

MOODY'S

INVESTORS SERVICE

CREDIT OPINION

29 May 2019

Update

 Rate this Research

RATINGS

Evonik Industries AG

Domicile	Germany
Long Term Rating	Baa1
Type	LT Issuer Rating - Dom Curr
Outlook	Stable

Please see the [ratings section](#) at the end of this report for more information. The ratings and outlook shown reflect information as of the publication date.

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Evonik Industries AG

Update to Discussion of Key Credit Factors

Summary

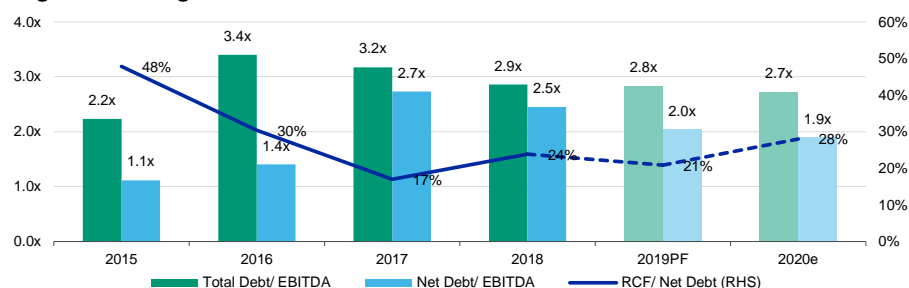
The Baa1 rating reflects the strong business profile of Evonik underpinned by its significant size and leading global market positions. Its vertically integrated production model and technological leadership in several key specialty products support its relatively stable operating profitability over the cycle.

Recent acquisitions, including the of the specialty additives business of [Air Products and Chemicals, Inc.](#) (A2 stable), the silica business of J.M. Huber Corporation, Dr. Straetmans (both unrated) and PeroxyChem (closing expected in Q3 2019), enhance Evonik's specialty chemicals franchise. Despite being largely funded with a mix of existing cash and senior debt, the impact of the deals on Evonik's financial profile was contained by the significant deleveraging it had achieved during 2013-2016, as well as the issuance of a €500 million hybrid bond with a 50% equity content and will be further offset by net disposal proceeds of around €2.5 billion (pre-tax) for its methacrylate (MMA) activities.

Evonik's financial ratios continue to keep it weakly positioned relative to our guidance for the Baa1 rating. Moody's adjusted retained cash flow (RCF) to net debt and total debt to EBITDA were 23.9% and 2.9x respectively in 2018. We expect in the next 12-18 months a gradual restoration of credit metrics commensurate with the Baa1 rating category with the deployment of MMA proceeds for the repayment of the 2020 €500 million bond and the incremental EBITDA contribution from PeroxChem.

Exhibit 1

Leverage and Coverage Metrics



Source: Moody's Financial Metrics™

Credit Strengths

- » Solid business profile characterised by leading positions in growth markets, strong technology capabilities and extensive end-market diversification
- » Future earnings and cash flow generation to benefit from incremental contributions from recent acquisitions and organic growth projects as well as a continuous focus on operating and capital efficiency
- » Normalisation of capex to support neutral to positive FCF following recent sizeable investments in organic projects and acquisitions
- » Disposal proceeds of methacrylates business support moderate deleveraging and further growth

Credit Challenges

- » Timely delivery of targeted acquisition synergies and cost savings from ongoing efficiency initiatives
- » Need to grow operating profit and cash flow to reposition credit metrics more in line with our rating guidance
- » Developing the group's growth strategy successfully while maintaining conservative financial policies

Rating Outlook

The stable outlook reflects our expectation that: 1) Evonik's future operating profitability and cash flow generation will be boosted by the timely realization of acquisition synergies and cost efficiencies as well as incremental contributions from ongoing organic growth projects and acquisitions; 2) in parallel with a gradual return to normalized levels of capex, this will enable Evonik to remain FCF positive (after capex and dividend) in coming years; and 3) growing internal cash flow complemented by cash proceeds from the divestment of the methacrylates business will enable Evonik to reposition financial metrics in line with our rating guidance, including total debt to EBITDA no higher than 2.5x and RCF to net debt of around 25% or above, bearing in mind the adverse effect of historically low discount rates on the IFRS valuation of pension obligations.

