



PROPOSAL TO ACQUIRE VERSUM MATERIALS

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Disclaimer

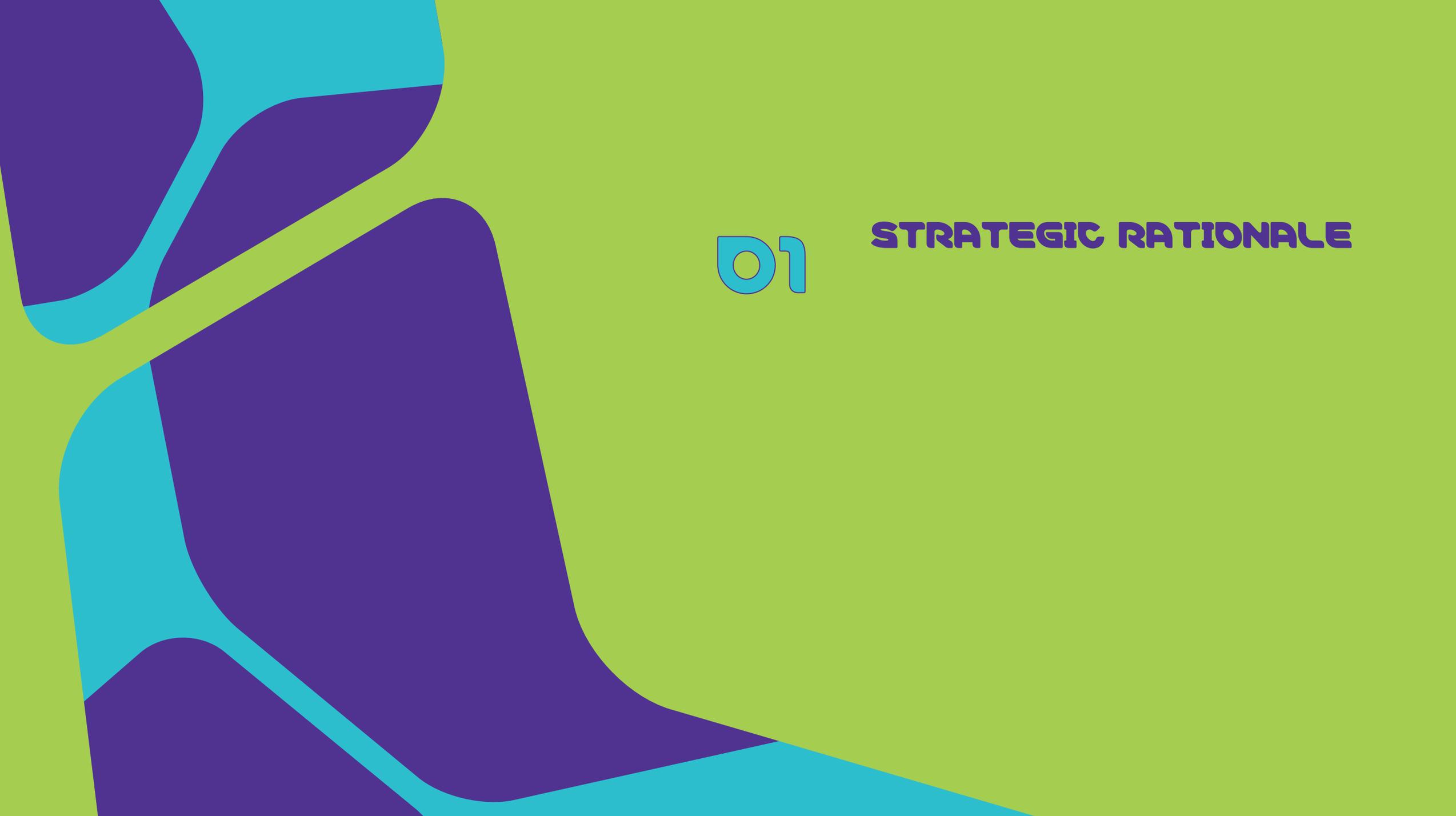
Additional Information and Where to Find It

