mutual written consent of Versum and Entegris by action of the Entegris Board and the Versum Board.

9.2. Termination by Either Versum or Entegris. This Agreement may be terminated and the Merger may be abandoned at any time prior to the Effective Time by action of either the Entegris Board or the Versum Board, if:

(a) the Merger shall not have been consummated by 5:00 p.m. (New York Time) on January 28, 2020 (the **Outside Date**); provided, however, that if any of the conditions to the Closing set forth in Section 8.1(d) or Section 8.1(e) (solely as it relates to any Antitrust Laws) has not been satisfied or waived on or prior to January 28, 2020 but all other conditions to Closing set forth in Article VIII have been satisfied (other than those conditions that by their nature are to be satisfied at the Closing (so long as such conditions are reasonably capable of being satisfied if the Closing were to occur on the Outside Date)) or waived, the Outside Date may be extended by either Party (by delivery written notice to the other Party at or prior to 5:00 p.m. (New York Time) on January 28, 2020), without further action of the other Party to (and including) 5:00 p.m. (New York Time) on April 28, 2020, and, if so extended, such date shall be the **Outside Date**; provided, further, that the right to terminate this Agreement pursuant to this Section 9.2(a) shall not be available to any Party that has breached in any material respect any of its representations, warranties, covenants or agreements set forth in this Agreement in any manner that shall have been the primary cause of or primarily resulted in the occurrence of the failure of a condition to the consummation of the Merger to be satisfied;

(b) a Relevant Legal Restraint permanently restraining, enjoining or otherwise prohibiting consummation of the Transactions shall become final and non-appealable; provided, that the Party seeking to terminate this Agreement pursuant to this Section 9.2(b) shall have used reasonable best efforts to prevent the entry of and to remove such Relevant Legal Restraint in accordance with Section 7.5; provided, further, that the right to terminate this Agreement pursuant to this Section 9.2(b) shall not be available to any Party that has breached in any material respect any of its representations, warranties, covenants or agreements set forth in this Agreement in any manner that shall have been the primary cause of or primarily resulted in the occurrence of the failure of the condition set forth in Section 8.1(e) [*Laws or Governmental Orders*] to the consummation of the Merger to be satisfied; or

(c) (i) if the Requisite Versum Vote shall not have been obtained at the Versum Stockholders Meeting (or, if the Versum Stockholders Meeting has been adjourned or postponed in accordance with this Agreement, at the final adjournment or postponement thereof), in each case, at which a vote on the adoption of this Agreement was taken or (ii) if the Requisite Entegris Vote shall not have been obtained at the Entegris Stockholders Meeting (or, the Entegris Stockholders Meeting has been adjourned or postponed in accordance with this Agreement, at the final adjournment or postponement thereof), in each case, at which a vote on the adoption of this Agreement and the Share Issuance was taken.

9.3. Termination by Entegris. This Agreement may be terminated and the Merger may be abandoned at any time prior to the Effective Time by action of the Entegris Board:

(a) prior to the time the Requisite Versum Vote is obtained, if the Versum Board shall have made a Change of Recommendation;

(b) if at any time prior to the Effective Time, there has been a breach by Versum of any of its representations, warranties, covenants or agreements set forth in this Agreement such that the conditions in Section 8.2(a) or Section 8.2(b) would not be satisfied (and such breach is not curable prior to the Outside Date,

or if curable prior to the Outside Date, has not been cured within the earlier of (i) thirty (30) days after the giving of notice thereof by Entegris to Versum or (ii) three (3) Business Days prior to the Outside Date); provided, that the right to terminate this Agreement pursuant to this Section 9.3(b) shall not be available if Entegris has breached in any material respect any of its representations, warranties, covenants or agreements set forth in this Agreement in any manner that shall have been the primary cause of or primarily resulted in the occurrence of the failure of a condition to the consummation of the Merger not to be satisfied;

(c) in order to enter into a definitive written agreement with respect to a Superior Proposal with respect to Entegris, provided that Entegris has complied with its obligations under Section 7.2 and, in connection with the termination of this Agreement, Entegris pays to Versum in immediately available funds the Entegris Termination Fee required to be paid pursuant to Section 9.5(c).

9.4. Termination by Versum. This Agreement may be terminated and the Merger may be abandoned at any time prior to the Effective Time by action of the Versum Board:

(a) prior to the time the Requisite Entegris Vote is obtained, if the Entegris Board shall have made a Change of Recommendation;

(b) if at any time prior to the Effective Time, there has been a breach by Entegris of any of its representations, warranties, covenants or agreements set forth in this Agreement such that the conditions in Section 8.3(a) or Section 8.3(b) would not be satisfied (and such breach is not curable prior to the Outside Date, or if curable prior to the Outside Date, has not been cured within the earlier of (i) thirty (30) days after the giving of notice thereof by Versum to Entegris or (ii) three (3) Business Days prior to the Outside Date); provided, that the right to terminate this Agreement pursuant to this Section 9.4(b) shall not be available if Versum has breached in any material respect any of its representations, warranties, covenants or agreements set forth in this Agreement in any manner that shall have been the primary cause of or primarily resulted in the occurrence of the failure of a condition to the consummation of the Merger not to be satisfied;

(c) in order to enter into a definitive written agreement with respect to a Superior Proposal with respect to Versum, provided that Versum has complied with its obligations under Section 7.2 and, in connection with the termination of this Agreement, Versum pays to Entegris in immediately available funds the Versum Termination Fee required to be paid pursuant to Section 9.5(b).

9.5. Effect of Termination and Abandonment.

(a) Except to the extent provided in Section 9.5(b), Section 9.5(c) and Section 9.5(d) below, in the event of termination of this Agreement and the abandonment of the Merger pursuant to this Article IX, this Agreement shall become void and of no effect with no liability to any Person on the part of any Party (or any of its Representatives or Affiliates); provided, however, that, notwithstanding anything in this Agreement to the contrary, (i) no such termination shall relieve any Party of any liability or damages to any other Party resulting from any fraud or Willful Breach of this Agreement and (ii) the provisions set forth in Article X [*Miscellaneous and General*], Section 7.13 [*Expenses*], this Section 9.5 [*Effect of Termination and Abandonment*] and the Confidentiality Agreement shall survive the termination of this Agreement.

(b) In the event that this Agreement is terminated:

(i) by either Versum or Entegris pursuant to Section 9.2(a) [*Outside Date*] (if the sole reason the Merger was not consummated was the failure of Versum to convene and hold the Versum Stockholders Meeting prior to the Outside

Date) or Section 9.2(c)(i) [*Requisite Versum Vote Not Obtained*] and, in either case,

(A) a *bona fide* Acquisition Proposal with respect to Versum shall have been publicly made directly to the stockholders of Versum or shall otherwise have become publicly known or any Person shall have publicly announced an intention (whether or not conditional) to make an Acquisition Proposal with respect to

Versum (and such Acquisition Proposal or publicly announced intention shall not have been publicly withdrawn without qualification five (5) Business Days prior to (i) the date of such termination, with respect to any termination pursuant to Section 9.2(a) [*Outside Date*] or (ii) the date of the Versum Stockholders Meeting, with respect to termination pursuant to Section 9.2(c)(i) [*Requisite Versum Vote Not Obtained*]), and

(B) within twelve (12) months after such termination, (1) Versum or any of its Subsidiaries shall have entered into an Alternative Acquisition Agreement with respect to any Acquisition Proposal with respect to Versum or (2) there shall have been consummated any Acquisition Proposal with respect to Versum (in each case of clauses (1) and (2), with fifty percent (50%) being substituted in lieu of fifteen percent (15%) in each instance thereof in the definition of Acquisition Proposal ), then immediately prior to or concurrently with the occurrence of either of the events described in the foregoing clauses (B)(1) or (B)(2),

(ii) by Entegris pursuant to Section 9.3(a) [*Versum Change of Recommendation*], then promptly, but in no event later than two (2) Business Days after the date of such termination,

(iii) by either Entegris or Versum pursuant to Section 9.2(c)(i) [*Requisite Versum Vote Not Obtained*] (and, at the time of such termination pursuant to Section 9.2(c)(i) [*Requisite Versum Vote Not Obtained*], Entegris had the right to terminate this Agreement pursuant to Section 9.3(a) [*Versum Change of Recommendation*]), then promptly, but in no event later than, in the case of such termination by Entegris, two (2) Business Days or, in the case of such termination by Versum, one (1) Business Day after the date of such termination, or

(iv) by Versum pursuant to Section 9.4(c) [*Versum Termination to Accept Superior Proposal*], then concurrently and as a condition to the effectiveness of such termination,

Versum shall, in the case of Section 9.5(b)(i), Section 9.5(b)(ii), Section 9.5(b)(iii) or Section 9.5(b)(iv), pay the Versum Termination Fee to Entegris or its designee by wire transfer of immediately available cash funds. In no event shall Versum be required to pay the Versum Termination Fee on more than one occasion.

(c) In the event that this Agreement is terminated:

(i) by either Versum or Entegris pursuant to Section 9.2(a) [*Outside Date*] (if the sole reason the Merger was not consummated was the failure of Entegris to convene and hold the Entegris Stockholders Meeting prior to the Outside Date) or Section 9.2(c)(ii) [*Requisite Entegris Vote Not Obtained*] and, in either case,

(A) a *bona fide* Acquisition Proposal with respect to Entegris shall have been publicly made directly to the stockholders of Entegris or shall otherwise have become publicly known or any Person shall have publicly announced an intention (whether or not conditional) to make an Acquisition Proposal with respect to Entegris (and such Acquisition Proposal or publicly announced intention shall not have been publicly withdrawn without qualification five (5) Business Days prior to (i) the date of such termination, with respect to any termination pursuant to Section 9.2(a) [*Outside Date*] or (ii) the date of the Entegris Stockholders Meeting, with respect to termination pursuant to Section 9.2(c)(ii) [*Requisite Entegris Vote Not Obtained*]), and

(B) within twelve (12) months after such termination, (1) Entegris or any of its Subsidiaries shall have entered into an Alternative Acquisition Agreement with respect to any Acquisition Proposal with respect to Entegris or (2) there shall have been consummated any Acquisition Proposal with respect to Entegris (in each case of clauses (1) and (2), with fifty percent (50%) being substituted in lieu of fifteen percent (15%) in each instance thereof in the definition of Acquisition Proposal ), then immediately prior to or concurrently with the occurrence of either of the events described in the foregoing clauses (B)(1) or (B)(2),

(ii) by Versum pursuant to Section 9.4(a) [*Entegris Change of Recommendation*], then promptly, but in no event later than two (2) Business Days after the date of such termination,

(iii) by either Entegris or Versum pursuant to Section 9.2(c)(ii) [*Requisite Entegris Vote Not Obtained*] (and, at the time of such termination pursuant to Section 9.2(c)(ii) [*Requisite Entegris Vote Not Obtained*], Versum had the right to terminate this Agreement pursuant to Section 9.4(a) [*Entegris Change of Recommendation*]), then promptly, but in no event later than, in the case of such termination by Versum, two (2) Business Days or, in the case of such termination by Entegris, one (1) Business Day after the date of such termination, or

(iv) by Entegris pursuant to Section 9.3(c) [*Entegris Termination to Accept Superior Proposal*], then concurrently and as a condition to the effectiveness of such termination,

Entegris shall, in the case of Section 9.5(c)(i), Section 9.5(c)(ii), Section 9.5(c)(iii) or Section 9.5(c)(iv) pay the Entegris Termination Fee to Versum or its designee by wire transfer of immediately available cash funds. In no event shall Entegris be required to pay the Entegris Termination Fee on more than one occasion.

(d) In the event that this Agreement is terminated:

(i) by either Versum or Entegris pursuant to Section 9.2(c)(i) [*Requisite Versum Vote Not Obtained*] at a time when the condition set forth in Section 8.1(b) [*Entegris Stockholder Approval*] has been satisfied, then promptly, but in no event later than, in the case of such termination by Entegris, three (3) Business Days or, in the case of such termination by Versum, one (1) Business Day after the date of such termination, Versum shall pay all of the documented out-of-pocket costs, fees and expenses of counsel, accountants, financial advisors and other experts and advisors as well as fees and expenses incident to negotiation, preparation and execution of this Agreement and related documentation and stockholders meetings and consents (collectively, **Costs** ) of Entegris up to a maximum amount equal to $35 million (the **Expense Amount** ), to Entegris or its designee by wire transfer of immediately available cash funds; provided that any amounts paid under this Section 9.5(d)(i) shall be credited (without interest) against any Versum Termination Fee if paid to Entegris (or its designee) pursuant to the terms of this Agreement, and

(ii) by either Versum or Entegris pursuant to Section 9.2(c)(ii) [*Requisite Entegris Vote Not Obtained*] at a time when the condition set forth in Section 8.1(a) [*Versum Stockholder Approval*] has been satisfied, then promptly, but in no event later than, in the case of such termination by Versum, three (3) Business Days or, in the case of such termination by Entegris, one (1) Business Day after the date of such termination, Entegris shall pay all of the documented out-of-pocket Costs of Versum up to the Expense Amount to Versum or its designee by wire transfer of immediately available cash funds; provided that any amounts paid under this Section 9.5(d)(ii) shall be credited (without interest) against any Entegris Termination Fee if paid to Versum (or its designee) pursuant to the terms of this Agreement.

