

OUR SUPERIOR PROPOSAL

**WHY MERCK KGAA,
DARMSTADT, GERMANY IS
THE RIGHT OWNER OF VERSUM**

March 14, 2019



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Disclaimer

Additional Important Information and Where to Find It

This communication does not constitute an offer to buy or solicitation of an offer to sell any securities. This communication relates to the proposal which Merck KGaA, Darmstadt, Germany has made for a business combination transaction with Versum Materials, Inc. ("Versum"). Merck KGaA, Darmstadt, Germany filed the preliminary proxy statement on Schedule 14A (the "Preliminary Proxy Statement") and the accompanying GREEN proxy card with the Securities and Exchange Commission (the "SEC") on March 12, 2019 to be used to solicit proxies in opposition to the proposed business combination transaction between Versum and Entegris, Inc., and intends to file other relevant materials with the SEC, including a proxy statement in definitive form (the "Proxy Statement"). This communication is not a substitute for the Proxy Statement or any other document Merck KGaA, Darmstadt, Germany, Versum or Entegris, Inc. may file with the SEC in connection with the proposed transaction. **STOCKHOLDERS OF VERSUM ARE URGED TO READ THE PRELIMINARY PROXY STATEMENT, THE PROXY STATEMENT WHEN IT BECOMES AVAILABLE AND ALL RELEVANT DOCUMENTS FILED WITH THE SEC, INCLUDING ALL PROXY MATERIALS, BECAUSE THEY WILL CONTAIN IMPORTANT INFORMATION ABOUT THE PROPOSED TRANSACTION.** The Proxy Statement will be delivered to the stockholders of Versum. Investors and security holders will be able to obtain free copies of these documents (if and when available) and other documents filed with the SEC by Merck KGaA, Darmstadt, Germany through the website maintained by the SEC at <http://www.sec.gov>, or by contacting the proxy solicitor of Merck KGaA, Darmstadt, Germany, D.F. King & Co., Inc., at (212) 269-5550 for banks and brokers or at (800) 714-3312 for stockholders.

Participants in Solicitation

Merck KGaA, Darmstadt, Germany and its directors and executive officers may be deemed to be participants in the solicitation of proxies from the holders of Versum common stock. Additional information regarding the participants in the proxy solicitation is contained in the Preliminary Proxy Statement.

Our superior proposal for Versum shareholders

All cash proposal

- **All cash proposal** at **\$48 per Versum share**
- **Certainty of value and immediate liquidity** to Versum shareholders

substantial premium

- **~52% premium** over unaffected Versum closing price¹
- **~21% implied premium** based on current “look through price” of the Entegris transaction²

Attractive valuation

- Total transaction value of ~\$5.9bn, inclusive of Versum’s net debt
- **Implied EBITDA multiple ~3.2x³ above Entegris’ implied proposal**

certainty

- **No financing contingency**
- **No anticipated regulatory issues**
- **No shareholder vote required** by Merck KGaA, Darmstadt, Germany

beneficial for other stakeholders

- Merck KGaA, Darmstadt, Germany has **track record as a top U.S. employer**
- Versum employees will become an **integral part of a** leading Performance Materials business
- Tempe site will be the **major hub for our combined electronic materials business in the U.S.**

our superior proposal

- ➔ Superior to Entegris’ proposal and
- ➔ in the best interest of Versum stakeholders

The existing Entegris acquisition is not in the best interest of Versum shareholders

Significant discount to current trading

Entegris' deal is currently valued at a significant discount to Versum's prevailing stock price

Value proposition is inferior

Analysis by Versum's financial advisor, Lazard, clearly shows that our offer commands higher valuation than the Entegris merger consideration¹, including assumed synergies

Entegris acquisition was the result of a poorly run process

Versum's process was flawed, rushed and pre-conceived: Versum announced the transaction less than two months after its initial outreach without considering strategic alternatives

Newly found synergies are unsubstantiated

Versum's newly claimed/discovered \$50m of additional cost synergies and revenue synergies resulting in \$50m additional EBITDA are unsubstantiated, speculative and illusory – market did not react materially to announcement²

Versum stakeholders should be concerned

Tactics employed by Versum and proposed Board composition are not in Versum stakeholders' best interest