This communication does not constitute an offer to buy or solicitation of an offer to sell any securities. This communication relates to a proposal which Merck KGaA, Darmstadt, Germany has made for a business combination transaction with Versum Materials, Inc. ("Versum"). In furtherance of this proposal and subject to future developments, Merck KGaA, Darmstadt, Germany (and if a negotiated transaction is agreed, Versum Materials) intends to file relevant materials with the SEC, including a proxy statement on Schedule 14A (the "Proxy Statement"). This communication is not a substitute for the Proxy Statement or any other document Merck KGaA, Darmstadt, Germany, Versum Materials or Entegris, Inc. may file with the SEC in connection with the proposed transaction. STOCKHOLDERS OF VERSUM MATERIALS ARE URGED TO READ ALL RELEVANT DOCUMENTS FILED WITH THE SEC, INCLUDING THE PROXY STATEMENT, BECAUSE THEY WILL CONTAIN IMPORTANT INFORMATION ABOUT THE PROPOSED TRANSACTION. Any definitive Proxy Statement will be delivered to the stockholders of Versum Materials. 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>.

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 Materials common stock in respect of the proposed transaction. Information regarding the participants in the proxy solicitation and a description of their direct and indirect interests, by security holdings or otherwise, will be contained in the Proxy Statement and other relevant materials to be filed with the SEC in respect of the proposed transaction when they become available.

Agenda

- 01** Strategic rationale
- 02** Transaction details and impacts for Merck KGaA, Darmstadt, Germany
- 03** Executive summary
- 04** Back-up



01

STRATEGIC RATIONALE

Group

Strategic combination of two highly complementary industry leaders

Attractive proposal

- Merck KGaA, Darmstadt, Germany proposal to acquire Versum Materials¹ for US\$ 48.00 per share in cash
- ~ 52% premium over unaffected Versum Materials closing price on January 25, 2019², and ~16% premium to closing price on February 26, 2019²
- Total transaction value³ of € 5.3bn, inclusive of Versum Materials' net debt

Superior offer

- Provides greater value and the immediate certainty of a cash offer
- Confident of regulatory approval
- No Merck KGaA, Darmstadt, Germany shareholder vote required
- Fully financed with cash and debt
- Merck KGaA, Darmstadt, Germany has a strong track record of successfully integrating acquisitions

New "PM"⁴ platform

- Enhances Merck's KGaA, Darmstadt, Germany leading electronic materials platform to accelerate leading-edge innovation
- Provides increased scale, product and services depth, truly global presence and strengthened supply chain
- Expands portfolio to include fab equipment, specialty gases and services

Value accretive

- Compelling financial metrics for Merck KGaA, Darmstadt, Germany investors
- Anticipate ~€60m in annual cost synergies to be fully realized in 3rd year after closing (2022)
- Accretive to Merck's KGaA, Darmstadt, Germany EPS pre in first year after closing, and to reported EPS⁵ in year 3

proposal

➔ is superior to Entegris' proposal and

➔ in the best interests of Versum Materials' and Merck KGaA, Darmstadt, Germany stakeholders

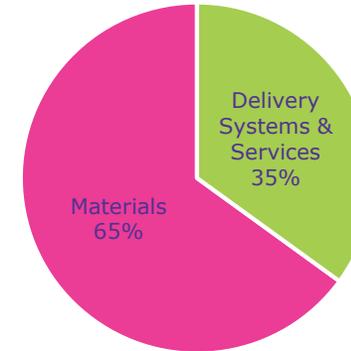
¹NYSE: VSM; ²January 25, 2019: US\$ 31.65, February 26, 2019: US\$ 41.40; ³EV = Enterprise value; ⁴PM = Merck's KGaA, Darmstadt, Germany Performance Materials business sector; ⁵Reported EPS = Profit after tax including adjustments / 434.8m Merck KGaA, Darmstadt, Germany shares

Group

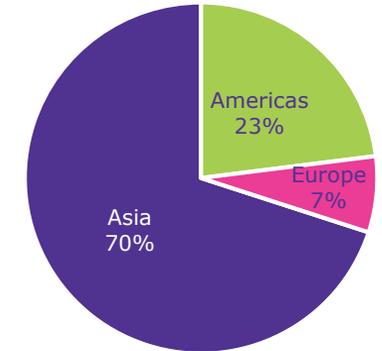
Versum Materials – A leading supplier to the electronics industry