(e) The Parties hereby acknowledge and agree that the agreements contained in this Section 9.5 are an integral part of the Transactions, and that, without these agreements, the other Parties would not enter into this Agreement; accordingly, if Versum or Entegris, as applicable, fails to promptly pay the amount due pursuant to this Section 9.5, and, in order to obtain such payment, Entegris or Versum, as applicable, commences a suit that results in a judgment against Versum or Entegris, as applicable, for the fees set forth in this Section 9.5 or any portion of such fees, such paying Party shall pay the other Party its costs and expenses (including reasonable attorneys fees, costs and expenses) in connection with such suit, together with interest on the amount of the fee at the prime rate as published by *The Wall Street Journal* (in effect on the date such payment was required to be made) from the date such payment was required to be made through the date of payment. Notwithstanding anything in this Agreement to the contrary, the Parties hereby acknowledge and agree that in the event that any termination fee becomes payable by, and is paid by, Versum or becomes payable by, and is paid by, Entegris, as applicable, such fee shall be the receiving Party s sole and exclusive remedy for damages against the other Parties and their respective former, current or future stockholders, directors, officers, Affiliates, agents or other Representatives for any loss suffered as a result of any breach of any

representation, warranty, covenant or agreement set forth in this Agreement or the failure of the Transactions to be consummated; provided, however,

that no such payment shall relieve any Party of any liability or damages to any other Party resulting from any fraud or Willful Breach of this Agreement.

ARTICLE X

MISCELLANEOUS AND GENERAL

10.1. Survival. This Article X and the agreements of Versum and Entegris contained in Article II [*Merger Consideration; Effect of the Merger on Capital Stock*], Article III [*Delivery of Merger Consideration; Procedures for Surrender*], Section 4.1 [*Combined Company Governance and Additional Matters*], Section 7.11 [*Employee Benefits*], Section 7.12 [*Certain Tax Matters*], Section 7.13 [*Expenses*], and Section 7.14 [*Indemnification; Directors and Officers Insurance*] shall survive the consummation of the Merger. All other representations, warranties, covenants and agreements in this Agreement or in any instrument or other document delivered pursuant to this Agreement shall not survive the consummation of the Merger.

10.2. Amendment; Waiver. Subject to the provisions of applicable Laws and the provisions of Section 7.14 [*Indemnification; Directors and Officers Insurance*] and Section 10.15 [*Financing Parties*], at any time prior to the Effective Time, this Agreement may be amended, modified or waived if, and only if, such amendment, modification or waiver is in writing and signed, in the case of an amendment, modification or waiver, by Versum and Entegris, or in the case of a waiver, by the Party against whom the waiver is to be effective. The conditions to each of the respective parties obligations to consummate the Transactions are for the sole benefit of such Party and may be waived by such Party in whole or in part to the extent permitted by applicable Law; provided, however, that any such waiver shall only be effective if made in writing and executed by the Party against whom the waiver is to be effective. No failure or delay by any Party in exercising any right, power or privilege hereunder shall operate as a waiver thereof nor shall any single or partial exercise thereof preclude any other or further exercise thereof or the exercise of any other right, power or privilege. The rights and remedies herein provided shall be cumulative and not exclusive of any rights or remedies provided by Law.

10.3. Counterparts. This Agreement may be executed in any number of counterparts, each such counterpart being deemed to be an original instrument, and all such counterparts shall together constitute the same agreement. A signed copy of this Agreement delivered by facsimile, email or other means of electronic transmission shall be deemed to have the same legal effect as delivery of an original signed copy of this Agreement.

10.4. Governing Law and Venue; Submission to Jurisdiction; Selection of Forum; Waiver of Trial by Jury.

(a) THIS AGREEMENT SHALL BE DEEMED TO BE MADE IN AND IN ALL RESPECTS SHALL BE INTERPRETED, CONSTRUED AND GOVERNED BY AND IN ACCORDANCE WITH THE LAW OF THE STATE OF DELAWARE WITHOUT REGARD TO THE CONFLICT OF LAW PRINCIPLES THEREOF (OR ANY OTHER JURISDICTION) TO THE EXTENT THAT SUCH PRINCIPLES WOULD DIRECT A MATTER TO ANOTHER JURISDICTION.

(b) Each of the Parties agrees that it shall bring any action or Proceeding in respect of any claim arising under or relating to this Agreement or the Transactions exclusively in the Court of Chancery for the State of Delaware in and for New Castle County, Delaware (or, in the event that such court does not have subject matter jurisdiction over such action or Proceeding, the United States District Court for the District of Delaware) (the **Chosen Court**) and, solely in connection with such claims, (i) irrevocably submits to the exclusive jurisdiction of the Chosen Court, (ii) waives any objection to the laying of venue in any such action or Proceeding in the Chosen Court, (iii) waives any objection that the Chosen Court is an inconvenient forum or does not have jurisdiction over any Party and (iv) agrees that mailing of

process or other papers in connection with any such action or Proceeding in the manner provided in Section 10.6 or in such other manner as may be permitted by Law shall be valid and sufficient service thereof.

(c) EACH PARTY ACKNOWLEDGES AND AGREES THAT ANY CONTROVERSY WHICH MAY BE IN CONNECTION WITH, ARISE OUT OF OR OTHERWISE RELATE TO THIS AGREEMENT, ANY INSTRUMENT OR OTHER DOCUMENT DELIVERED PURSUANT TO THIS AGREEMENT OR OTHER DOCUMENT DELIVERED PURSUANT TO THIS AGREEMENT OR THE TRANSACTIONS, IS LIKELY TO INVOLVE COMPLICATED AND DIFFICULT ISSUES, AND THEREFORE EACH PARTY HERETO IRREVOCABLY AND UNCONDITIONALLY WAIVES TO THE FULLEST EXTENT PERMITTED BY LAW ANY RIGHT IT MAY HAVE TO A TRIAL BY JURY WITH RESPECT TO ANY ACTION OR PROCEEDING DIRECTLY OR INDIRECTLY IN CONNECTION WITH, ARISING OUT OF OR OTHERWISE RELATING TO THIS AGREEMENT, ANY INSTRUMENT OR OTHER DOCUMENT DELIVERED PURSUANT TO THIS AGREEMENT OR THE TRANSACTIONS. EACH PARTY HEREBY ACKNOWLEDGES AND CERTIFIES (I) THAT NO REPRESENTATIVE, AGENT OR ATTORNEY OF THE OTHER PARTY HAS REPRESENTED, EXPRESSLY OR OTHERWISE, THAT SUCH OTHER PARTY WOULD NOT, IN THE EVENT OF ANY ACTION OR PROCEEDING, SEEK TO ENFORCE THE FOREGOING WAIVER, (II) IT UNDERSTANDS AND HAS CONSIDERED THE IMPLICATIONS OF THIS WAIVER, (III) IT MAKES THIS WAIVER VOLUNTARILY AND (IV) IT HAS BEEN INDUCED TO ENTER INTO THIS AGREEMENT AND THE TRANSACTIONS BY, AMONG OTHER THINGS, THE MUTUAL WAIVERS, ACKNOWLEDGMENTS AND CERTIFICATIONS CONTAINED IN THIS SECTION 10.4(c).

10.5. Specific Performance. Each of the Parties acknowledges and agrees that the rights of each Party to consummate the Transactions are special, unique and of extraordinary character and that if for any reason any of the provisions of this Agreement are not performed in accordance with their specific terms or are otherwise breached, immediate and irreparable harm or damage would be caused for which money damages would not be an adequate remedy. Accordingly, each Party agrees that, in addition to any other available remedies a Party may have in equity or at Law, each Party shall be entitled to enforce specifically the terms and provisions of this Agreement and to obtain an injunction restraining any breach or violation or threatened breach or violation of the provisions of this Agreement in the Court of Chancery of the State of Delaware without necessity of posting a bond or other form of security. In the event that any action or Proceeding should be brought in equity to enforce the provisions of this Agreement, no Party shall allege, and each Party hereby waives the defense, that there is an adequate remedy at Law.

10.6. Notices. All notices, requests, instructions or other communications or documents to be given or made hereunder by any Party to the other Parties shall be in writing and shall be deemed to have been duly given when (a) served by personal delivery or by an internationally recognized overnight courier service upon the Party or Parties for whom it is intended, (b) delivered by registered or certified mail, return receipt requested or (c) sent by email, provided that the transmission of the email is promptly confirmed by telephone or response email:

If to Entegris:

Entegris, Inc.

129 Concord Road

Billerica, MA 01821

Attention: Bertrand Loy

Telephone: (978) 436-6500

E-mail: bertrand.loy@entegris.com

Table of Contents

With a copy (which shall not constitute notice) to:

Wachtell, Lipton, Rosen & Katz

51 West 52nd Street

New York, NY 10019

Attention: Mark Gordon

Alison Z. Preiss

Telephone: (212) 403-1000

E-mail: mgordon@wlrk.com

azpreiss@wlrk.com

If to Versum:

Versum Materials, Inc.

8555 South River Parkway

Tempe, AZ 85284

Attention: Michael W. Valente

Telephone: (480) 482-4302

E-mail: michael.valente@VersumMaterials.com

With a copy (which shall not constitute notice) to:

Simpson Thacher & Bartlett LLP

425 Lexington Avenue

New York, NY 10017

Attention: Mario A. Ponce

Jakob Rendtorff

Telephone: (212) 455-2000

E-mail: mponce@stblaw.com

jrendtorff@stblaw.com

or to such other Person or addressees as has been designated in writing by the party to receive such notice provided above.

10.7. Definitions.

(a) For purposes of this Agreement, the following terms (including, with correlative meaning, their singular and plural variations) shall have the following meanings:

**401(k) Plan** means a Benefit Plan that is a defined contribution plan with a qualified cash or deferred arrangement within the meaning of Section 401 of the Code.

**Acquisition Proposal** means (a) any proposal, offer or indication of interest relating to a merger, joint venture, partnership, consolidation, dissolution, liquidation, tender offer, recapitalization, reorganization, spin-off, share exchange, business combination or similar transaction involving Versum or Entegris, as applicable, or any of their respective Subsidiaries and involving, directly or indirectly, fifteen percent (15%) or more of the consolidated net revenues, net income or total assets (it being understood that total assets include equity securities of Subsidiaries of Versum or Entegris, as applicable), or (b) any acquisition by any Person or group (as defined under Section 13 of the Exchange Act) resulting in, or any proposal, offer, inquiry or indication of interest that if consummated would result in, any Person or group (as defined under Section 13 of the Exchange Act) becoming the beneficial owner of, directly or indirectly, in one or a series of related transactions, fifteen percent (15%) or more of the total voting power or of any class of equity securities of Versum or Entegris, as applicable, or fifteen percent (15%) or more of the consolidated net revenues, net income or total assets (it being understood that total assets include equity securities of Subsidiaries) of Versum or Entegris, as applicable,

in each case of clauses (a) and (b), other than the Transactions; provided that any proposal or offer to the extent related to any purchase of assets required to be divested or held separate (including by trust or otherwise) pursuant to a Regulatory Remedy in accordance with Section 7.5(c) shall not be deemed an Acquisition Proposal.

**Affiliate** means, with respect to any Person, any other Person that directly or indirectly, through one or more intermediaries, controls, is controlled by, or is under common control with, such first Person.

**Antitrust Law** means the Sherman Antitrust Act of 1890, as amended, the Clayton Act of 1914, as amended, the HSR Act, the Federal Trade Commission Act of 1914, as amended, and all other United States or non-United States, including state, national, or supranational, antitrust, competition or other Laws that are designed or intended to prohibit, restrict or regulate actions having the purpose or effect of monopolization or restraint of trade or lessening of competition through merger or acquisition.