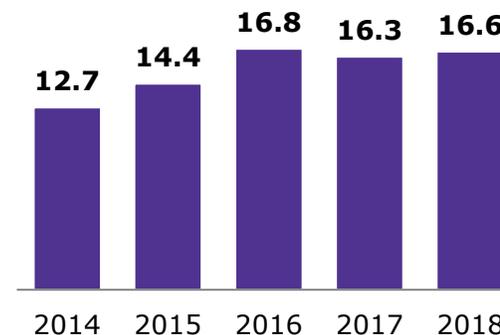
01

ABOUT US

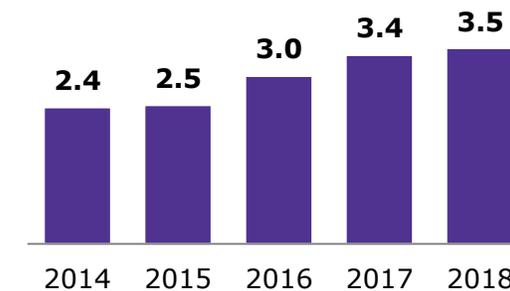
Who we are

- ▶ We are a leading **science and technology company**, active in 3 areas: **Healthcare, Life Science** and **Performance Materials**
- ▶ Since **establishment over 350 years ago**, we have become a global company with over **52,000 employees** in **66 countries**
- ▶ **Our ideas are everywhere**, from cancer therapies and laboratory tools to the display of your smartphone or the color of your car
- ▶ Through our Performance Materials business, we offer **specialty chemicals that enrich people's lives** in many ways - our **technologies enable smart devices**
- ▶ To strengthen our global leadership position, we are truly focused on industry leading research – with **~7,200 R&D professionals** worldwide and **\$2.5bn R&D spending in 2018**
- ▶ **North America is a core pillar** to our success – more than **10,000 employees** account for **~26% of Group revenues**

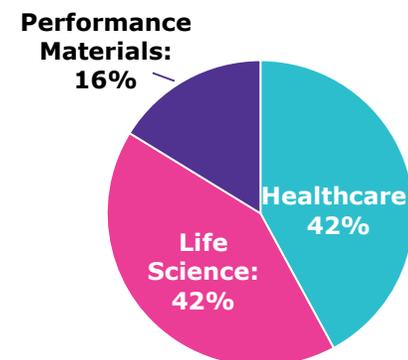
Sales development* (\$bn)



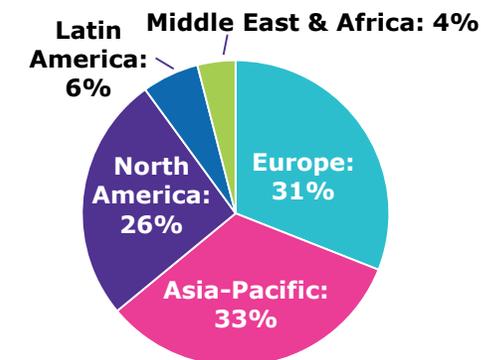
Total capex and R&D* (\$bn)



Sales by segment



Sales by region

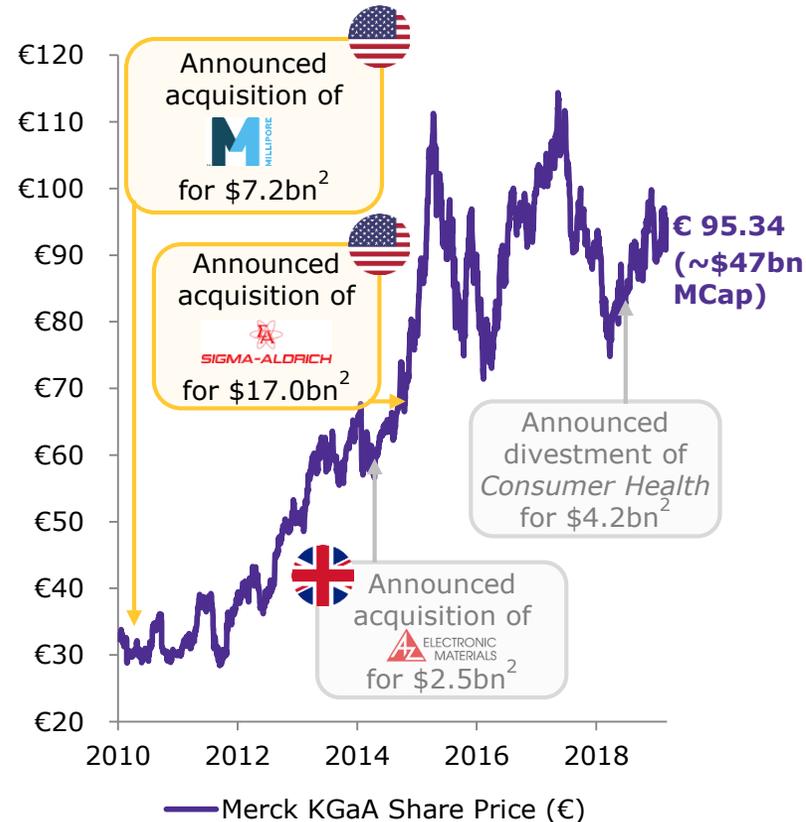


We have an outstanding track record of successful acquisitions and the financial flexibilities for further growth