- Leading global supplier of high-purity process chemicals, gases and equipment serving mainly semiconductor manufacturers
- Established positions in advanced deposition, specialty gases, chemical mechanical planarization² as well as equipment systems and services
- Headquartered in Tempe, Arizona with production facilities in the U.S., Korea, Taiwan and China
 - 15 production facilities worldwide
 - ~ 2,300 employees
- Market cap. US\$ 4.6bn⁴

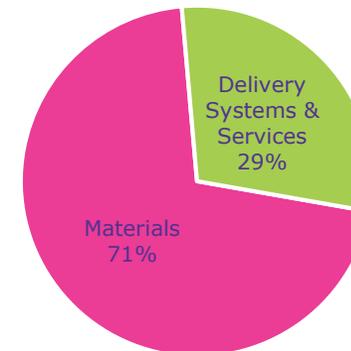
Sales¹ by segment



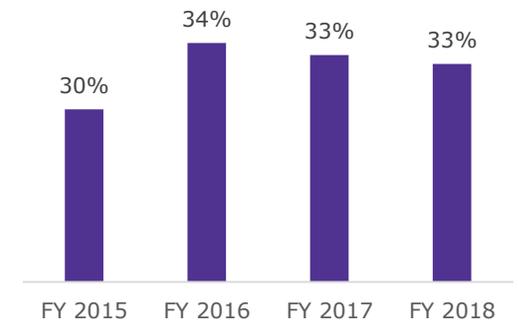
Sales¹ by region



Adjusted EBITDA³ by segment



Adjusted EBITDA¹ margin



Group

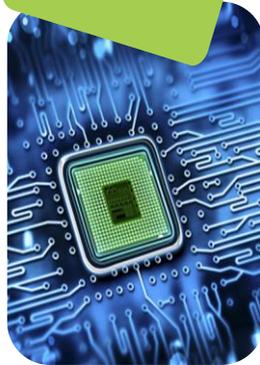
Creating a leading electronic materials player

Partner of choice



- Creating a leading electronic materials player with focus on the semiconductor and display industries
- Combined pro-forma Performance Materials annual sales ~ €3.5bn¹

Innovation



- Accelerating ability to innovate through the combination of R&D efforts
- Combine technological capabilities in order to generate novel technologies and better serve our customers

Poised for growth



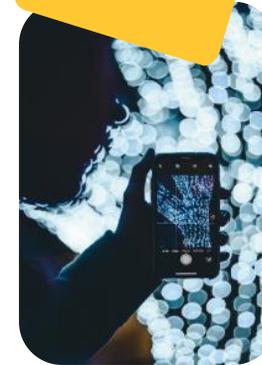
- Optimally positioned to capitalize on strong long-term secular trends in the semiconductor industry, incl. the emergence of Artificial Intelligence, mobility, big data, Internet of Things
- Increasing diversification of end-markets

Complementary



- Complementary capabilities
- Versum Materials' business adds positions in advanced deposition, specialty gases and chemical mechanical planarization to our established presence

Deep portfolio



- Build an attractive portfolio in high value materials
- E.g. in advanced deposition materials, dielectrics, CMP slurries, and cleaning chemicals

Broadened offering



- Expanding Merck's KGaA, Darmstadt, Germany electronic materials business and tapping new growth opportunities
- Versum Materials' equipment and services business allows broader positioning along the wafer processing value chain for Merck KGaA, Darmstadt, Germany

Group

A compelling proposal for all stakeholders

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

- ~ 52% premium to Versum Materials' unaffected closing price of US\$ 31.65 on January 25, 2019
- ~ 16% premium to Versum Materials' closing price of US\$ 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 a major hub for the combined business in the US