**Benefit Plan** means any benefit or compensation plan, program, policy, practice, agreement, contract, arrangement or other obligation, whether or not in writing and whether or not funded, in each case, that is sponsored or maintained by, or required to be contributed to, or with respect to which any potential liability is borne by Versum or Entegris or any of their respective Subsidiaries. Benefit Plans include, but are not limited to, employee benefit plans within the meaning of ERISA, employment, non-compete and/or non-solicit, consulting, retirement, severance, termination or change in control agreements, deferred compensation, equity-based, incentive, bonus, supplemental retirement, profit sharing, insurance, medical, health, welfare, fringe or other benefits or remuneration of any kind.

**Business Day** means any day ending at 11:59 p.m. (Eastern Time) other than a Saturday or Sunday or a day on which banks in the City of New York are required or authorized by Law to be closed.

**Company Intellectual Property** means all Intellectual Property owned or purported to be owned by Versum and its Subsidiaries or Entegris and its Subsidiaries, as applicable.

**Contract** means any oral or written contract, agreement, lease, license, note, mortgage, indenture, arrangement or other obligation (other than a Benefit Plan).

**Controlled Group Liability** means any and all liabilities (a) under Title IV of ERISA, (b) under Section 302 of ERISA, (c) under Sections 412 and 4971 of the Code and (d) as a result of a failure to comply with the continuation coverage requirements of Section 601 et seq. of ERISA and Section 4980B of the Code.

**Covered Termination** means (a) in the case of an employee of Versum and its Subsidiaries, the termination of employment of a holder of a Versum RSU or Versum PSU, as applicable, (i) by Versum or one of its Subsidiaries other than for Cause or (ii) by the employee for Good Reason (as such terms are defined in the applicable Versum RSU award agreement or Versum PSU award agreement, as applicable) during the twenty four (24)-month period following the Closing Date and (b) in the case of a member of the Versum Board, the termination of service on the board of directors of Versum or Entegris thereof for any reason on or following the Closing Date. For the avoidance of doubt, if an employee of Versum and its Subsidiaries does not have Good Reason termination rights provided in their applicable equity award agreement (or employment or similar agreement), a Covered Termination shall not include a termination by the employee for Good Reason.

**DTC** means The Depositary Trust Company.

**Effect** means any effect, event, development, change, state of facts, condition, circumstance or occurrence.

**Entegris Benefit Plan** means any Benefit Plan that is sponsored or maintained by, or required to be contributed to, or with respect to which any potential liability is borne by Entegris or any of its Subsidiaries.

Table of Contents

**Entegris ESPP** means the Entegris, Inc. Amended and Restated Employee Stock Purchase Plan.

**Entegris Stock Plan** means the Entegris, Inc. 2010 Stock Plan, as amended and/or restated from time to time.

**Entegris Stockholders Meeting** means the meeting of stockholders of Entegris to be held in connection with the Merger, as may be adjourned or postponed from time to time.

**Entegris Termination Fee** means an amount in cash equal to $155 million.

**Employee** means any current or former employee, officer, director or independent contractor (who is a natural person) of Versum or Entegris or any of their respective Subsidiaries, as applicable.

**Environmental Law** means any Law relating to: (a) the protection, investigation or restoration of the environment or natural resources, (b) the handling, use, disposal, Release or threatened Release of, or exposure to any harmful or deleterious substances or (c) indoor air quality, wetlands, pollution, contamination or any injury or threat of injury to persons or property arising from any harmful or deleterious substances.

**ERISA** means the Employee Retirement Income Security Act of 1974, as amended.

**ERISA Affiliate** means all employers (whether or not incorporated) that would be treated together with Versum or Entegris or any of their respective Subsidiaries, as applicable, as a single employer within the meaning of Section 414 of the Code.

**ERISA Plans** means each Benefit Plan that is an employee benefit plan within the meaning of Section 3(3) of ERISA, excluding multiemployer plans within the meaning of Section 3(37) of ERISA.

**Exchange Act** means the Securities Exchange Act of 1934, as amended.

**Excluded Shares** means shares of Versum Common Stock owned by Versum excluding any such shares of Versum Common Stock owned by a Versum Benefit Plan or held on behalf of third parties.

**Financing Entities** shall mean (a) Morgan Stanley Senior Funding, Inc. and any other Person that becomes a Commitment Party under, and as defined in, that certain Commitment Letter dated the date hereof between Entegris and Morgan Stanley Senior Funding, Inc., and (b) any other Person that shall have committed to provide or arrange any financing, or any amendment or other modification of any financing, in each case, pursuant to or in connection with the Financing Documents, or that is otherwise acting as an arranger, bookrunner, underwriter, initial purchaser, placement agent, administrative or collateral agent, trustee or a similar representative in respect of, any such financing or amendment, and their respective Affiliates and their and their respective Affiliates officers, directors, employees, agents and representatives and their respective successors and assigns.

**Governmental Entity** means any United States, non-United States, supranational or transnational governmental (including public international organizations), quasi-governmental, regulatory or self-regulatory authority, agency, commission, body, department or instrumentality or any court, tribunal or arbitrator or other entity or subdivision thereof or other legislative, executive or judicial entity or subdivision thereof, in each case, of competent jurisdiction.

**Governmental Order** means any order, writ, judgment, temporary, preliminary or permanent injunction, decree, ruling, stipulation, determination, or award entered by or with any Governmental Entity.

Table of Contents

**Hazardous Materials** means (a) petroleum, petroleum products and by-products, asbestos and asbestos-containing materials, polychlorinated biphenyls, mold, and radioactive substances and (b) any other chemical, material, substance, waste, pollutant or contaminant that is prohibited or regulated by or pursuant to, any Environmental Law.

**HSR Act** means the Hart-Scott-Rodino Antitrust Improvement Act of 1976, as amended, and the rules and regulations promulgated thereunder.

**Indebtedness** means, with respect to any Person, without duplication, all obligations or undertakings by such Person (a) for borrowed money (including deposits or advances of any kind to such Person); (b) evidenced by bonds, debentures, notes or similar instruments; (c) for capitalized leases or to pay the deferred and unpaid purchase price of property or equipment; (d) pursuant to securitization or factoring programs or arrangements; (e) pursuant to guarantees and arrangements having the economic effect of a guarantee of any Indebtedness of any other Person (other than between or among any of Entegris and its wholly owned Subsidiaries or between or among any of Versum and its wholly owned Subsidiaries); (f) to maintain or cause to be maintained the financing, financial position or financial covenants of others; (g) net cash payment obligations of such Person under swaps, options, derivatives and other hedging Contracts or arrangements that will be payable upon termination thereof (assuming termination on the date of determination) or (h) letters of credit, bank guarantees, and other similar Contracts or arrangements entered into by or on behalf of such Person.

**Intellectual Property** means all intellectual and industrial property rights anywhere in the world (whether foreign, state or domestic, registered or unregistered), including rights arising under or with respect to: (a) patents and utility models of any kind, patent applications, including provisional applications, statutory invention registrations, inventions, discoveries and invention disclosures (whether or not patented), and all related continuations, continuations-in-part, divisionals, reissues, re-examinations, substitutions, and extensions thereof, (b) trademarks, service marks, trade dress, logos, Internet domain names, uniform resource locators, social and mobile media identifiers and other similar identifiers of origin, trade names and corporate names, whether registered or unregistered, and the goodwill associated therewith, together with any registrations and applications for registration thereof, (c) copyrights, mask works, rights under copyrights and corresponding rights in, industrial designs, and works of authorship (including computer software), applications, source code and object code, and databases, other compilations of information), whether registered or unregistered, and any registrations, renewals and applications for registration thereof, (d) trade secrets and other rights in know-how and confidential or proprietary information, including in any technical data, specifications, designs, techniques, processes, methods, inventions, discoveries, software, algorithms and databases and the information contained therein, in each case, to the extent that it qualifies as a trade secret under applicable Law and (e) all other intellectual and industrial property rights recognized by applicable Law.

**Intervening Event** means any material Effect that was not known or reasonably foreseeable by the Versum Board or the Entegris Board, as applicable, on the date of this Agreement (or, if known or reasonably foreseeable, the consequences of which were not known or reasonably foreseeable by such board of directors as of the date of this Agreement), which Effect or consequences, as applicable, become known by such board of directors prior to the time Versum receives the Requisite Versum Vote or Entegris receives the Requisite Entegris Vote, as applicable; provided, that (a) in no event shall the receipt, existence or terms of an Acquisition Proposal or a Superior Proposal or any inquiry or communications relating thereto, or any matter relating thereto or consequence thereof, be taken into account for purposes of determining whether an Intervening Event has occurred, (b) in no event shall any changes in the market price or trading volume of Versum Common Stock or Entegris Common Stock, as applicable, or the fact that Versum or Entegris, as applicable, meets, exceeds or fails to meet internal or published projections, forecasts or revenue or earnings predictions for any period constitute an Intervening Event, except that the underlying cause or causes of such change or fact may be taken into account for purposes of determining whether an Intervening Event has

occurred and (c) in no event shall any Effect that has had or would reasonably be expected to have an adverse effect on the business or financial condition of Versum (in the case of determination made by the Entegris Board) or Entegris (in the case of determination made

by the Versum Board) and its Subsidiaries, as applicable, constitute an Intervening Event unless such Effect constitutes a Material Adverse Effect on Versum or Entegris, as applicable.

**IT Assets** means computers, software, firmware, middleware, servers, workstations, routers, hubs, switches, networks, data communications lines and all other information technology equipment and all associated documentation.

**Knowledge** (a) with respect to Versum or any of its Subsidiaries means the actual knowledge of the Persons listed on Section 10.7(a)(i) of the Versum Disclosure Letter and (b) with respect to Entegris or any of its Subsidiaries means the actual knowledge of the Persons listed on Section 10.7(a)(j) of the Entegris Disclosure Letter.

**Laws** means any federal, state, local, foreign, international or transnational law, statute, ordinance, common law, rule, regulation, standard, judgment, determination, order, writ, injunction, decree, arbitration award, treaty, agency requirement, authorization, license or permit of any Governmental Entity.

**Leased Real Property** with respect to Versum or Entegris, means all leasehold or subleasehold estates and other rights to use and occupy any land, buildings, structures, improvements, fixtures or other interest in Real Property held by Versum and any of its Subsidiaries or Entegris and any of its Subsidiaries, as applicable.

**Licenses** means all permits, licenses, certifications, approvals, registrations, consents, authorizations, franchises, variances, exemptions and orders issued or granted by a Governmental Entity.

**Material Adverse Effect** with respect to Versum or Entegris, means any Effect that is materially adverse to the business, condition (financial or otherwise) or results of operations of such Party and its Subsidiaries, taken as a whole; provided, however, that none of the following, alone or in combination, shall be deemed to constitute a Material Adverse Effect, or be taken into account in determining whether a Material Adverse Effect has occurred or would reasonably be expected to occur:

(A) Effects generally affecting (1) the economy, credit, capital, securities or financial markets in the United States or elsewhere in the world, including changes to interest rates and exchange rates, or (2) political, regulatory or business conditions in any jurisdiction in which such Party or any of its Subsidiaries has material operations or where any of such Party s or any of its Subsidiaries products or services are sold;

(B) Effects that are the result of factors generally affecting the semiconductor industry or any industry, markets or geographical areas in which such Party and its Subsidiaries operate;

(C) any loss of, or adverse Effect in, the relationship of such Party or any of its Subsidiaries, contractual or otherwise, with customers, Employees, unions, suppliers, distributors, financing sources, partners or similar relationship to the extent caused by the entry into, announcement or consummation of the Transactions (provided that the exception in this clause (C) shall not apply to the representations and warranties contained in Section 5.4(b));

(D) the performance by any Party of its obligations to the extent expressly required under this Agreement;

(E) any action taken (or not taken) by such Party or any of its Subsidiaries (1) that is required to be taken (or not to be taken) by this Agreement and for which the Party shall have requested in writing the other Party s consent to permit its non-compliance and such non-requesting Party shall not have granted such consent or (2) at the written request of the other Party, which action taken (or not taken) is not required under the terms of this Agreement;

(F) changes or modifications, and prospective changes or modifications, in GAAP or in any Law of general applicability, including the repeal thereof, or in the interpretation or enforcement thereof, after the date of this Agreement;

(G) any failure, in and of itself, by such Party to meet any internal or public projections or forecasts or estimates of revenues or earnings for any period; provided, that the exception in this clause (G) shall not prevent or otherwise affect a determination that any Effect underlying such failure has resulted in, or contributed to, or would reasonably be expected to result in, or contribute to, a Material Adverse Effect (if not otherwise falling within any of the exceptions in clauses (A) through (F) or (H) and (I));

(H) any Effect resulting from acts of war (whether or not declared), civil disobedience, hostilities, sabotage, terrorism, geopolitical conditions, military actions or the escalation or worsening of any of the foregoing, any hurricane, flood, tornado, earthquake or other weather or natural disaster, or any outbreak of illness or other public health event or any other force majeure event, whether or not caused by any Person; or

(I) (1) a decline in the market price, or change in trading volume, in and of itself, of the shares of common stock of such Party on the NYSE or NASDAQ, as applicable, or (2) any ratings downgrade or change in ratings outlook for such Party or any of its Subsidiaries; provided, that the exceptions in this clause (I) shall not prevent or otherwise affect a determination that any Effect underlying such decline or change has resulted in, or contributed to, or would reasonably be expected to result in, or contribute to, a Material Adverse Effect (if not otherwise falling within any of the exceptions in clauses (A) through (H));

provided, further, that, with respect to clauses (A), (B), (F) and (H), such Effect will be taken into account in determining whether a Material Adverse Effect has occurred if it disproportionately adversely affects such Party and its Subsidiaries, taken as a whole, compared to other companies and their respective Subsidiaries, taken as a whole, of comparable size, operating in the industries in which such Party and its Subsidiaries operate, but, in such event, only the incremental disproportionate impact of any such Effect will be taken into account in determining whether a Material Adverse Effect has occurred.