Factors that Could Lead to an Upgrade

- » A sustained uplift in EBITDA margin (as adjusted by Moody's) above 20% underpinned by the enhanced resilience of the group's business portfolio
- » A permanent improvement in financial profile evidenced by total debt to EBITDA sustainably below 2.0x and RCF to net debt in the mid to high thirties in percentage terms

Factors that Could Lead to a Downgrade

- » Severe deterioration in operating performance and/or more aggressive debt-funded acquisition strategy
- » Failure to consolidate financial metrics and bring total debt to EBITDA close to 2.5x and RCF to net debt around 25%, leaving aside current upward pressure on pension obligations amid historically low discount rates

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the ratings tab on the issuer/entity page on www.moody's.com for the most updated credit rating action information and rating history.

Key Indicators

Exhibit 2

Evonik Industries AG

	12/31/2014	12/31/2015	12/31/2016	12/31/2017	12/31/2018
Revenue (USD Billion)	17.2	15.0	14.1	16.3	17.7
PP&E (net) (USD Billion)	7.1	6.8	7.0	8.5	8.5
EBITDA Margin %	13.9%	17.4%	18.2%	15.9%	16.3%
EBIT / Avg. Assets	6.8%	9.4%	8.0%	6.6%	7.2%
Debt / EBITDA	2.4x	2.2x	3.4x	3.2x	2.9x
RCF / Debt	19.4%	23.9%	12.5%	14.6%	20.5%
EBITDA / Interest Expense	8.1x	12.1x	11.4x	9.6x	10.7x

Note: All ratios are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations.

Source: Moody's Financial Metrics™

Profile

Evonik Industries AG, headquartered in Essen, Germany, is the holding company of the Evonik group, one of the leading European specialty chemicals producers. In 2018, Evonik reported revenue of €15.0 billion and EBITDA of €2.6 billion, equivalent to a margin of 17.3%.

Evonik has production facilities in 28 countries (with a significant share of production assets in Europe) and benefits from a high level of vertical integration (Verbund). Its activities are organised around three business segments:

- » Nutrition & Care (2018: 29% of EBITDA excluding Services and Corporate; 17.4% EBITDA margin): specialty chemicals used in consumer goods, animal nutrition and healthcare products.
- » Resource Efficiency (2018: 47% of EBITDA excluding Services and Corporate; 22.6% EBITDA margin): high-performance materials (e.g. silica, oil additives, crosslinkers, high performance polyamide, resins) supplied in particular to the automotive, paints, coatings adhesives and construction industries.
- » Performance Materials (2018: 24% of EBITDA excluding Services and Corporate; 16.9% EBITDA margin): polymer materials and intermediates including C4 chain products (e.g. butadiene, MTBE, butane-1) as well as acrylic monomers and polymers (MMA and PMMA) supplied mainly to the rubber, plastics and agriculture industries.

Evonik has a current equity market capitalisation of around €11.9 billion. It is 64.3%-owned by RAG-Stiftung - a foundation set up to fund legacy costs relating to the termination of RAG's mining activities from 2019. The annual cash-out to be incurred by RAG-Stiftung is expected to be around €220 million compared to the dividend payment of €364 million it received from Evonik in 2018.

Detailed Credit Considerations

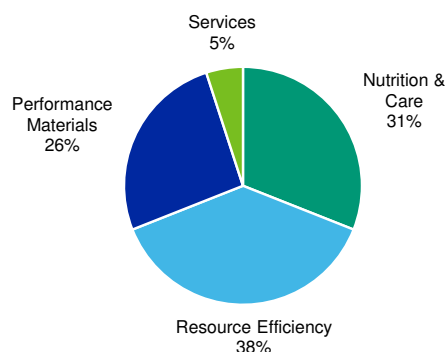
Evonik's business profile enhanced by acquisitions

Evonik's business profile is well underpinned by the significant size and strength of its chemicals franchise. It is well-diversified in terms of end markets, with main exposures to the food and animal feed, consumer and personal care, pharmaceuticals, automotive and construction sectors, as well as to the chemicals industry, producing intermediate products used in the production of optical fibers, plastics and rubber. It does not exhibit any undue customer concentration.