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

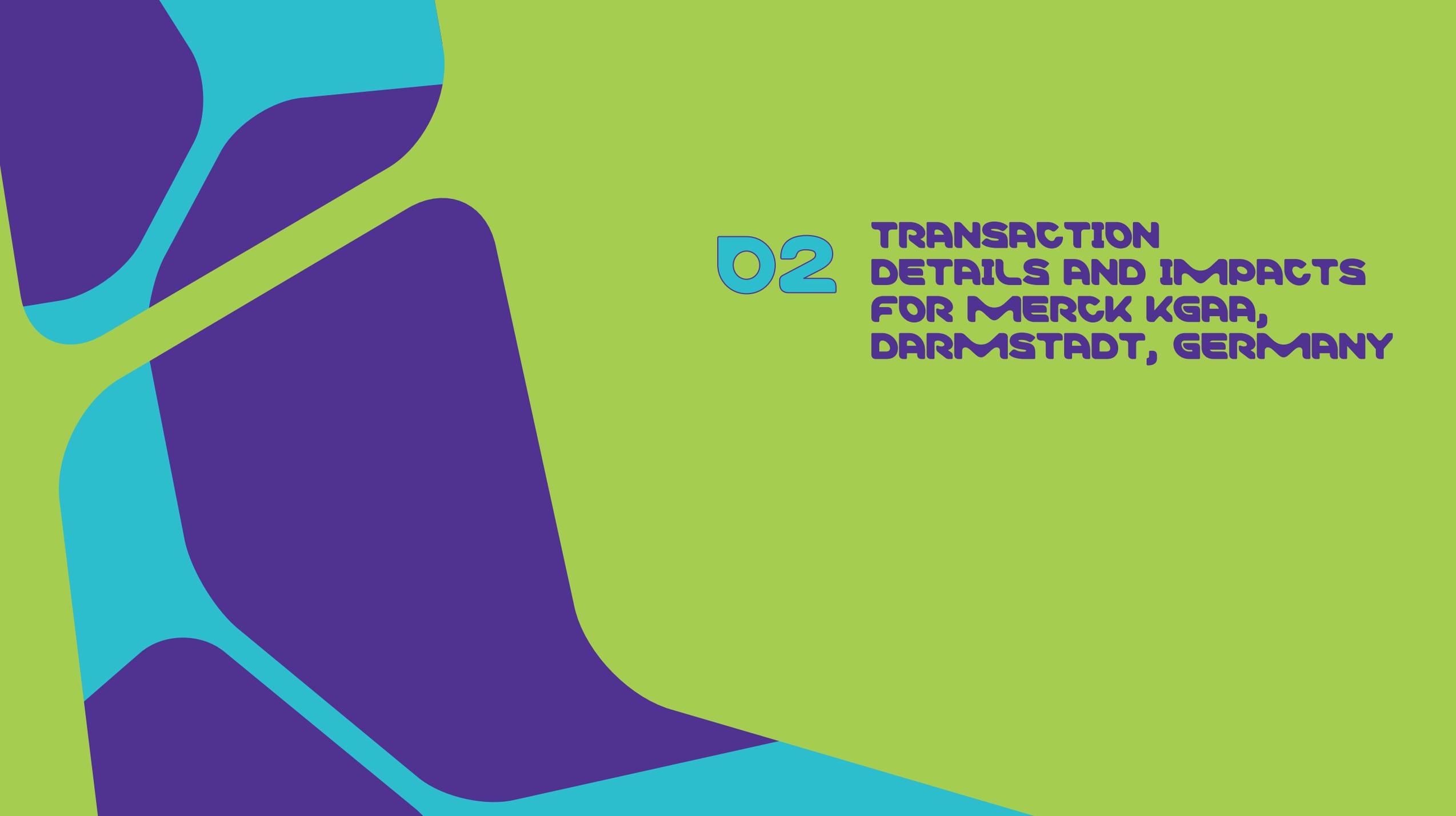
Combines innovation strength to better serve our customers in a rapidly evolving marketplace

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 – best strategic owner of Versum Materials to the highest benefit of shareholders, employees and customers



02

**TRANSACTION
DETAILS AND IMPACTS
FOR MERCK KGAA,
DARMSTADT, GERMANY**

Group

Key transaction highlights



Proposal

- Purchase price of US\$ 48.00 per Versum Materials common share
- 100% cash consideration
- Attractive premium: ~52% over unaffected closing price of \$31.65 on January 25, 2019, and ~16% to closing price on February 26, 2019



Valuation

- Total transaction value (EV¹) of €5.3bn
- Represents 12.6x 2019E EBITDA² and pro-forma 11.0x 2019E EBITDA including 100% synergy run-rate
- In line with prior industry transactions



Timing and next steps

- Following Versum Materials Board concluding the Merck KGaA, Darmstadt, Germany proposal could lead to a superior proposal, confirmatory due diligence and contract signing
- Closing expected for H2 2019, subject to customary closing conditions, including approval by Versum Materials shareholders