**NASDAQ** means the NASDAQ Global Select Market.

**NYSE** means the New York Stock Exchange, Inc.

**Ordinary Course** means, with respect to an action taken by any Person, that such action is in the ordinary course of business and consistent with the past practices of such Person.

**Organizational Documents** means (a) with respect to any Person that is a corporation, its articles or certificate of incorporation, memorandum and articles of association, as applicable, and bylaws, or comparable documents, (b) with respect to any Person that is a partnership, its certificate of partnership and partnership agreement, or comparable documents, (c) with respect to any Person that is a limited liability company, its certificate of formation and limited liability company or operating agreement, or comparable documents, (d) with respect to any Person that is a trust or other entity, its declaration or agreement of trust or other constituent document or comparable documents and (e) with respect to any other Person that is not an individual, its comparable organizational documents.

**Owned Real Property** with respect to Versum or Entegris, means all land, together with all buildings, structures, improvements and fixtures located thereon, and all easements and other rights and interests appurtenant thereto, owned by Versum and any of its Subsidiaries or Entegris and any of its Subsidiaries, as applicable.

**Permitted Encumbrances** means (a) mechanics , materialmen s, carriers , workmen s, repairmen s, vendors , operator other like Encumbrances, if any, arising or incurred in the Ordinary Course that (i) relate to obligations as to which there is no default on the part of Versum, Entegris or any of their Subsidiaries, as applicable, and that do not materially detract from the value of or materially interfere with the use of any of the assets of the Party and its

Subsidiaries as currently conducted or (ii) are being contested in good faith through appropriate Proceedings;
(b) Encumbrances arising under original purchase price conditional sales contracts and

equipment leases with third parties entered into in the Ordinary Course; (c) Rights-of-Way, covenants, conditions, restrictions and other similar matters of record affecting title and other title defects of record or Encumbrances (other than those constituting Encumbrances for the payment of Indebtedness), if any, that do not or would not, individually or in the aggregate, impair in any material respect the use or occupancy of the assets of the Party and its Subsidiaries, taken as a whole; (d) Encumbrances for Taxes or other governmental charges that are not yet due or payable or that are being contested in good faith through appropriate Proceedings and for which adequate reserves have been established in accordance with GAAP; (e) Encumbrances supporting surety bonds, performance bonds and similar obligations issued in the Ordinary Course in connection with the businesses of the Party and its Subsidiaries; (f) Encumbrances not created by the Party or its Subsidiaries that affect the underlying fee interest of a Versum Leased Real Property (in the case of Versum) or Entegris Leased Real Property (in the case of Entegris); (g) Encumbrances that are disclosed on the most recent consolidated balance sheet of the Party included in the Reports or notes thereto or securing liabilities reflected on such balance sheet; (h) Encumbrances arising under or pursuant to the Organizational Documents of the Party or any of its Subsidiaries; (i) with respect to Rights-of-Way, restrictions on the exercise of any of the rights under a granting instrument that are set forth therein or in another executed agreement, that is of public record or to which the Party or any of its Subsidiaries otherwise has access, between the parties thereto; (j) as to Entegris or Versum, Encumbrances resulting from any facts or circumstances relating to the other Party or any of its Affiliates; (k) Encumbrances that do not and would not reasonably be expected to materially impair, in the case of Versum, the continued use of a Versum Owned Real Property or a Versum Leased Real Property as presently operated, and in the case of Entegris, the continued use of an Entegris Owned Real Property or an Entegris Leased Real Property as presently operated; (l) non-exclusive licenses to Intellectual Property; (m) restrictions or exclusions that would be shown by a current title report or other similar report; and (n) specified Encumbrances described in Section 10.7(a)(ii) of such Party s Disclosure Letter.

**Person** means an individual, corporation (including not-for-profit), Governmental Entity, general or limited partnership, limited liability company, joint venture, estate, trust, association, organization, unincorporated organization, other entity of any kind or nature or group (as defined in Section 13(d)(3) of the Exchange Act).

**Personal Data** means a natural person s name, street address, telephone number, e-mail address, photograph, identification number, social security number, government-issued identifier or tax identification number, driver s license number, passport number, credit card number, bank information, Internet protocol address, device identifier or any other piece of information that, alone or together with other information held by a Party and its Subsidiaries, allows the identification of a natural person.

**Proceeding** means any action, cause of action, claim, demand, litigation, suit, grievance, citation, summons, subpoena, inquiry, audit, hearing, originating application to a tribunal, arbitration or other similar proceeding of any nature, civil, criminal, regulatory, administrative or otherwise, whether in equity or at law, in contract, in tort or otherwise.

**Real Property** means, collectively, the Owned Real Property and the Leased Real Property.

**Registered Intellectual Property** means all Intellectual Property owned by Entegris and its Subsidiaries or Versum and its Subsidiaries, as applicable, that is registered, recorded or filed under the authority of, with or by any Governmental Entity or Internet domain name registrar in any jurisdiction, including pending applications for any of the foregoing.

**Release** means any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing, or arranging for disposal, into the indoor or outdoor environment.

**Rights-of-Way** means easements, licenses, rights-of-way, permits, servitudes, leasehold estates, instruments creating an interest in real property, and other similar real estate interests.

Table of Contents

**Significant Subsidiary** has the meaning ascribed to such term in Rule 1.02(w) of Regulation S-X promulgated pursuant to the Exchange Act.

**Subsidiary** means, with respect to any Person, any other Person of which (a) at least a majority of the securities or ownership interests of such other Person is directly or indirectly owned or controlled by such Person, or (b) the power to vote or direct voting of sufficient voting securities, other voting rights or voting partner interests to elect a majority of the board of directors or other persons performing similar functions is directly or indirectly owned or controlled by such Person or by one or more of its Subsidiaries.

**Superior Proposal** means an unsolicited, *bona fide* written Acquisition Proposal (except that the references in the definition thereof to fifteen percent (15%) or more shall be deemed to be references to 50% or more ) made after the date of this Agreement that the Versum Board or the Entegris Board, as applicable, has determined in good faith, after consultation with its outside legal counsel and its financial advisor (a) would result in a transaction more favorable (including, without limitation, from a financial point of view) to Versum s stockholders or Entegris s stockholders, as applicable, than the Transactions and (b) is reasonably likely to be consummated on the terms proposed, in each case of clauses (a) and (b), taking into account any legal, financial, regulatory and stockholder approval requirements, the sources, availability and terms of any financing, financing market conditions and the existence of a financing contingency, the likelihood of termination, the timing of closing, the identity of the Person or Persons making the proposal and any other aspects considered relevant by the Versum Board or the Entegris Board, as applicable, including any revisions to the terms of this Agreement proposed by Versum or Entegris, as applicable, pursuant to Section 7.2(e)(ii).

**Tax** means all federal, state, local and foreign income, windfall or other profits, franchise, gross receipts, environmental, customs duty, capital stock, severances, stamp, transfer, payroll, sales, employment, unemployment, disability, use, property, withholding, excise, production, value added, escheat, unclaimed property, occupancy and other taxes, duties or assessments in the nature of a tax, together with all interest, penalties and additions imposed with respect to such amounts and any interest in respect of such penalties and additions.

**Tax Return** means all returns and reports (including elections, declarations, disclosures, schedules, estimates and information returns) supplied to or required to be supplied to a Tax authority relating to Taxes.

**Trading Day** means any day on which shares of Entegris Common Stock are traded on the NYSE.

**Treasury Regulation** means Part 1 of Title 26, Chapter I, Subchapter A of the Code of Federal Regulations.

**Versum Benefit Plan** means any Benefit Plan that is sponsored or maintained by, or required to be contributed to, or with respect to which any potential liability is borne by Versum or any of its Subsidiaries.

**Versum Prior Stock Plan** means the Air Products and Chemicals, Inc. Long-Term Incentive Plan, amended and restated as of October 1, 2014.

**Versum Stock Plan** means the Versum Materials, Inc. Amended and Restated Long-Term Incentive Plan.

**Versum Stockholders Meeting** means the meeting of stockholders of Versum to be held in connection with the Merger, as may be adjourned or postponed from time to time.

**Versum Termination Fee** means an amount in cash equal to $140 million.

**Willful Breach** means a breach of this Agreement that is the result of a willful or intentional act or failure to act where the breaching party knows, or would reasonably be expected to have known, that such act or failure to act might result in, or would reasonably be expected to result in, a breach.

Table of Contents

(b) The following terms are defined elsewhere in this Agreement, as indicated below:

| | |
|---|---|
| Agreement | Preamble |
| Alternative Acquisition Agreement | 7.2(e)(i)(D) |
| Applicable Date | 5.5(a) |
| Approvals | 5.4(a) |
| Bankruptcy and Equity Exception | 5.3 |
| Board Recommendation Notice | 7.2(e)(ii) |
| Book-Entry Share | 2.2 |
| Burdensome Effect | 7.5(e) |
| Certificate | 2.2 |
| Certificate of Merger | 1.3 |
| Change of Recommendation | 7.2(e)(i)(D) |
| Charter Amendment | 4.1(a) |
| Chosen Court | 10.4(b) |
| Closing | 1.2 |
| Closing Date | 1.2 |
| Code | Recitals |
| Combined Company | 1.1 |
| Combined Company Board | 4.1(c) |
| Confidentiality Agreement | 10.8 |
| Consents | 7.5(a) |
| Continuing Employees | 7.11(b) |
| Converted Awards | 2.3(g) |
| Converted Versum Option | 2.3(a) |
| Costs | 9.5(d)(i) |
| D&O Insurance | 7.14(b) |
| DGCL | Recitals |
| Director Deferral Plan | 2.3(d) |
| Disclosure Letter | Article V |
| Effective Time | 1.3 |
| Eligible Shares | 2.1 |
| Entegris | Preamble |
| Entegris Board | Recitals |
| Entegris CEO | 4.1(c) |
| Entegris Charter Vote | 5.3 |
| Entegris Common Stock | Recitals |
| Entegris Continuing Employees | 7.11(a) |
| Entegris Designees | 4.1(c) |
| Entegris Disclosure Letter | Article V |
| Entegris Equity Awards | 6.1 |
| Entegris Option | 6.1 |
| Entegris Preferred Stock | 6.1 |
| Entegris PSU | 6.1 |
| Entegris Recommendation | 6.2 |
| Entegris Restricted Share | 6.1 |

| | |
|---|---|
| Entegris RSU | 6.1 |
| Entegris Tax Representation Letter | 7.12(b) |
| Entegris s Counsel | 7.12(b) |
| Encumber | 6.1 |
| Encumbrance | 6.1 |
| Exchange Agent | 3.1 |