Evonik estimates that it holds market-leading positions (i.e. ranking 1st, 2nd or 3rd in the relevant markets) in approximately 80% of its products, including DL-methionine, super absorbents, silicas and polyamide 12. Performance Materials, which include C4 chain intermediates and acrylic mono- and polymers, entail some exposure to the commodity cycle. This segment contributed around 18% of reported adjusted EBITDA (excluding Services and Corporate) in the period 2013-17, but will play less of a role once the MMA business has been sold. The sale of the MMA activities to funds managed by Advent International is expected to close in Q3 2019.

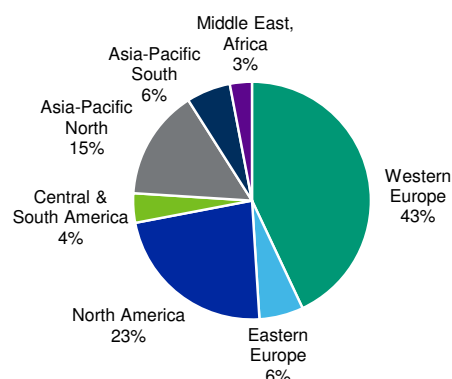
While the strong position of Evonik in some higher-margin businesses such as DL-methionine results in a degree of earnings concentration, this has been reduced by recent acquisitions. Also, this risk is partly mitigated by above average growth prospects, high barrier to entry and limited exposure to raw material cost fluctuations.

Exhibit 3

FY2018 Sales by Segment

Source: Company filings, Moody's Investors Service

Exhibit 4

FY2018 Sales by Region

Source: Company filings, Moody's Investors Service

Following the reorganisation of its portfolio in early 2015, Evonik further refined its strategy in mid 2017. It identified four areas as main growth drivers within the segments Nutrition & Care and Resource Efficiency including health & care (e.g. pharma polymers, oleochemicals, advanced biotechnology), smart materials (e.g. rubber silica & silanes, high performance polymers, membranes), specialty additives (e.g. coating, polyurethane and oil additives) and animal nutrition (e.g. amino acids, probiotics).

In line with this strategy, Evonik completed in 2017, three acquisitions, which enhanced its specialty chemical franchise. In early January, it closed the purchase of Air Products' Performance Materials Division (APD) for €3.5 billion, and became a global leader in specialty and coatings additives with annual revenues around €3.5 billion. The acquisition helped broaden the range of additives Evonik can supply to customers in markets such as polyurethane foams, coatings and adhesives and specialty surfactants.

In May 2017, Evonik acquired for approximately €100 million all shares in Germany-based Dr. Straetmans, which produces alternative preservatives for the cosmetics industry. The acquisition complemented well Evonik's broad portfolio of specialties for the cosmetics business and allows it to offer complete formulation systems to cosmetics manufacturers.

In September 2017, Evonik completed the acquisition of Huber Silica's portfolio for around €600 million. This offered a particularly good fit with its existing silica business, already the global market leader with revenue in excess of €1 billion. Huber Silica is focused on dental (2/3 of sales) and life science specialties (1/3), while Evonik's products are primarily used in tyres, coatings and other industrial applications. The acquisition gave Evonik some backward integration into sodium silicate, which is the main raw material used in the production of precipitated silica.

Evonik in November 2018 announced the acquisition of PeroxyChem, a producer of hydrogen peroxide, persulfates, peracetic acid, for an enterprise value of \$625 million. Once the transaction closes by Q3 2019, PeroxyChem is expected to contribute around \$300 million of sales and an EBITDA of around \$60 million.