Financing

- Preparation of financing structure well under way
- Solid pro-forma balance sheet preserved
- Commitment to swift deleveraging confirmed

Group

Value accretive for Merck KGaA, Darmstadt, Germany shareholders

pro-forma

Enhancing sales and EBITDA pre

- Merck's KGaA, Darmstadt, Germany LTM sales¹ increase by ~8%
- Merck's KGaA, Darmstadt, Germany LTM EBITDA pre¹ rises by ~11%²
- Pro-forma group EBITDA pre margin expansion by ~60 bps³ in year 1

value creation

Expected synergies drive value creation

- Cost synergies of ~ €60m p.a.
- To be fully captured by year 3; up to 50% realized in year 1
- Immediately accretive to EPS pre
- Accretive to reported EPS including all transaction-related costs in year 3
- Transaction IRR > WACC

balance sheet

Solid financial structure preserved

- Fully financed with cash and debt
- Strong investment grade credit rating preserved
- Solid pro-forma balance sheet as of Day 1 with estimated net debt / EBITDA pre⁴ of 2.9x and pro-forma 2.8x including 100% synergies

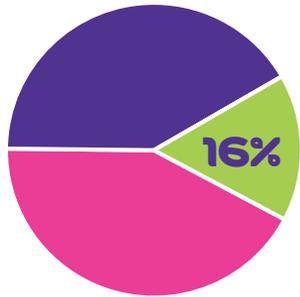
Proposed acquisition of Versum Materials strengthens Merck KGaA, Darmstadt, Germany portfolio and meets group's clear financial M&A criteria

Group

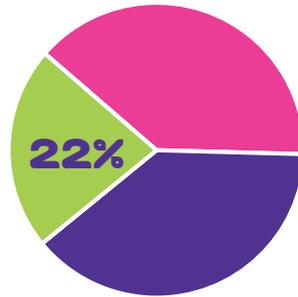
Transaction raises Performance Materials' profile within the group

Rebalancing group portfolio to diversified structure of three strong pillars

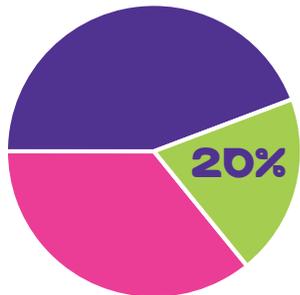
Merck KGaA, Darmstadt, Germany
Net sales¹



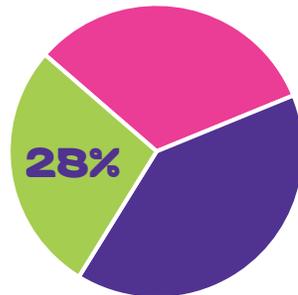
Pro-forma net sales¹



Merck KGaA, Darmstadt, Germany
EBITDA pre¹



Pro-forma EBITDA pre^{1, 2}



■ Healthcare
■ Life Science
■ Performance Materials

Significantly bolsters Performance Materials sector

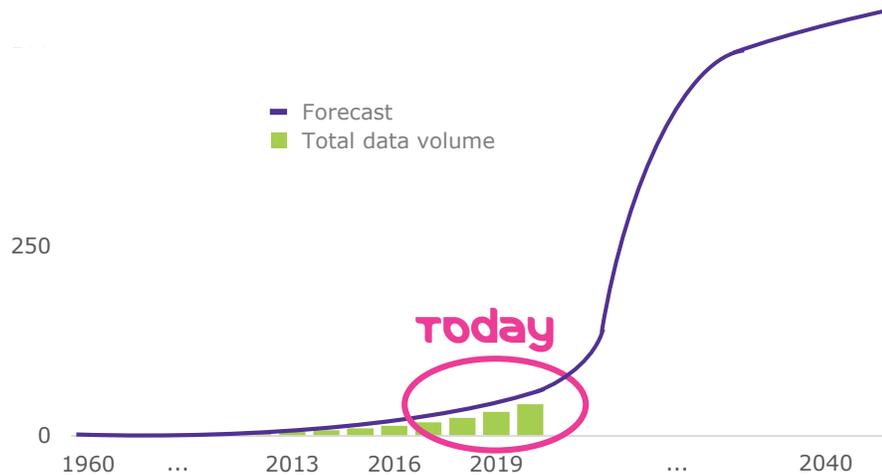
- Performance Materials and Versum Materials will have pro-forma LTM net sales of ~€3.5bn¹ and LTM EBITDA pre of ~€1.3bn^{1,2}
- Cost synergy realization
 - €60m by 2022, up to 50% to be realized in first full year after closing
 - Equivalent to ~5% of acquired net sales
 - Mainly from SG&A rationalization
 - Integration costs ~1.3x expected synergies, spread over 2 years
 - Expected transaction costs ~€260m