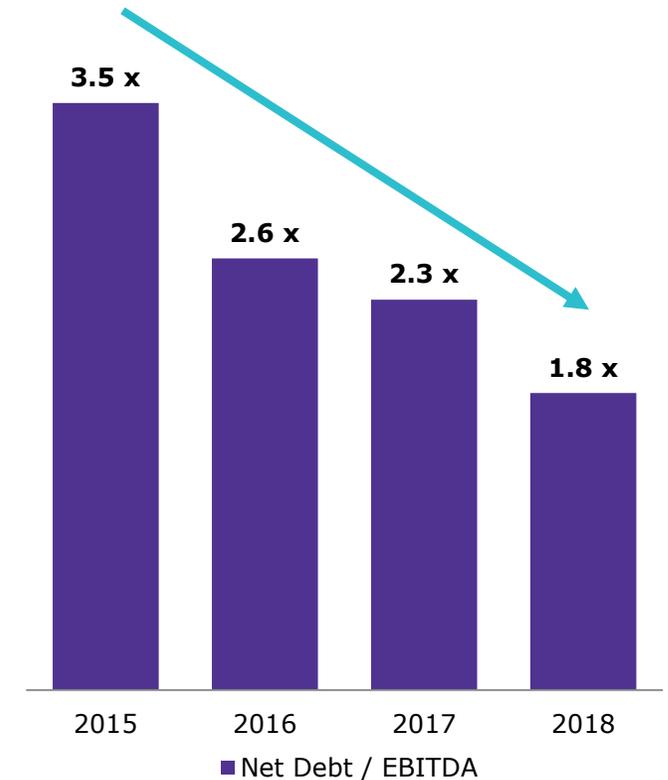
M&A is part of our DNA and growth strategy ...

- Strong track record of successful acquisitions, particularly in the U.S.
- Over the last 10 years, we have completed acquisitions in the U.S. with a total transaction value of ~\$24bn¹
- Successful acquisitions and integration of two large U.S. public companies
- We have significant experience in obtaining regulatory approvals both in the U.S. and globally

... leading to long-term value creation ...



... supported by our high cash generation



Source: Market data as of March 8, 2019; ¹Values shown in USD based on EUR/USD rate of 1.12; ²Values shown based on prevailing EUR/USD FX rates (February 28, 2010 = 1.37, December 5, 2013 = 1.37, September 22, 2014 = 1.28, April 19, 2018 = 1.24)

Why Versum and Merck KGaA, Darmstadt, Germany fit so well together – creating a leading electronic materials player

1

Create a leading player

- Create one of the **leading electronic materials** players focused on the semiconductor and display industries **with cutting-edge technology**
- **Increase scale, product and services depth** and truly global presence
- **Accelerate innovation with Versum R&D** focused on the Advanced Materials segment (10-15% R&D rate)

2

Capitalize on long-term growth trends

- Electronics industry expected to **benefit from data volume increase tailwinds**, enabled through high purity semiconductor materials
- **Semiconductor Solutions business** to comprise **~50% of pro-forma** Performance Materials **sales versus ~25% today**

3

Complementary offering

- **Complementary capabilities** with very **little product overlap**
- **Manufacturing facilities in the U.S.** strengthen our supply chain and supply reliability

4

Value accretive to shareholders

- **~\$65-70m in annual cost synergies** fully realized in 3rd year after closing (2022)
- Expected to be **EPS pre accretive** in first year after closing, and to reported EPS in year 3



02

**OUR PROPOSAL
IS SUPERIOR**

Versum shareholders should prefer the superior value and certainty of our Proposal