The acquired businesses are characterised by healthy and stable EBITDA margins of around 20% compared to Evonik's average margin of around 17% in the period 2015-18. They will also help improve Evonik's geographical mix by expanding its presence in the Americas and Asia.

Growth fundamentals, acquisition synergies and efficiency gains to boost future profitability

EBITDA growth will be supported by above GDP-growth, innovation, expansion, synergies and efficiencies.

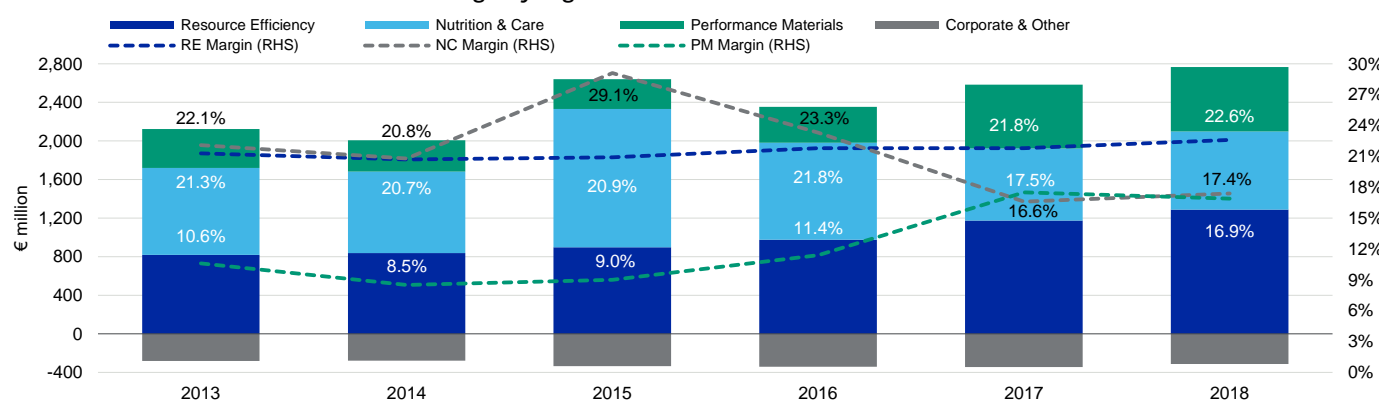
With the ongoing repositioning of Evonik's activities towards specialty chemicals, its product offering is well positioned to benefit from above-average growth. Many of its end markets addressed exhibit above GDP growth rates. Specialty additives, health & care products

grow by about 5-6% per year, with the animal nutrition market growing by about 5-7%. In addition, the company aims to achieve an additional sales of €1.0 billion by 2025 from innovation. Evonik spends about 3.1% of revenues, or €459 million in 2018, on R&D. About 12% of its 2018 sales were achieved with products and applications developed in the previous five years. Another driver of organic growth is also the expansion of existing capacity, such as the €400 million investment into a new polyamide 12 (PA12) production complex that is scheduled to become operational in H1 2021. It will increase Evonik's current PA12 capacity by more than 50%.

Evonik expects the APD and Huber acquisitions to generate a total of €85 million of recurring annual synergies by 2020/21 against one-off integration costs of €105 million. These synergies come on top of Evonik's cost excellence programme that has a target of €200 million savings by 2021, of which the company has already achieved €50 million in 2018.

In 2018, Evonik's EBITDA (as adjusted by Moody's) grew by 6.6% to €2.4 billion on sales of €15 billion. The growth was supported by strong growth in its Resource Efficiency segment with an increase of 10%. Good demand for water-borne coating additives and high performance polymers offset cautiousness in auto and China-related businesses. EBITDA in Nutrition & Care expanded by 8% yoy with strong volume growth. Performance Material's EBITDA was up by 2% as low water levels of the Rhine in Q3 and Q4 increased logistics costs and reduced raw material availability. The price normalisation of MMA will have an impact on EBITDA post 2018.