Group

Capitalizing upon electronics industry growth

The digital revolution ...

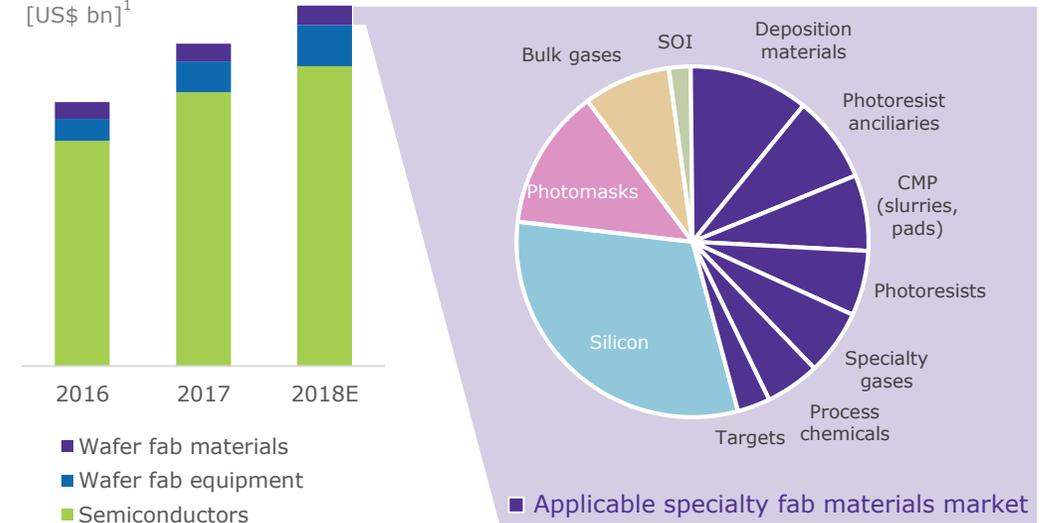
[Size of global data sphere in zetabytes]^{2,3}



- New markets and diverse applications are emerging daily
- Data volume is forecast to grow sharply: e.g. emergence of Artificial Intelligence, mobility, big data, Internet of Things