our superior proposal

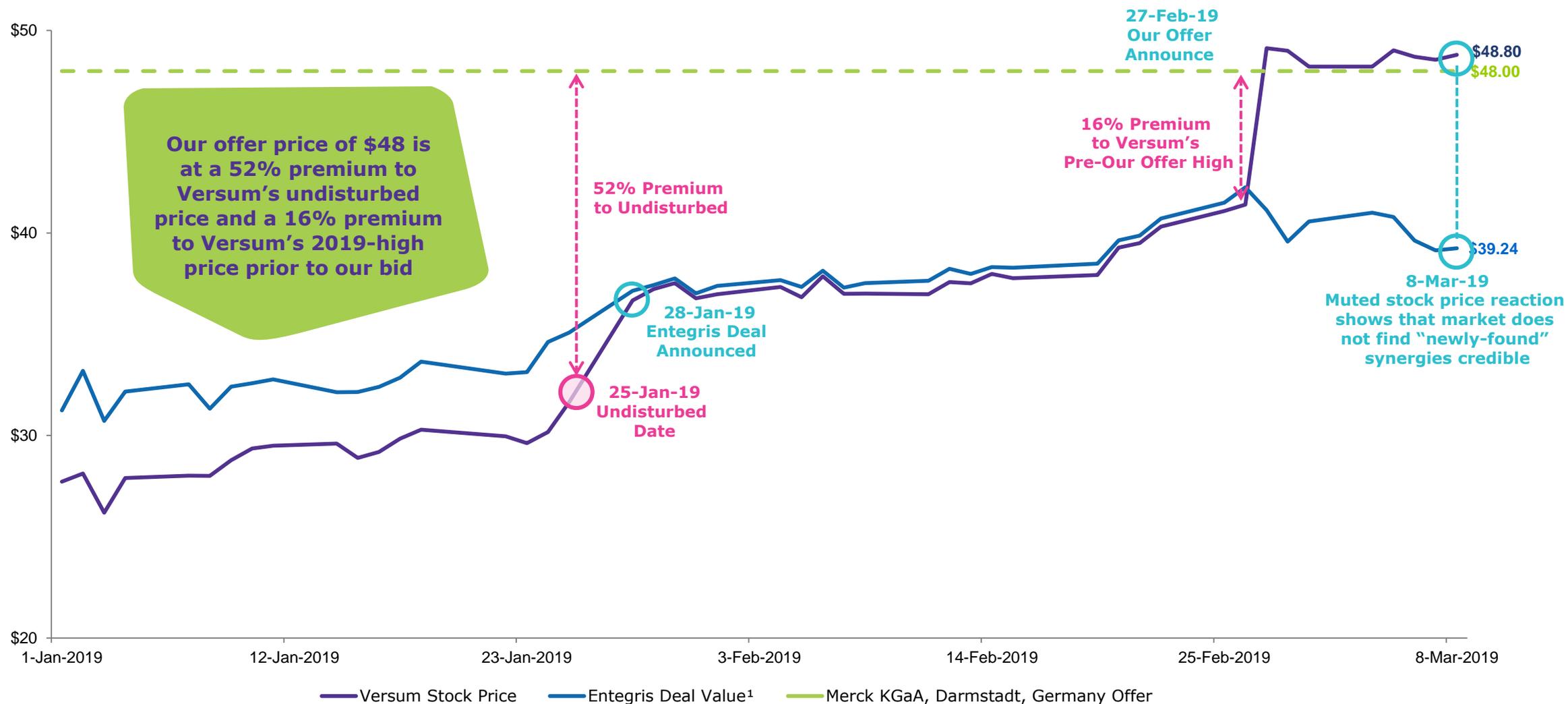
- Highly certain, cash proposal of \$48.00 per share
- ~52% premium over last unaffected Versum closing price
- 16% premium to Versum's 2019-high price prior to our bid, reflecting the value of Entegris offer
- Represents 13.3x LTM EBITDA¹, in line with the highest multiple achieved in the sector
- Our Proposal is superior to the value of both Versum standalone and MergeCo, according to Versum's own advisor



Entegris proposal

- Current deal value at \$39.52 per share² – a 17.7% discount to our proposal of \$48.00
- Value creation relies heavily on market value and on assumptions about size of synergies, cost to achieve, and ability of successful and timely implementation...
- ... which have changed to catch-up with our Proposal
- ... and are currently set at highly unrealistic levels
- Unsurprisingly, the market is not buying it

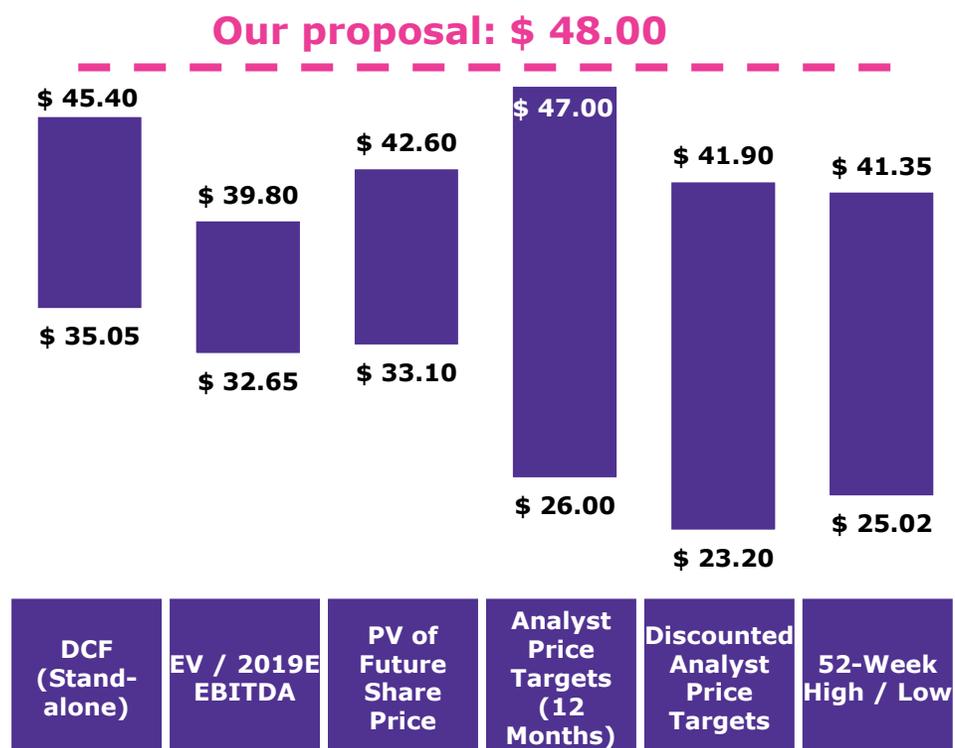
The market's reaction supports view that our proposal is superior