Table of Contents

| | |
|---|---|
| Exchange Fund | 3.1 |
| Exchange Ratio | 2.1 |
| Expense Amount | 9.5(d)(i) |
| FCPA | 5.11(e) |
| Filings | 5.4(a) |
| Financing Disclosure | 7.10 |
| Financing Documents | 10.15 |
| GAAP | 5.5(e) |
| Governmental Antitrust Entity | 7.5(d)(i) |
| Indemnified Parties | 7.14(a) |
| Insurance Policies | 5.16 |
| IRS | 5.9(d) |
| Labor Organization | 5.10(a) |
| Letter of Transmittal | 3.2(a) |
| Material Contract | 5.17(a) |
| Merger | Recitals |
| Merger Consideration | 2.1 |
| Non-DTC Book-Entry Share | 3.2(a) |
| Non-U.S. Benefit Plans | 5.9(k) |
| OFAC | 5.11(d) |
| Outside Date | 9.2(a) |
| Party | Preamble |
| Prior Plan Versum RSU | 2.3(b) |
| Proxy/Prospectus | 7.3(a) |
| Registration Statement | 7.3(a) |
| Regulatory Remedy | 7.5(d)(ii) |
| Relevant Legal Restraint | 8.1(e) |
| Replacement RSU | 2.3(b) |
| Reports | 5.5(a) |
| Representatives | 7.2(a) |
| Requisite Entegris Vote | 5.3 |
| Requisite Regulatory Approvals | 8.1(d) |
| Requisite Versum Vote | 5.3 |
| SEC | 2.3(g) |
| Securities Act | 2.3(g) |
| Share Issuance | 5.3 |
| Substitute RSU | 2.3(c) |
| Tail Period | 7.14(b) |
| Takeover Statute | 5.12 |
| Transactions | Recitals |
| Versum | Preamble |
| Versum Board | Recitals |
| Versum Common Stock | Recitals |
| Versum Compensation Committee | 2.3(c) |
| Versum Continuing Employees | 7.11(a) |
| Versum Designees | 4.1(c) |
| Versum Disclosure Letter | Article V |
| Versum Dividend Equivalents | 2.3(e) |

| | |
|---|---|
| Versum DSU | 2.3(d) |
| Versum Equity Awards | 2.3(f) |
| Versum Option | 2.3(a) |
| Versum Preferred Stock | 6.5 |

| | |
|---|---|
| Versum PSU | 2.3(c) |
| Versum Recommendation | 6.6 |
| Versum RSU | 2.3(b) |
| Versum Tax Representation Letter | 7.12(b) |
| Versum s Counsel | 7.12(b) |

10.8. Entire Agreement. This Agreement (including any exhibits hereto), the Versum Disclosure Letter, the Entegris Disclosure Letter and the Mutual Confidentiality Agreement, dated as of January 3, 2019, between Versum and Entegris (the **Confidentiality Agreement**) constitute the entire agreement among the Parties with respect to the subject matter of this Agreement and supersedes all prior and contemporaneous agreements, negotiations, understandings and representations and warranties, whether oral or written, with respect to such matters, except for the Confidentiality Agreement, which shall remain in full force and effect until the Closing.

10.9. Third-Party Beneficiaries. Versum and Entegris hereby agree that their respective representations, warranties and covenants set forth in this Agreement are solely for the benefit of the other Parties hereto, in accordance with and subject to the terms of this Agreement, and this Agreement is not intended to, and does not, confer upon any Person other than Entegris, Versum and their respective successors, legal representatives and permitted assigns any rights or remedies, express or implied, hereunder, including the right to rely upon the representations and warranties set forth in this Agreement, except with respect to (i) Section 7.14 [*Indemnification; Directors and Officers Insurance*] and Section 10.15 [*Financing Parties*] and (ii) after the Effective Time, the provisions of Article II relating to the payment of the Merger Consideration, any dividends or other distributions payable pursuant thereto and any cash in lieu of any fractional shares payable pursuant thereto, which shall inure to the benefit of, and be enforceable by, holders of Versum Common Stock and Versum Equity Awards as of immediately prior to the Effective Time to the extent necessary to receive the consideration and amounts due to such Persons thereunder). The representations and warranties in this Agreement are the product of negotiations among the Parties. Any inaccuracies in such representations and warranties are subject to waiver by the Parties in accordance with Section 10.2 without notice or liability to any other Person. In some instances, the representations and warranties in this Agreement may represent an allocation among the Parties of risks associated with particular matters regardless of the knowledge of any of the Parties. Consequently, Persons other than the Parties may not rely upon the representations and warranties in this Agreement as characterizations of actual facts or circumstances as of the date of this Agreement or as of any other date.

10.10. Fulfillment of Obligations. Whenever this Agreement requires a Subsidiary of Entegris to take any action, such requirement shall be deemed to include an undertaking on the part of Entegris to cause such Subsidiary to take such action and, after the Effective Time, on the part of the Combined Company to cause such Subsidiary to take such action. Whenever this Agreement requires a Subsidiary of Versum to take any action, such requirement shall be deemed to include an undertaking on the part of Versum to cause such Subsidiary to take such action. Any obligation of one Party to another Party under this Agreement, which obligation is performed, satisfied or fulfilled by an Affiliate of such Party, shall be deemed to have been performed, satisfied or fulfilled by such Party.

10.11. Non-Recourse. Unless expressly agreed to otherwise by the Parties in writing, this Agreement may only be enforced against, and any Proceeding in connection with, arising out of or otherwise resulting from this Agreement, any instrument or other document delivered pursuant to this Agreement or the transactions may only be brought against the Persons expressly named as Parties and then only with respect to the specific obligations set forth herein with respect to such Party. No past, present or future director, Employee (including any officer), incorporator, manager, member, partner, stockholder, other equity holder or Persons in a similar capacity, controlling person, Affiliate or other Representative of any Party or of any Affiliate of any Party, or any of their respective successors, Representatives and permitted assigns, shall have any liability or other obligation for any obligation of any Party under this Agreement or for any Proceeding in connection with, arising out of or otherwise resulting from this

Agreement, any instrument or other document delivered pursuant to this Agreement or the Transactions.

10.12. Severability. The provisions of this Agreement shall be deemed severable and the illegality, invalidity or unenforceability of any provision shall not affect the legality, validity or enforceability of the other provisions of this Agreement. If any provision of this Agreement, or the application of such provision to any Person or any circumstance, is illegal, invalid or unenforceable, (a) a suitable and equitable provision shall be substituted therefor in order to carry out, insofar as may be legal, valid and enforceable, the intent and purpose of such illegal, invalid or unenforceable provision, and (b) the remainder of this Agreement and the application of such provision to other Persons or circumstances shall not be affected by such illegality, invalidity or unenforceability, nor shall such illegality, invalidity or unenforceability affect the legality, validity or enforceability of such provision, or the application of such provision, in any other jurisdiction.

10.13. Interpretation; Construction.

(a) The table of contents and headings herein are for convenience of reference only, do not constitute part of this Agreement and shall not be deemed to limit or otherwise affect any of the provisions hereof. All article, section, subsection, schedule, annex and exhibit references used in this Agreement are to articles, sections, subsections, schedules, annexes and exhibits to this Agreement unless otherwise specified. The exhibits, schedules and annexes attached to this Agreement constitute a part of this Agreement and are incorporated herein for all purposes.

(b) If a term is defined as one part of speech (such as a noun), it shall have a corresponding meaning when used as another part of speech (such as a verb). Unless the context of this Agreement clearly requires otherwise, words importing the masculine gender shall include the feminine and neutral genders and vice versa. The words includes or including shall mean including without limitation, the words hereof, hereby, herein, hereunder and similar ter this Agreement shall refer to this Agreement as a whole and not any particular section or article in which such words appear and any reference to a Law shall include any rules and regulations promulgated thereunder, and any reference to any Law in this Agreement shall only be a reference to such Law as of the date of this Agreement. Currency amounts referenced herein are in U.S. Dollars.

(c) Whenever this Agreement refers to a number of days, such number shall refer to calendar days unless Business Days or Trading Days are specified. Whenever any action must be taken hereunder on or by a day that is not a Business Day, then such action may be validly taken on or by the next day that is a Business Day.

(d) All accounting terms used herein and not expressly defined herein shall have the meanings given to them under GAAP.

(e) The Parties have participated jointly in negotiating and drafting this Agreement. In the event that an ambiguity or a question of intent or interpretation arises, this Agreement shall be construed as if drafted jointly by the Parties, and no presumption or burden of proof shall arise favoring or disfavoring any Party by virtue of the authorship of any provision of this Agreement.

10.14. Successors and Assigns. This Agreement shall be binding upon and inure to the benefit of the Parties and their respective successors, legal representatives and permitted assigns. No Party may assign any of its rights or delegate any of its obligations under this Agreement, in whole or in part, by operation of Law or otherwise, directly or indirectly, without the prior written consent of the other Parties.

10.15. Financing Parties. Notwithstanding anything in this Agreement to the contrary, but in all cases subject to and without in any way limiting the rights and claims of any Party and/or any of its Subsidiaries under and pursuant to any commitment letter or any definitive agreement entered into by such Party (but not, for the avoidance of doubt, the other Party or any of its Subsidiaries) with respect to any financing arrangements in connection with the Merger (the

Financing Documents ), each of Versum and Entegris, on behalf of itself, its Subsidiaries and each of its controlled Affiliates, hereby:

(a) agrees that any Proceeding, whether in law or in equity, whether in contract or in tort or otherwise, involving the Financing Entities, in any way arising out of or relating to this Agreement, the Financing

Documents or any of the transactions contemplated hereby or thereby or the performance of any services thereunder shall be subject to the exclusive jurisdiction of, and shall be brought and heard and determined exclusively in, any Federal court of the United States of America sitting in the Borough of Manhattan or, if that court does not have subject matter jurisdiction, in any state court located in the City and County of New York, and any appellate court thereof and each party hereto irrevocably submits itself and its property with respect to any such Proceeding to the exclusive jurisdiction of such court;

(b) agrees that any such Proceeding shall be governed by the laws of the State of New York (without giving effect to any conflicts of law principles that would result in the application of the laws of another state), except as otherwise expressly provided in the Financing Documents;

(c) agrees not to bring or support or permit any of its affiliates to bring or support any Proceeding of any kind or description, whether in law or in equity, whether in contract or in tort or otherwise, against any Financing Entity in any way arising out of or relating to this Agreement, the Financing Documents or any of the transactions contemplated hereby or thereby or the performance of any services thereunder in any forum other than any Federal court of the United States of America sitting in the Borough of Manhattan or, if that court does not have subject matter jurisdiction, in any state court located in the City and County of New York;

(d) agrees that service of process upon such Party, its Subsidiaries or its controlled Affiliates in any such Proceeding shall be effective if notice is given in accordance with Section 10.6;

(e) irrevocably waives, to the fullest extent that it may effectively do so, the defense of an inconvenient forum to the maintenance of such Proceeding in any such court;

(f) knowingly, intentionally and voluntarily waives to the fullest extent permitted by applicable law trial by jury in any Proceeding brought against the Financing Entities in any way arising out of or relating to, this Agreement, the Financing Documents or any of the transactions contemplated hereby or thereby or the performance of any services thereunder;

(g) agrees that none of the Financing Entities will have any liability to any Party or any of its Subsidiaries or any of their respective Affiliates or Representatives in any way relating to or arising out of this Agreement, any Financing Documents to which such Party is not a party, or any of the transactions contemplated hereby or thereby or the performance of any services thereunder, whether in law or in equity, whether in contract or in tort or otherwise;

(h) agrees that the Financing Entities are express third party beneficiaries of, and may enforce, this Section 10.15 and any of the provisions in this Agreement reflecting the agreements in this Section 10.15; and

(i) agrees that the provisions in this Section 10.15 and the definition of Financing Entities (and any other definition set forth in, or any other provision of, this Agreement to the extent that an amendment, waiver or other modification of such definition or other provision would amend, waive or otherwise modify the substance of this Section 10.15 or the definition of Financing Parties ) shall not be amended, waived or otherwise modified, in each case, in any way adverse to the Financing Entities without the prior written consent of the Financing Entities (and any such amendment, waiver or other modification without such prior written consent shall be null and void).

[*signature page follows*]

Table of Contents

IN WITNESS WHEREOF, this Agreement has been duly executed and delivered by the duly authorized officers of the parties to this Agreement as of the date first written above.

ENTEGRIS, INC.

By /s/ Bertrand Loy
Name: Bertrand Loy
Title: President and Chief Executive Officer

VERSUM MATERIALS, INC.

By /s/ Guillermo Novo
Name: Guillermo Novo
Title: President and Chief Executive Officer

[*Signature Page to Merger Agreement*]

Table of Contents

**Exhibit A**

**Form of Amended and Restated Certificate of Incorporation of the Combined Company**

(attached)

Table of Contents

FINAL FORM

FORM OF AMENDED AND RESTATED CERTIFICATE

OF INCORPORATION OF

ENTEGRIS, INC.