... requires high purity materials

[US\$ bn]¹

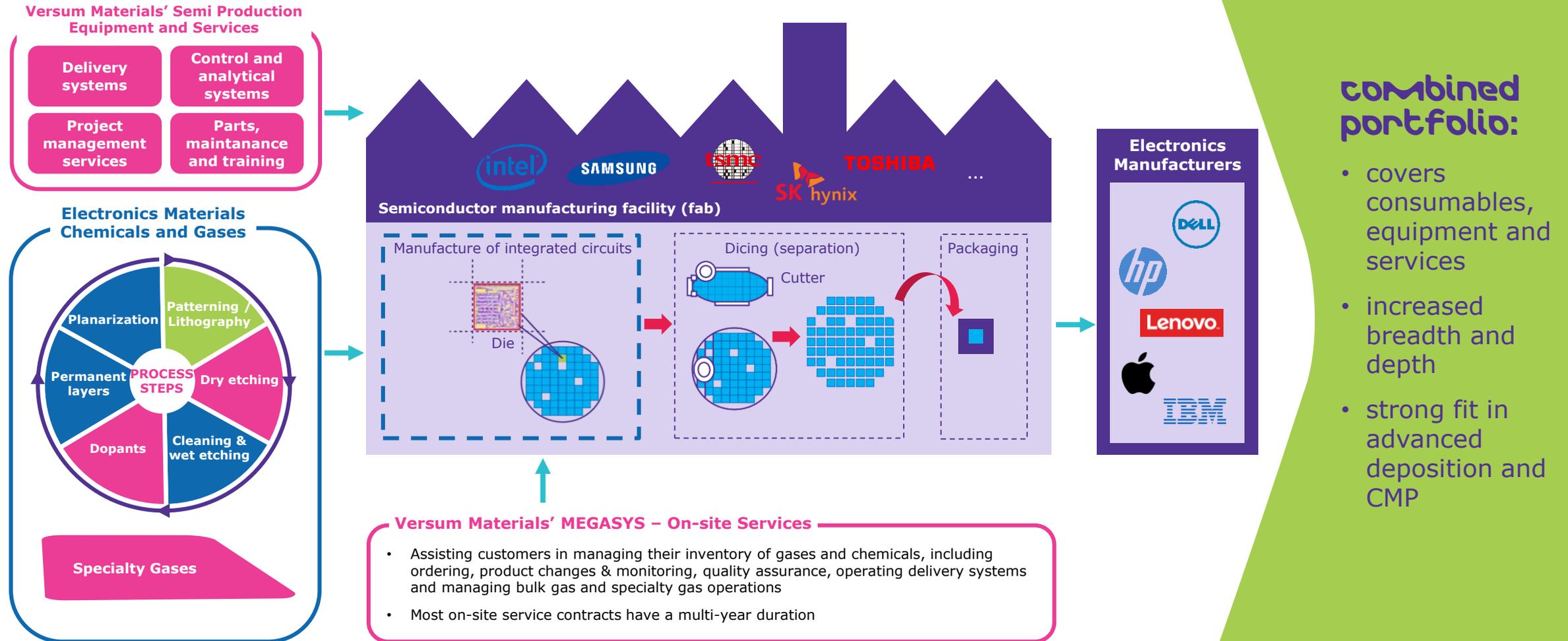


- Speciality materials market is driven by innovation and volume
- Complexity of devices and ICs is rising
- Materials are increasingly critical to the industry's ability to innovate for next-generation chip technologies

The era of semiconductors has just started, and Merck KGaA, Darmstadt, Germany and Versum Materials will have a podium position to capitalize on it

Group

Building an attractive platform for electronic materials and solutions



combined portfolio:

- covers consumables, equipment and services
- increased breadth and depth
- strong fit in advanced deposition and CMP

Colour codes: ■ Versum Materials ■ Merck KGaA, Darmstadt, Germany ■ Both

Group

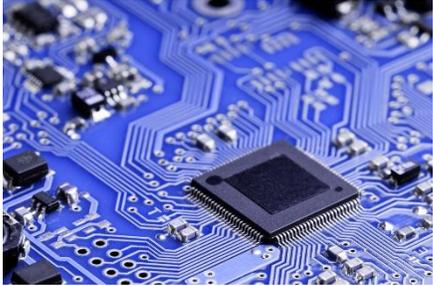
Performance Materials executes on its transformation program

Semiconductor Solutions

Today¹
25% of Sales

→

Pro Forma²
50% of Sales



Mid to high single-digit growth

Display Solutions

Today¹
55% of Sales

→

Pro Forma²
36% of Sales



Low single-digit decline

Surface Solutions

Today¹
20% of Sales

→

Pro Forma²
14% of Sales



Low single-digit growth

Raising exposure to high-growth market segments in electronic materials and solutions



03

EXECUTIVE SUMMARY

Group Executive Summary

Active portfolio
management

Consistent with Merck's KGaA, Darmstadt, Germany strategic capital allocation and strengthening its balanced structure of three strong pillars

"New" Performance
Materials

Creating a leading electronic materials player focused on high-growth segments in the semiconductor and display industries