The published financial analysis of Lazard – Versum’s own financial advisor – supports our view that our Proposal is superior to the Entegris acquisition

Our Proposal is superior to Lazard’s valuation of Versum on a standalone basis¹...

... and when compared to Lazard’s DCF value of the merger consideration including synergies

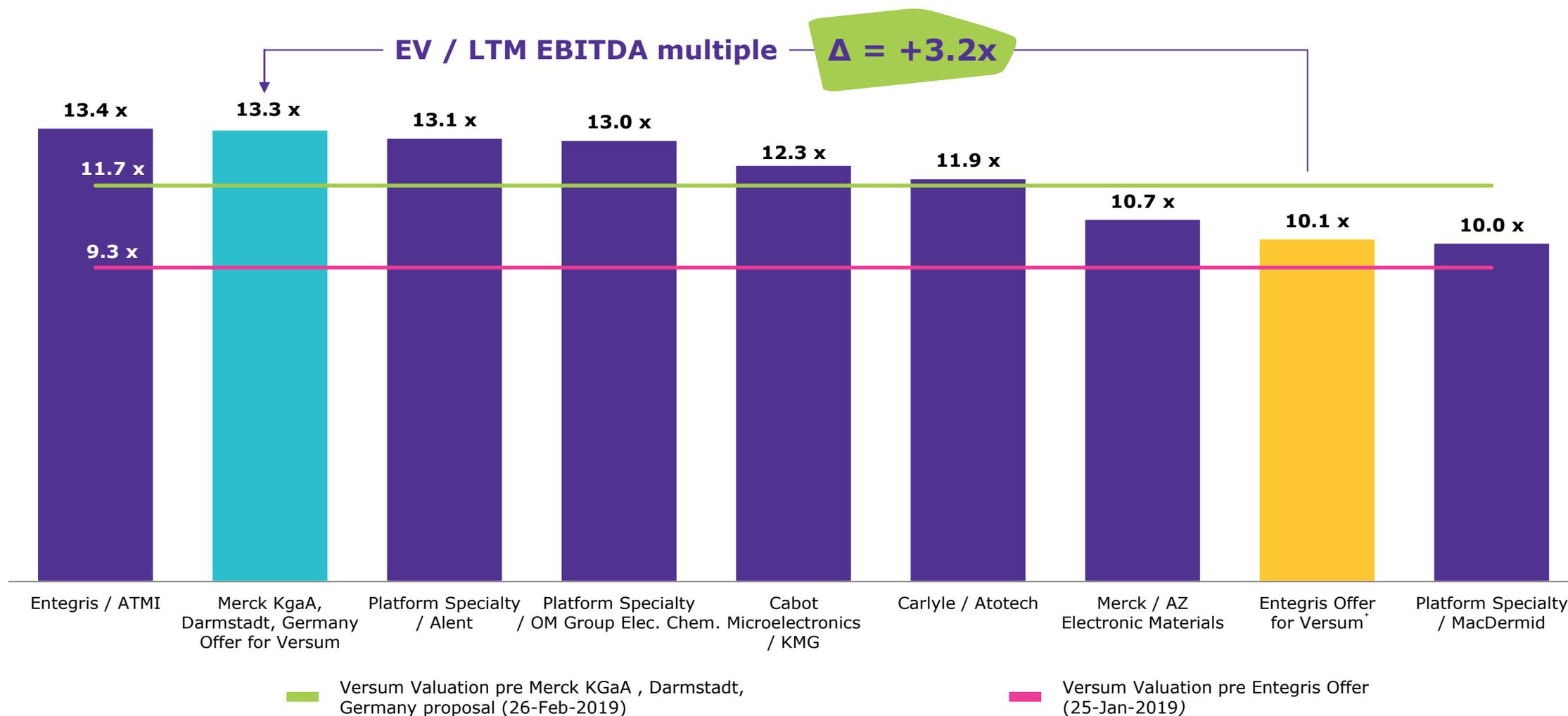


Run rate synergies (\$m)	DCF value per share of the Entegris merger consideration including synergies ²	Premium to DCF value per share of the Entegris merger consideration including synergies
\$75	\$41.43	15.9%
\$85	\$41.71	15.1%
\$100	\$42.19	13.8%