Entegris, Inc., a corporation organized and existing under the laws of the State of Delaware (the Corporation ), does hereby certify as follows:

1. The name of the Corporation is Entegris, Inc. The original name of the Corporation was Eagle DE, Inc., and the original Certificate of Incorporation was filed with the Secretary of State of the State of Delaware on March 17, 2005.

2. This Amended and Restated Certificate of Incorporation was duly adopted in accordance with the provisions of Sections 242 and 245 of the General Corporation Law of the State of Delaware (as amended, the DGCL ) and is to become effective as of [ ] on [ ].

3. This Amended and Restated Certificate of Incorporation restates, integrates and amends the provisions of the currently existing Certificate of Incorporation of the Corporation, including as amended or supplemented heretofore. As so restated, integrated and amended, the Amended and Restated Certificate of Incorporation reads as follows:

**ARTICLE I**

The name of this corporation is Entegris, Inc. (hereinafter referred to as the Corporation ).

**ARTICLE II**

The registered office of this Corporation in the State of Delaware is located at Corporation Trust Center, 1209 Orange Street, in the City of Wilmington (19801), County of New Castle. The name of its registered agent at such address is The Corporation Trust Company.

**ARTICLE III**

The purpose of this Corporation is to engage in any lawful act or activity for which corporations may be organized under the Delaware General Corporation Law.

**ARTICLE IV**

A. The total number of shares of all classes of stock which the Corporation shall have authority to issue is 405,000,000 shares, consisting of (i) 400,000,000 shares of Common Stock, $.01 par value per share ( Common Stock ), and (ii) 5,000,000 shares of Preferred Stock, $.01 par value per share ( Preferred Stock ).

B. The Board of Directors is authorized, subject to any limitations prescribed by law, to provide for the issuance of shares of Preferred Stock in series, and by filing a certificate pursuant to the applicable law of the State of Delaware (such certificate being hereinafter referred to as a Preferred Stock Designation ), to establish from time to time the number of shares to be included in each such series, and to fix the designation, powers,

Table of Contents

preferences, and rights of the shares of each such series and any qualifications, limitations or restrictions thereof. The number of authorized shares of Preferred Stock may be increased or decreased (but not below the number of shares thereof then outstanding) by the affirmative vote of the holders of a majority of the Common Stock, without a vote of the holders of the Preferred Stock, or of any series thereof, unless a vote of any such holders is required pursuant to the terms of any Preferred Stock Designation.

**ARTICLE V**

Unless and except to the extent that the By-laws of this Corporation shall so require, the election of directors need not be by written ballot.

**ARTICLE VI**

In furtherance of and not in limitation of the powers conferred by statute, the Board of Directors is expressly authorized to adopt, amend or repeal the By-Laws of this Corporation, subject to the right of the stockholders entitled to vote with respect thereto to alter and repeal the By-Laws adopted or amended by the Board of Directors; provided, however, that, notwithstanding the fact that a lesser percentage may be specified by law, the By-Laws shall not be altered, amended or repealed by the stockholders of the Corporation except by the affirmative vote of holders of not less than seventy-five percent (75%) of the then outstanding shares of capital stock of the Corporation entitled to vote generally in the election of directors. Notwithstanding any other provisions of law, this Certificate of Incorporation or the By-Laws, each as amended, and notwithstanding the fact that a lesser percentage may be specified by law, this Certificate of Incorporation or the By-Laws of the Corporation, the affirmative vote of seventy-five percent (75%) of the then outstanding shares of capital stock of the Corporation entitled to vote generally in the election of directors shall be required to amend or repeal, or to adopt any provisions inconsistent with the purpose or intent of, this Article VI.

**ARTICLE VII**

Except to the extent that the Delaware General Corporation Law prohibits the elimination or limitation of liability of directors for breaches of fiduciary duty, no director of the Corporation shall be personally liable to the Corporation or its stockholders for monetary damages for any breach of fiduciary duty as a director, notwithstanding any provision of law imposing such liability. No amendment to or repeal of this provision shall apply to or have any effect on the liability or alleged liability of any director of the Corporation for or with respect to any acts or omissions of such director occurring prior to such amendment.

**ARTICLE VIII**

Subject to Article XIV, the Corporation reserves the right to amend, alter, change or repeal any provision contained in this Certificate of Incorporation, in the manner now or hereafter prescribed by statute and this Certificate of Incorporation, and all rights conferred upon stockholders herein are granted subject to this reservation.

**ARTICLE IX**

This Article is inserted for the management of the business and for the conduct of the affairs of the Corporation.

1. Number; Election and Qualification of Directors. The number of directors which shall constitute the whole Board of Directors shall be determined by resolution of the Board of Directors, but in no event shall be less than three. The directors shall be elected at the annual meeting of stockholders by such stockholders as have the right to vote on such election. The directors need not be stockholders of the Corporation.

2. Terms of Office. Except as provided in Section 3 of this Article IX, each director shall serve for a term ending on the date of the first annual meeting following the election of such director; provided, however, that the term of each director shall be subject to the election and qualification of his or her successor and to his or her earlier death, resignation or removal.

3. Removal. Any director or the entire board of directors may be removed, with or without cause, by the holders of a majority of the then outstanding shares of capital stock of the Corporation entitled to vote generally in the election of directors, except to the extent a different vote is required by law.

4. Vacancies. Any vacancy in the Board of Directors, however occurring, including a vacancy resulting from an enlargement of the Board, shall be filled only by vote of a majority of the directors then in office, although less than a quorum, or by a sole remaining director. A director elected to fill a vacancy shall be elected for the unexpired term of his or her predecessor in office, and a director chosen to fill a position resulting from an increase in the number of directors shall hold office until the next election of directors, subject to the election and qualification of his or her successor and to his or her earlier death, resignation or removal.

5. Stockholder Nominations and Introduction of Business, Etc. Advance notice of stockholder nominations for election of directors and other business to be brought by stockholders before either an annual or special meeting of stockholders shall be given in the manner provided by the By-Laws of this Corporation.

## ARTICLE X

1. Dividends. The Board of Directors shall have authority from time to time to set apart out of any assets of the Corporation otherwise available for dividends a reserve or reserves as working capital or for any other purpose or purposes, and to abolish or add to any such reserve or reserves from time to time as said board may deem to be in the interest of the Corporation; and said Board shall likewise have power to determine in its discretion, except as herein otherwise provided, what part of the assets of the Corporation available for dividends in excess of such reserve or reserves shall be declared in dividends and paid to the stockholders of the Corporation.

2. Location of Meetings, Books and Records. Except as otherwise provided in the By-laws, the stockholders of the Corporation and the Board of Directors may hold their meetings and have an office or offices outside of the State of Delaware and, subject to the provisions of the laws of said State, may keep the books of the Corporation outside of said State at such places as may, from time to time, be designated by the Board of Directors or by the By-laws of this Corporation.

## ARTICLE XI

Stockholders of the Corporation may not take any action by written consent in lieu of a meeting. Notwithstanding any other provisions of law, this Certificate of Incorporation or the By-Laws, each as amended, and notwithstanding the fact that a lesser percentage may be specified by law, this Certificate of Incorporation or the By-Laws of the Corporation, the affirmative vote of seventy-five percent (75%) of the then outstanding shares of capital stock of the Corporation entitled to vote generally in the election of directors shall be required to amend or repeal, or to adopt any provisions inconsistent with the purpose or intent of, this Article XI.

Table of Contents

## ARTICLE XII

Special meetings of stockholders may be called at any time by only the Chairman of the Board of Directors, the Chief Executive Officer (or if there is no Chief Executive Officer, the President), or by the Board of Directors of the Corporation pursuant to a resolution adopted by the affirmative vote of a majority of the total number of directors then in office. Any business transacted at any special meeting of stockholders shall be limited to matters relating to the purpose or purposes stated in the notice of meeting. Notwithstanding any other provisions of law, this Certificate of Incorporation or the By-Laws, each as amended, and notwithstanding the fact that a lesser percentage may be specified by law, this Certificate of Incorporation or the By-Laws of the Corporation, the affirmative vote of seventy-five percent (75%) of the then outstanding shares of capital stock of the Corporation entitled to vote generally in the election of directors shall be required to amend or repeal, or to adopt any provisions inconsistent with the purpose or intent of, this Article XII.

## ARTICLE XIII

The Corporation expressly elects to be governed by Section 203 of the Delaware General Corporation Law.

## ARTICLE XIV

1. Definitions

Closing Date means the Closing Date (as such term is defined in the Merger Agreement).

Effective Time means the Effective Time (as such term is defined in the Merger Agreement).

Former Versum Chairman means the chairman of the board of directors of Versum Materials, Inc. as of immediately prior to the Effective Time.

Merger Agreement means that certain Agreement and Plan of Merger, dated as of January 27, 2019, among Versum Materials, Inc. and Entegris, Inc., as amended, restated, supplemented or otherwise modified from time to time.

Pre-Closing CEO means the chief executive officer of Entegris, Inc. as of immediately prior to the Effective Time.

Specified Post-Merger Period means the period from and after the Closing Date until the third (3rd) anniversary of the Closing Date.

Supermajority of the directors then serving means at least seventy-five percent (75%) of such directors; provided, that if such Supermajority yields a non-integer number of directors, the requisite number of directors shall be rounded up to the nearest integer.

2. Chairman

A. During the Specified Post-Merger Period, unless a Supermajority of the then-serving directors shall have adopted a resolution to the contrary, the Former Versum Chairman shall serve as Chairman of the Board of Directors of this Corporation.

B. During the Specified Post-Merger Period, unless a Supermajority of the then-serving directors shall have adopted a resolution to the contrary, the removal of, or the failure to designate, appoint or elect, the Former

Table of Contents

Versum Chairman to serve as Chairman of the Board of Directors of this Corporation, or the failure to nominate the Former Versum Chairman for election to the Board of Directors at any meeting of the stockholders of this Corporation, shall require the affirmative vote of a Supermajority of the then-serving directors.

3. Chief Executive Officer

A. During the Specified Post-Merger Period, unless a Supermajority of the then-serving directors shall have adopted a resolution to the contrary, the Pre-Closing CEO shall serve as the Chief Executive Officer of this Corporation.

B. During the Specified Post-Merger Period, unless a Supermajority of the then-serving directors shall have adopted a resolution to the contrary, the removal of, or failure to appoint, the Pre-Closing CEO (unless he shall have earlier resigned or otherwise permanently ceased his service to this corporation) as Chief Executive Officer of this Corporation shall require the affirmative vote of a Supermajority of the then-serving directors.

4. Amendments to this Article XIV; Conflicts

A. During the Specified Post-Merger Period, the provisions of this Article XIV shall not be modified, amended or repealed, and any provision of this Article XIV or other resolution inconsistent with this Article XIV shall not be adopted, or any such modification, amendment, repeal or inconsistent provision of this Article XIV or other resolutions shall not be recommended for adoption by the stockholders of this corporation without the approval of a Supermajority of the then-serving directors.

B. In the event of any inconsistency between any other provision of this Certificate of Incorporation or any provision of the by-laws of this Corporation, on the one hand, and any provision of this Article XIV, on the other hand, the provisions of this Article XIV shall control.

IN WITNESS WHEREOF, this Amended and Restated Certificate of Incorporation of this Corporation has been executed by its duly authorized officer this [ ] day of [ ], 2019.

ENTEGRIS, INC.

By:
Name:
Title:

Table of Contents

**Annex B**

FORM OF AMENDED AND RESTATED CERTIFICATE

OF INCORPORATION OF

ENTEGRIS, INC.

Entegris, Inc., a corporation organized and existing under the laws of the State of Delaware (the Corporation ), does hereby certify as follows:

1. The name of the Corporation is Entegris, Inc. The original name of the Corporation was Eagle DE, Inc., and the original Certificate of Incorporation was filed with the Secretary of State of the State of Delaware on March 17, 2005.

2. This Amended and Restated Certificate of Incorporation was duly adopted in accordance with the provisions of Sections 242 and 245 of the General Corporation Law of the State of Delaware (as amended, the DGCL ) and is to become effective as of [ ] on [ ].

3. This Amended and Restated Certificate of Incorporation restates, integrates and amends the provisions of the currently existing Certificate of Incorporation of the Corporation, including as amended or supplemented heretofore. As so restated, integrated and amended, the Amended and Restated Certificate of Incorporation reads as follows:

**ARTICLE I**

The name of this corporation is Entegris, Inc. (hereinafter referred to as the Corporation ).