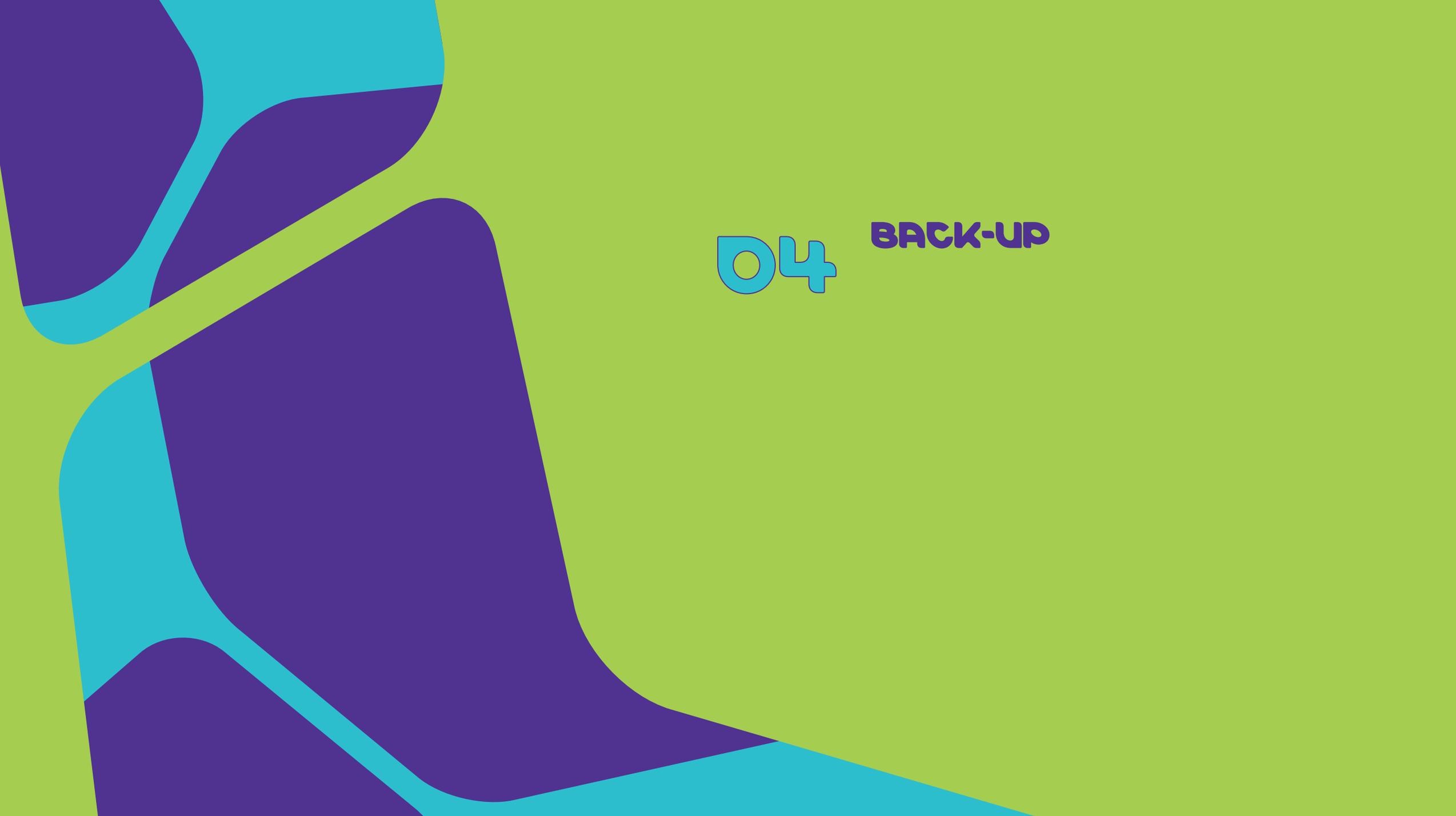
Superior proposal to
Versum Materials
shareholders

Best strategic owner of Versum Materials combined with certainty of a cash offer at 16% premium over closing share price on February 26, 2019

Value accretive

Expected earnings accretion drives value creation for Merck KGaA, Darmstadt, Germany shareholders, and meets clear financial M&A criteria





04

BACK-UP

Financials

Versum Materials

€m ^{1, 2}	2015	2016	2017	2018
Net sales	907	880	997	1,162
Adjusted EBITDA	271	297	329	377
Adjusted EBITDA margin	29.9%	33.7%	33.0%	32.5%
EBITDA	251	296	307	360
D&A	51	46	41	43
EBIT	200	251	266	317

robust historical financial performance

- 2015-2018 CAGR sales of ~11%
- 2015-2018 CAGR adjusted EBITDA of ~14%

¹Source: Versum Materials filings; Financials converted from US\$ to EUR based on average annual exchange rate of EUR/USD; ²Versum Materials Fiscal Year ends September 30

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