Our Proposal
Premium to DCF value per share of the Entegris merger consideration including synergies

Source: Entegris S-4. ¹Standalone Versum values per share compiled from Lazard’s valuation work disclosed in the Entegris S-4. The premia of the value of our Proposal relative to each of the stand-alone values were calculated by Merck KGaA, Darmstadt, Germany. ²DCF value per share of the merger consideration including synergies derived from Lazard’s has-gets analysis disclosed in the Entegris S-4, which expresses these values as a premium to Versum’s share price. The premia of the value of our Proposal relative to each of the value of the merger consideration including synergies were calculated by Merck KGaA, Darmstadt, Germany.

Our Proposal represents a best-in-class valuation multiple



Source: Public filings, press releases. Note: Versum multiples based on FY 2018A EBITDA of \$446m and net debt as of December 31, 2018 of \$599m (incl. \$20m underfunded pensions), plus \$36m minority interest. Diluted Versum shares outstanding calculated using the treasury stock method resulting in shares outstanding of (i) 110.52m for Merck KGaA, Darmstadt, Germany offer, (ii) 110.49m for Versum valuation as of February 26, 2019 (pre Merck offer), (iii) 110.45m for implied Versum valuation based on Entegris offer and (iv) 110.42m for Versum valuation pre Entegris offer; *Implied valuation based on Entegris share price of \$31.32 and exchange ratio of 1.120x.



03

**CONCERNS ABOUT THE
VERSUM/ENTEGRIS
PROPOSAL**

Versum's process to date was flawed, rushed and pre-conceived – if not changed now, shareholders could miss out on our superior proposal

The current deal is not a result of a rigorous assessment

- **Versum has been considering this transaction since the spin from Air Products in 2016**, as disclosed in the Entegris S-4
- **Current disclosure in the Entegris S-4** indicates that the Versum Board did not undertake any process to examine strategic alternatives

Entire process to date has been hurried and the background is vague

- The Entegris S-4 indicates that discussions between the parties began in December 2018, with an **announcement less than two months later**
- This **hastiness indicates the parties' willingness to forgo all other transactions**
- **Newly found synergies cast doubt on the credibility** of financial projections and due diligence process

Versum did not engage with us and is employing delay tactics

- **Versum rejected our proposal 2 days after receipt**, claiming they had undertaken "careful review and consideration", and almost **immediately implemented a poison pill**
 - Shareholders should not be fooled – a typical review of our proposal could not have been conducted so swiftly without some form of underlying bias towards the existing deal
- Engaging with us would have clearly been in the best interest of Versum shareholders
- **Shareholders should demand that Versum not delay in engaging with us**, so as not to create an unfair decision making process for shareholders

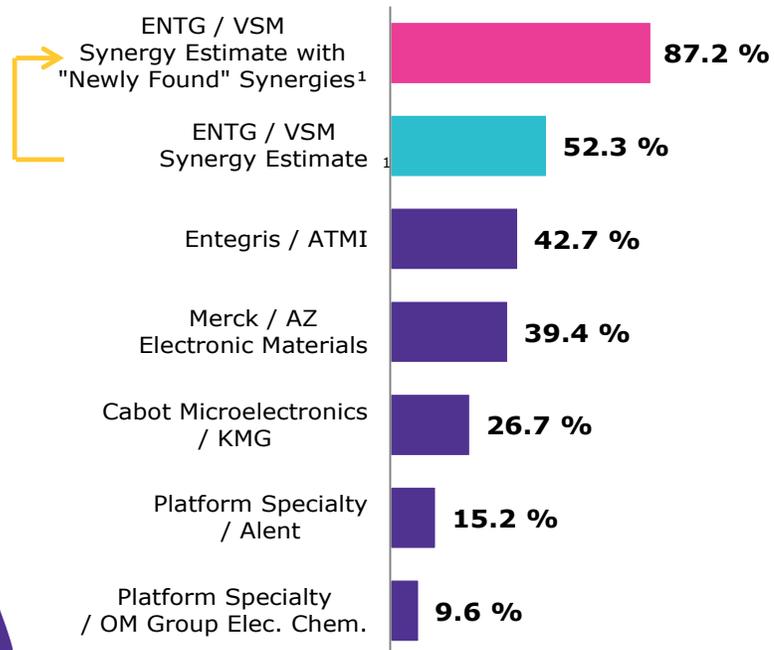
Versum responded to our superior and certain cash proposal with ad-hoc additional synergies, thereby further increasing uncertainty of value

Cost synergies have been increased to a level which seems inconsistent with Versum's cost base