**ARTICLE II**

The registered office of this Corporation in the State of Delaware is located at Corporation Trust Center, 1209 Orange Street, in the City of Wilmington (19801), County of New Castle. The name of its registered agent at such address is The Corporation Trust Company.

**ARTICLE III**

The purpose of this Corporation is to engage in any lawful act or activity for which corporations may be organized under the Delaware General Corporation Law.

**ARTICLE IV**

A. The total number of shares of all classes of stock which the Corporation shall have authority to issue is 405,000,000 shares, consisting of (i) 400,000,000 shares of Common Stock, $.01 par value per share ( Common Stock ), and (ii) 5,000,000 shares of Preferred Stock, $.01 par value per share ( Preferred Stock ).

B. The Board of Directors is authorized, subject to any limitations prescribed by law, to provide for the issuance of shares of Preferred Stock in series, and by filing a certificate pursuant to the applicable law of the State of Delaware (such certificate being hereinafter referred to as a Preferred Stock Designation ), to establish from time to time the number of shares to be included in each such series, and to fix the designation, powers, preferences, and rights of the shares of each such series and any qualifications, limitations or restrictions thereof. The number of authorized shares of Preferred Stock may be increased or decreased (but not below the number of

Table of Contents

shares thereof then outstanding) by the affirmative vote of the holders of a majority of the Common Stock, without a vote of the holders of the Preferred Stock, or of any series thereof, unless a vote of any such holders is required pursuant to the terms of any Preferred Stock Designation.

**ARTICLE V**

Unless and except to the extent that the By-laws of this Corporation shall so require, the election of directors need not be by written ballot.

**ARTICLE VI**

In furtherance of and not in limitation of the powers conferred by statute, the Board of Directors is expressly authorized to adopt, amend or repeal the By-Laws of this Corporation, subject to the right of the stockholders entitled to vote with respect thereto to alter and repeal the By-Laws adopted or amended by the Board of Directors; provided, however, that, notwithstanding the fact that a lesser percentage may be specified by law, the By-Laws shall not be altered, amended or repealed by the stockholders of the Corporation except by the affirmative vote of holders of not less than seventy-five percent (75%) of the then outstanding shares of capital stock of the Corporation entitled to vote generally in the election of directors. Notwithstanding any other provisions of law, this Certificate of Incorporation or the By-Laws, each as amended, and notwithstanding the fact that a lesser percentage may be specified by law, this Certificate of Incorporation or the By-Laws of the Corporation, the affirmative vote of seventy-five percent (75%) of the then outstanding shares of capital stock of the Corporation entitled to vote generally in the election of directors shall be required to amend or repeal, or to adopt any provisions inconsistent with the purpose or intent of, this Article VI.

**ARTICLE VII**

Except to the extent that the Delaware General Corporation Law prohibits the elimination or limitation of liability of directors for breaches of fiduciary duty, no director of the Corporation shall be personally liable to the Corporation or its stockholders for monetary damages for any breach of fiduciary duty as a director, notwithstanding any provision of law imposing such liability. No amendment to or repeal of this provision shall apply to or have any effect on the liability or alleged liability of any director of the Corporation for or with respect to any acts or omissions of such director occurring prior to such amendment.

**ARTICLE VIII**

Subject to Article XIV, the Corporation reserves the right to amend, alter, change or repeal any provision contained in this Certificate of Incorporation, in the manner now or hereafter prescribed by statute and this Certificate of Incorporation, and all rights conferred upon stockholders herein are granted subject to this reservation.

**ARTICLE IX**

This Article is inserted for the management of the business and for the conduct of the affairs of the Corporation.

1. Number; Election and Qualification of Directors. The number of directors which shall constitute the whole Board of Directors shall be determined by resolution of the Board of Directors, but in no event shall be less than three. The directors shall be elected at the annual meeting of stockholders by such stockholders as have the right to vote on such election. The directors need not be stockholders of the Corporation.

2. Terms of Office. Except as provided in Section 3 of this Article IX, each director shall serve for a term ending on the date of the first annual meeting following the election of such director; provided, however, that the term of each director shall be subject to the election and qualification of his or her successor and to his or her earlier death, resignation or removal.

3. Removal. Any director or the entire board of directors may be removed, with or without cause, by the holders of a majority of the then outstanding shares of capital stock of the Corporation entitled to vote generally in the election of directors, except to the extent a different vote is required by law.

4. Vacancies. Any vacancy in the Board of Directors, however occurring, including a vacancy resulting from an enlargement of the Board, shall be filled only by vote of a majority of the directors then in office, although less than a quorum, or by a sole remaining director. A director elected to fill a vacancy shall be elected for the unexpired term of his or her predecessor in office, and a director chosen to fill a position resulting from an increase in the number of directors shall hold office until the next election of directors, subject to the election and qualification of his or her successor and to his or her earlier death, resignation or removal.

5. Stockholder Nominations and Introduction of Business, Etc. Advance notice of stockholder nominations for election of directors and other business to be brought by stockholders before either an annual or special meeting of stockholders shall be given in the manner provided by the By-Laws of this Corporation.

## ARTICLE X

1. Dividends. The Board of Directors shall have authority from time to time to set apart out of any assets of the Corporation otherwise available for dividends a reserve or reserves as working capital or for any other purpose or purposes, and to abolish or add to any such reserve or reserves from time to time as said board may deem to be in the interest of the Corporation; and said Board shall likewise have power to determine in its discretion, except as herein otherwise provided, what part of the assets of the Corporation available for dividends in excess of such reserve or reserves shall be declared in dividends and paid to the stockholders of the Corporation.

2. Location of Meetings, Books and Records. Except as otherwise provided in the By-laws, the stockholders of the Corporation and the Board of Directors may hold their meetings and have an office or offices outside of the State of Delaware and, subject to the provisions of the laws of said State, may keep the books of the Corporation outside of said State at such places as may, from time to time, be designated by the Board of Directors or by the By - laws of this Corporation.

## ARTICLE XI

Stockholders of the Corporation may not take any action by written consent in lieu of a meeting. Notwithstanding any other provisions of law, this Certificate of Incorporation or the By-Laws, each as amended, and notwithstanding the fact that a lesser percentage may be specified by law, this Certificate of Incorporation or the By-Laws of the Corporation, the affirmative vote of seventy-five percent (75%) of the then outstanding shares of capital stock of the Corporation entitled to vote generally in the election of directors shall be required to amend or repeal, or to adopt any provisions inconsistent with the purpose or intent of, this Article XI.

## ARTICLE XII

Special meetings of stockholders may be called at any time by only the Chairman of the Board of Directors, the Chief Executive Officer (or if there is no Chief Executive Officer, the President), or by the Board of Directors

of the Corporation pursuant to a resolution adopted by the affirmative vote of a majority of the total number of directors then in office. Any business transacted at any special meeting of stockholders shall be limited to matters relating to the purpose or purposes stated in the notice of meeting. Notwithstanding any other provisions of law, this Certificate of Incorporation or the By-Laws, each as amended, and notwithstanding the fact that a lesser percentage may be specified by law, this Certificate of Incorporation or the By - Laws of the Corporation, the affirmative vote of seventy-five percent (75%) of the then outstanding shares of capital stock of the Corporation entitled to vote generally in the election of directors shall be required to amend or repeal, or to adopt any provisions inconsistent with the purpose or intent of, this Article XII.

**ARTICLE XIII**

The Corporation expressly elects to be governed by Section 203 of the Delaware General Corporation Law.

**ARTICLE XIV**

1. Definitions

"Closing Date" means the Closing Date (as such term is defined in the Merger Agreement).

"Effective Time" means the Effective Time (as such term is defined in the Merger Agreement).

"Former Versum Chairman" means the chairman of the board of directors of Versum Materials, Inc. as of immediately prior to the Effective Time.

"Merger Agreement" means that certain Agreement and Plan of Merger, dated as of January 27, 2019, among Versum Materials, Inc. and Entegris, Inc., as amended, restated, supplemented or otherwise modified from time to time.

"Pre-Closing CEO" means the chief executive officer of Entegris, Inc. as of immediately prior to the Effective Time.

"Specified Post-Merger Period" means the period from and after the Closing Date until the third (3rd) anniversary of the Closing Date.

"Supermajority" of the directors then serving means at least seventy-five percent (75%) of such directors; provided, that if such Supermajority yields a non-integer number of directors, the requisite number of directors shall be rounded up to the nearest integer.

2. Chairman

A. During the Specified Post-Merger Period, unless a Supermajority of the then-serving directors shall have adopted a resolution to the contrary, the Former Versum Chairman shall serve as Chairman of the Board of Directors of this Corporation.

B. During the Specified Post-Merger Period, unless a Supermajority of the then-serving directors shall have adopted a resolution to the contrary, the removal of, or the failure to designate, appoint or elect, the Former Versum Chairman to serve as Chairman of the Board of Directors of this Corporation, or the failure to nominate the Former Versum Chairman for election to the Board of Directors at any meeting of the stockholders of this Corporation, shall require the affirmative vote of a Supermajority of the then-serving directors.

Table of Contents

3. Chief Executive Officer

A. During the Specified Post-Merger Period, unless a Supermajority of the then-serving directors shall have adopted a resolution to the contrary, the Pre-Closing CEO shall serve as the Chief Executive Officer of this Corporation.

B. During the Specified Post-Merger Period, unless a Supermajority of the then-serving directors shall have adopted a resolution to the contrary, the removal of, or failure to appoint, the Pre-Closing CEO (unless he shall have earlier resigned or otherwise permanently ceased his service to this corporation) as Chief Executive Officer of this Corporation shall require the affirmative vote of a Supermajority of the then-serving directors.

4. Amendments to this Article XIV; Conflicts

A. During the Specified Post-Merger Period, the provisions of this Article XIV shall not be modified, amended or repealed, and any provision of this Article XIV or other resolution inconsistent with this Article XIV shall not be adopted, or any such modification, amendment, repeal or inconsistent provision of this Article XIV or other resolutions shall not be recommended for adoption by the stockholders of this corporation without the approval of a Supermajority of the then-serving directors.

B. In the event of any inconsistency between any other provision of this Certificate of Incorporation or any provision of the by-laws of this Corporation, on the one hand, and any provision of this Article XIV, on the other hand, the provisions of this Article XIV shall control.

IN WITNESS WHEREOF, this Amended and Restated Certificate of Incorporation of this Corporation has been executed by its duly authorized officer this [ ] day of [ ], 2019.

ENTEGRIS, INC.

By:
Name:
Title:

Table of Contents

**Annex C**

1585 Broadway
New York, NY 10036
January 27, 2019

Board of Directors

Entegris, Inc.

129 Concord Road

Billerica, MA 01821

Members of the Board:

We understand that Versum Materials, Inc. ( Versum ) and Entegris, Inc. ( Entegris ) propose to enter into an Agreement and Plan of Merger, substantially in the form of the draft dated January 26, 2019 (the Merger Agreement ), which provides, among other things, for the merger (the Merger ) of Versum with and into Entegris, with Entegris remaining as the surviving entity. Pursuant to the Merger, each outstanding share of common stock, par value $1.00 per share of Versum (the Versum Common Stock ), other than shares of Versum Common Stock owned by Versum, excluding any such shares of Versum Common Stock owned by a Versum Benefit Plan (as defined in the Merger Agreement) or held on behalf of third parties, will be converted into, and become exchangeable for, 1.120 shares (the Exchange Ratio ) of common stock, par value $0.01 per share, of Entegris (the Entegris Common Stock ), subject to adjustment in certain circumstances. The terms and conditions of the Merger are more fully set forth in the Merger Agreement.

You have asked for our opinion as to whether the Exchange Ratio pursuant to the Merger Agreement is fair from a financial point of view to Entegris.