Realization of revenue synergies is highly uncertain and as a result, typically represents a small portion of planned synergies, if any

Overall **synergy assumptions** have suddenly been increased to an unrealistic level in connection with stonewalling our proposal

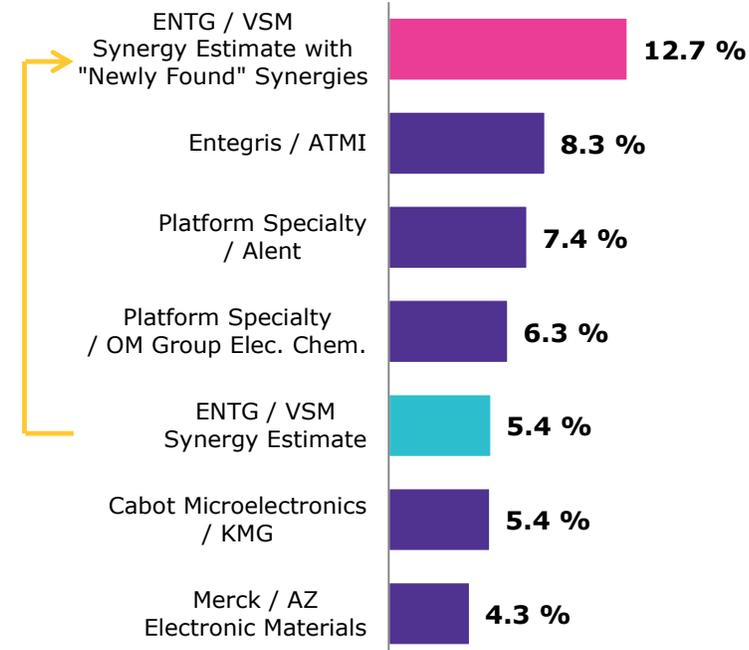
Announced cost synergies as a % of SG&A for precedent transactions¹



Announced revenue synergies for precedent transactions¹

Precedent Transaction	Revenue Synergies Announced?
Entegris / ATMI	X
Platform Specialty / Alent	X
Platform Specialty / OM Group Electronic Chem.	X
Cabot Microelectronics / KMG	X
Merck / AZ Electronic Materials	X

Announced total synergies as a % of sales for precedent transactions²



Source: Public filings, press releases. Note: Assumes LTM Dec-2018 Versum SG&A of \$143.3m and LTM Dec-2018 Revenue of 1,381m; ¹For simplicity, sets total announced cost synergies in relation to historical SG&A of the target company, i.e. for Versum cost synergies of \$75m as per original synergy estimate and \$125m as per synergy estimate including "newly found" synergies considered, respectively; ²Sets total announced synergies in relation to sales, i.e. for Versum includes synergies outlined in footnote 1, plus additional newly found revenue synergies

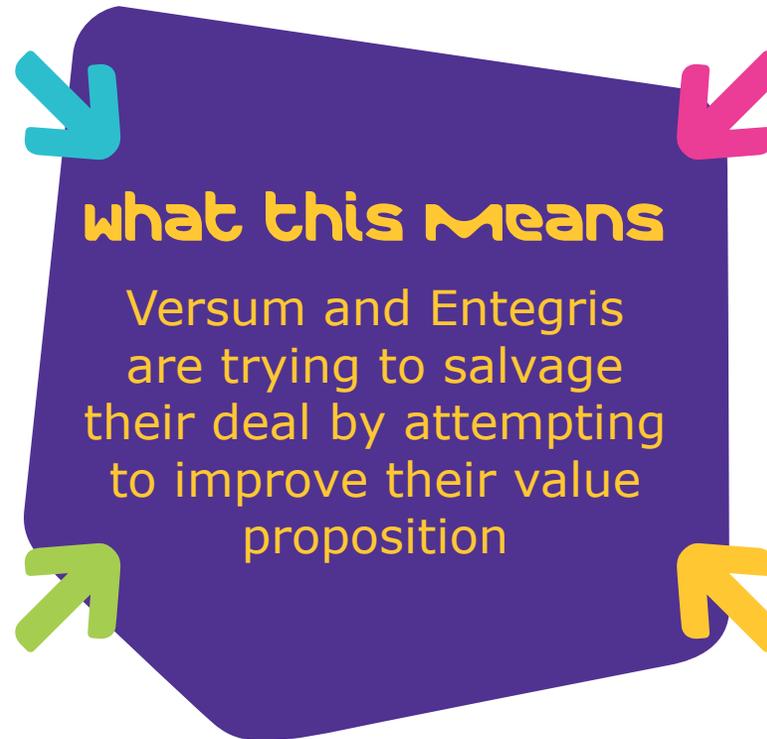
Versum's newly found synergies are unsubstantiated, speculative and illusory