For purposes of the opinion set forth herein, we have:

1) Reviewed certain publicly available financial statements and other business and financial information of Versum and Entegris, respectively;

2) Reviewed certain internal financial statements and other financial and operating data concerning Versum and Entegris, respectively;

3) Reviewed certain financial projections prepared by the management of (i) Versum relating to the business and operations of Versum, (ii) Versum relating to the business and operations of Versum, as modified by the management of Entegris, and (iii) Entegris relating to the business and operations of Entegris;

4) Reviewed information relating to certain strategic, financial and operational benefits anticipated from the Merger, prepared by the managements of Versum and Entegris, respectively;

5) Discussed the past and current operations and financial condition and the prospects of Versum, including information relating to certain strategic, financial and operational benefits anticipated from the Merger, with senior executives of Versum;

6) Discussed the past and current operations and financial condition and the prospects of Entegris, including information relating to certain strategic, financial and operational benefits anticipated from the Merger, with senior executives of Entegris;

7) Reviewed the pro forma impact of the Merger on Entegris earnings per share, cash flow, consolidated capitalization and certain financial ratios;

8) Reviewed the reported prices and trading activity for Versum Common Stock and Entegris Common Stock;

9) Compared the financial performance of Versum and Entegris and the prices and trading activity of Versum Common Stock and Entegris Common Stock with that of certain other publicly-traded companies comparable with Versum and Entegris, respectively, and their securities;

Table of Contents

1585 Broadway
New York, NY 10036

10) Reviewed the financial terms, to the extent publicly available, of certain comparable transactions;

11) Participated in certain discussions and negotiations among representatives of Versum and Entegris and their financial and legal advisors;

12) Reviewed the Merger Agreement and certain related documents; and

13) Performed such other analyses and considered such other factors as we have deemed appropriate.

We have assumed and relied upon, without independent verification, the accuracy and completeness of the information that was publicly available or supplied or otherwise made available to us by Versum and Entegris, and formed a substantial basis for this opinion. With respect to the financial projections, including information relating to certain strategic, financial and operational benefits anticipated from the Merger, we have assumed that they have been reasonably prepared on bases reflecting the best currently available estimates and judgments of the respective managements of Versum and Entegris of the future financial performance of Versum and Entegris. In addition, we have assumed that the Merger will be consummated in accordance with the terms set forth in the Merger Agreement without any waiver, amendment or delay of any terms or conditions, including, among other things, that the Merger will be treated as a tax-free reorganization, pursuant to the Internal Revenue Code of 1986, as amended and that the definitive Merger Agreement will not differ in any material respect from the draft thereof furnished to us. Morgan Stanley has assumed that, in connection with the receipt of all the necessary governmental, regulatory or other approvals and consents required for the proposed Merger, no delays, limitations, conditions or restrictions will be imposed that would have a material adverse effect on the contemplated benefits expected to be derived in the proposed Merger. We have relied upon, without independent verification, the assessment by the managements of Versum and Entegris of: (i) the strategic, financial and other benefits expected to result from the Merger; (ii) the timing and risks associated with the integration of Versum and Entegris; (iii) their ability to retain key employees of Versum and Entegris, respectively and (iv) the validity of, and risks associated with, Versum s and Entegris existing and future technologies, intellectual property, products, services and business models. We are not legal, tax or regulatory advisors. We are financial advisors only and have relied upon, without independent verification, the assessment of Entegris and Versum and their legal, tax or regulatory advisors with respect to legal, tax or regulatory matters. We express no opinion with respect to the fairness of the amount or nature of the compensation to any officers, directors or employees of any party to the Merger, or any class of such persons, relative to the Exchange Ratio. We have not made any independent valuation or appraisal of the assets or liabilities of Versum or Entegris, nor have we been furnished with any such valuations or appraisals. Our opinion is necessarily based on financial, economic, market and other conditions as in effect on, and the information made available to us as of, the date hereof. Events occurring after the date hereof may affect this opinion and the assumptions used in preparing it, and we do not assume any obligation to update, revise or reaffirm this opinion.

We have acted as financial advisor to the Board of Directors of Entegris in connection with the Merger and will receive a fee for our services, a substantial portion of which is contingent upon the closing of the Merger. In addition, Morgan Stanley or one of its affiliates may provide financing to refinance, if necessary, certain indebtedness of

Versum in connection with the Merger, and would receive fees for such services, which are contingent upon the closing of the Merger. In the two years prior to the date hereof, we have provided financing services for Entegris and have received fees in connection with such services. Morgan Stanley may also seek to provide financial advisory and financing services to Entegris and Versum and their respective affiliates in the future and would expect to receive fees for the rendering of these services.

Please note that Morgan Stanley is a global financial services firm engaged in the securities, investment management and individual wealth management businesses. Our securities business is engaged in securities underwriting, trading and brokerage activities, foreign exchange, commodities and derivatives trading, prime brokerage, as well as providing investment banking, financing and financial advisory services. Morgan Stanley,

Table of Contents

1585 Broadway
New York, NY 10036

its affiliates, directors and officers may at any time invest on a principal basis or manage funds that invest, hold long or short positions, finance positions, and may trade or otherwise structure and effect transactions, for their own account or the accounts of its customers, in debt or equity securities or loans of Entegris, Versum, or any other company, or any currency or commodity, that may be involved in the Merger, or any related derivative instrument.

This opinion has been approved by a committee of Morgan Stanley investment banking and other professionals in accordance with our customary practice. This opinion is for the information of the Board of Directors of Entegris and may not be used for any other purpose or disclosed without our prior written consent, except that a copy of this opinion may be included in its entirety in any filing Entegris is required to make with the Securities and Exchange Commission in connection with this transaction if such inclusion is required by applicable law.

This opinion does not address the relative merits of the Merger as compared to any other alternative business transaction, or other alternatives, or whether or not such alternatives could be achieved or are available. In addition, this opinion does not in any manner address the prices at which Entegris Common Stock will trade following consummation of the Merger or at any time, and Morgan Stanley expresses no opinion or recommendation as to how the stockholders of Entegris and Versum should vote at the stockholders meetings to be held in connection with the Merger.

Based on and subject to the foregoing, we are of the opinion on the date hereof that the Exchange Ratio pursuant to the Merger Agreement is fair from a financial point of view to Entegris.

Very truly yours,

MORGAN STANLEY & CO. LLC

By:

/s/ Wally Cheng
Wally Cheng

Managing Director

Table of Contents

**Annex D**

January 27, 2019

The Board of Directors

Versum Materials, Inc.

8555 South River Parkway

Tempe, Arizona 85284

Dear Members of the Board:

We understand that Versum Materials, Inc., a Delaware corporation ( Victor ), and Entegris, Inc., a Delaware corporation ( Emerald ), propose to enter into an Agreement and Plan of Merger (the Agreement ), pursuant to which Emerald will combine with Victor (the Transaction ). Pursuant to the Agreement, Victor will be merged with and into Emerald and each outstanding share of the common stock, par value $1.00 per share, of Victor ( Victor Common Stock ), other than shares of Victor Common Stock owned by Victor (excluding any such shares of Victor Common Stock owned by a Victor benefit plan or held on behalf of third parties) (collectively, the Excluded Shares ), will be converted into the right to receive 1.1200 ( Exchange Ratio ) shares of the common stock, par value $0.01 per share, of Emerald ( Emerald Common Stock ). The terms and conditions of the Transaction are more fully set forth in the Agreement.

You have requested our opinion as of the date hereof as to the fairness, from a financial point of view, to holders of Victor Common Stock (other than holders of Excluded Shares) of the Exchange Ratio provided for in the Transaction.

In connection with this opinion, we have:

(i) Reviewed the financial terms and conditions of a draft, dated January 26, 2019, of the Agreement;

(ii) Reviewed certain publicly available historical business and financial information relating to Victor and Emerald;

(iii) Reviewed various financial forecasts and other data provided to us by Victor relating to the business of Victor, and extrapolations thereto based on the guidance of management of Victor and approved by Victor for our use;

(iv) Reviewed various financial forecasts and other data provided to us by Emerald relating to the business of Emerald, and extrapolations thereto based on the guidance of management of Victor and approved by

Victor for our use;

(v) Reviewed the projected synergies and other benefits, including the amount and timing thereof, anticipated by the managements of Victor and Emerald to be realized from the Transaction;

(vi) Held discussions with members of the senior managements of Victor and Emerald with respect to the businesses and prospects of Victor and Emerald, respectively, and the projected synergies and other benefits anticipated by the managements of Victor and Emerald to be realized from the Transaction;

(vii) Reviewed public information with respect to other companies in lines of business we believe to be generally relevant in evaluating the businesses of Victor and Emerald;

(viii) Reviewed historical stock prices and trading volumes of Victor Common Stock and Emerald Common Stock;

(ix) Reviewed the potential pro forma financial impact of the Transaction on Emerald based on the financial forecasts referred to above relating to Victor and Emerald; and

(x) Conducted such other financial studies, analyses and investigations as we deemed appropriate.

Table of Contents

We have assumed and relied upon the accuracy and completeness of the foregoing information, without independent verification of such information. We have not conducted any independent valuation or appraisal of any of the assets or liabilities (contingent or otherwise) of Victor or Emerald or concerning the solvency or fair value of Victor or Emerald, and we have not been furnished with any such valuation or appraisal. With respect to the financial forecasts utilized in our analyses, including the extrapolations and the forecasts related to projected synergies and other benefits anticipated by the managements of Emerald and Victor to be realized from the Transaction, we have assumed, with the consent of Victor, that they have been reasonably prepared on bases reflecting the best currently available estimates and judgments as to the future financial performance of Victor and Emerald, respectively, and such synergies and other benefits. We assume no responsibility for and express no view as to any such forecasts or the assumptions on which they are based.

Further, our opinion is necessarily based on economic, monetary, market and other conditions as in effect on, and the information made available to us as of, the date hereof. We assume no responsibility for updating or revising our opinion based on circumstances or events occurring after the date hereof. We do not express any opinion as to the prices at which shares of Victor Common Stock or Emerald Common Stock may trade at any time subsequent to the announcement of the Transaction. In connection with our engagement, we were not authorized to, and we did not, solicit indications of interest from third parties regarding a potential transaction with Victor. In addition, our opinion does not address the relative merits of the Transaction as compared to any other transaction or business strategy in which Victor might engage or the merits of the underlying decision by Victor to engage in the Transaction.

In rendering our opinion, we have assumed, with the consent of Victor, that the Transaction will be consummated on the terms described in the Agreement, without any waiver or modification of any material terms or conditions. Representatives of Victor have advised us, and we have assumed, that the Agreement, when executed, will conform to the draft reviewed by us in all material respects. We also have assumed, with the consent of Victor, that obtaining the necessary governmental, regulatory or third party approvals and consents for the Transaction will not have an adverse effect on Victor, Emerald or the Transaction that is material in any respect to our analysis in connection with this opinion. We further have assumed, with the consent of Victor, that the Transaction will qualify for U.S. federal income tax purposes as a reorganization within the meaning of Section 368(a) of the Internal Revenue Code of 1986, as amended. We do not express any opinion as to any tax or other consequences that might result from the Transaction, nor does our opinion address any legal, tax, regulatory or accounting matters, as to which we understand that Victor obtained such advice as it deemed necessary from qualified professionals. We express no view or opinion as to any terms or other aspects (other than the Exchange Ratio to the extent expressly specified herein) of the Transaction, including, without limitation, the form or structure of the Transaction or any agreements or arrangements entered into in connection with, or contemplated by, the Transaction. In addition, we express no view or opinion as to the fairness of the amount or nature of, or any other aspects relating to, the compensation to any officers, directors or employees of any parties to the Transaction, or class of such persons, relative to the Exchange Ratio or otherwise.

Lazard Frères & Co. LLC ( Lazard ) is acting as financial advisor to Victor in connection with the Transaction and will receive a fee for such services, a portion of which will be payable upon the rendering of this opinion and a substantial portion of which will be payable upon consummation of the Transaction. We in the past have provided certain investment banking services to Victor, for which we have received compensation, including, during the past two years, having advised Victor with respect to corporate preparedness matters. In addition, in the ordinary course, Lazard and its affiliates and employees may trade securities of Victor, Emerald and certain of their respective affiliates for their own accounts and for the accounts of their customers, may at any time hold a long or short position in such securities, and may also trade and hold securities on behalf of Victor, Emerald and certain of their respective affiliates. The issuance of this opinion was approved by the Opinion Committee of Lazard.

Our engagement and the opinion expressed herein are for the benefit of the Board of Directors of Victor (in its capacity as such) and our opinion is rendered to the Board of Directors of Victor in connection with its evaluation of the Transaction. Our opinion is not intended to and does not constitute a recommendation to any stockholder as to how such stockholder should vote or act with respect to the Transaction or any matter relating thereto.

[*Signature Page Follows*]

Table of Contents

Based on and subject to the foregoing, we are of the opinion that, as of the date hereof, the Exchange Ratio provided for in the Transaction is fair, from a financial point of view, to holders of Victor Common Stock (other than holders of Excluded Shares).

Very truly yours,

LAZARD FRERES & CO. LLC

By /s/ Richard Whitney
Richard Whitney
Managing Director