Newly found synergies miraculously uncovered

- On March 8, 2019, 8 days after filing their original proxy, the companies announced they had more than doubled the claimed synergies, while also strengthening a commitment to existing operational sites – this seems contradictory
- Further, the announcement provides little explanation as to the source of these synergies

Timing appears opportunistic

- We believe that the timing of this announcement is opportunistic, and is an attempt to counter our superior proposal
- If management believed in these purported synergies, they should have included them in their original disclosure



This is further evidence of a poor process

- If the original process had been run properly, and not over such a hasty timeframe, a typical diligence exercise would have uncovered the purported synergies

Synergies exceed advisors' own analysis

- Versum's financial advisor, Lazard, included a synergy range of up to \$100m in their independent analysis of the proposed transaction
- We would expect a financial advisor would incorporate all potential synergies into pro-forma value expectations

Versum stakeholders should be concerned

Pro forma governance favors Entegris

- Entegris will have the majority of the Board (5 out of 9 directors), including the Entegris CEO
- Entegris CEO and CFO will be the surviving executive leadership team

Aggressive adoption of poison pill

- Versum failed to engage with us
- Immediately following the announcement of our superior proposal, Versum adopted a poison pill, a shareholder-unfriendly entrenchment tool out of step with governance best practices

Limited opportunity for employees and community

- Entegris announced its intention to operate the combined business from its headquarters, >2,500 miles away from Tempe*
- Our proposal offers a better outcome for Versum employees and the local community
 - We will keep Versum's Tempe site as the major hub for our combined electronic materials business in the U.S.
 - Versum employees will benefit from exciting development opportunities within a global science and technology company
 - We already have a strong footprint in the U.S. and a track record as a U.S. top employer

our superior proposal ...

... is fair to all Versum stakeholders

... provides a better outcome for Versum employees and the local community, by retaining Tempe as the major hub of our combined electronic materials business in the U.S.

Shareholders should act now and demand that Versum engage with Merck KGaA, Darmstadt, Germany to evaluate our superior proposal



04

HOW SHAREHOLDERS CAN WIN

Why Merck KGaA, Darmstadt, Germany is the right owner of Versum

Our proposal is superior

- **All cash proposal** at **\$48** per Versum share
- **Significant premium** over unaffected Versum closing price and “look through price” of Entegris transaction
- **No financing contingency** and **no anticipated regulatory issues**

We are the right owners of this asset

- Leading science and technology company, active in 3 areas: Healthcare, Life Science and Performance Materials
- **Established over 350 years ago**, and have become a global company with **>52,000 employees in 66 countries**

The transaction process has been flawed

- The **current deal is not a result of a rigorous assessment**, and the entire process to date has been rushed
- **Versum did not engage with us** and is **employing stonewalling tactics**

What should Versum shareholders do?

- **Act now** and **demand that Versum engage with Merck KGaA, Darmstadt, Germany** to evaluate our superior proposal
- **Vote against the Entegris acquisition**

A compelling proposal for all stakeholders

Combining the **certainty of an all-cash** transaction with an **attractive premium**

- ~ 52% premium to Versum's unaffected closing price of \$ 31.65 on January 25, 2019
- ~ 16% premium to Versum's closing price of \$ 41.40 on February 26, 2019

Becoming an **integral part** of **leading science and technology** company Merck KGaA, Darmstadt, Germany

Commitment to maintain Tempe, Arizona presence as **the major hub** for the combined electronic materials business in the U.S.



Providing **leading-edge technology** backed by the capabilities, scale and quality of Merck KGaA, Darmstadt, Germany

Truly global footprint and **close proximity** to customers worldwide

Combines **innovation strength** to better serve our customers in a rapidly evolving marketplace

A **strategically and financially compelling** transaction for Merck KGaA, Darmstadt, Germany shareholders

Delivers on strategy of **building leading positions in attractive markets**

Meeting Merck KGaA, Darmstadt, Germany **financial M&A criteria**

Merck KGaA, Darmstadt, Germany – the best strategic owner of Versum to the highest benefit of shareholders, employees and customers

If you support our superior proposal, demand that Versum engage with us, and, when available, vote the Green Proxy against the inferior Entegris acquisition



Significant Premium

52% premium over Versum's unaffected price, representing a total transaction value of \$5.9bn



All Cash Offer

Our bid is **not contingent on financing** and has a **high certainty of closing**



Represents the Best Outcome for Versum Employees and Stakeholders

Provides employees with opportunity at integrated global technology company

Vote the GREEN proxy

vote

If you have any questions, require assistance with voting your GREEN proxy card or need additional copies of the proxy materials, please contact:

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discard

DISCARD any proxy cards sent to you by Versum as they will count as votes against the value and certainty of the Merck KGaA, Darmstadt, Germany transaction