Exhibit 5

2013 - 2018 Historical EBITDA and EBITDA margin by Segment

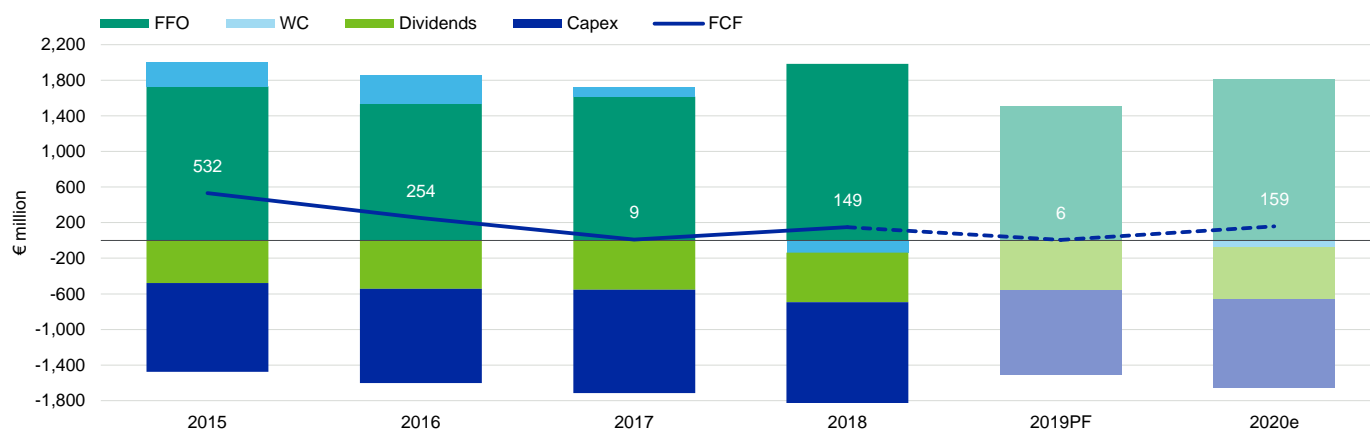
Source: Company filings, Moody's Investors Service

Growing operating cash flows and MMA divestment to support consolidation in financial metrics

The acquisitions of APD, Huber and Dr. Straetmans were events that resulted in a re-leveraging of the group with debt/EBITDA at 3.4x in 2016 and 3.2x in 2017 compared to 1.4x in 2015. APD closed in January 2017 with debt raised for the transaction already reflected in the 2016 accounts.

Of the €4.0 billion of reported debt in 2018, we expect the company to repay €500 million of maturing bonds in April 2020. The application of the new accounting standard IFRS 16 results in an increase of reported debt of €666 million. This is in contrast to our previous operating lease adjustment of €609 million, or €57 million higher debt. Since we give 50% equity credit to the hybrid, this leads to a reduction of debt of almost €250 million. By far the largest adjustment to debt are pension obligations which amounted to €2.7 billion of additional debt in 2018. Evonik will move around €550 million of pension obligations into the MMA spin-off. Nevertheless, excess cash (defined by Moody's as cash in excess of 3% of sales) will increase after the receipt of disposal proceeds which will result in a lower equity credit for its unfunded pension obligations at least in 2019.

Exhibit 6

2015 - 2020e Moody's adjusted Free Cash Flow Development

Note: 2019 Pro-forma financials are excluding MMA Verbund.

Source: Moody's Investors Service

The divestment of the methacrylates business raises substantial cash proceeds of around €2.5 billion (pre-tax), which would further support Evonik's efforts to restore its credit metrics more in line with the Baa1 rating and rebuild headroom within the rating category.

Liquidity Analysis

Evonik's liquidity position is strong, supported by cash balances of around €1.1 billion at the end of March 2018, and the availability of its €1.75 billion revolving credit facility that is currently fully undrawn. The facility matures in June 2024 and does not contain any financial covenants or MAC clause.

Based on our assumption that Evonik will cover capex and dividend out of internally generated cash flow, it has ample liquidity sources to meet maturities of around €500 million falling due within the twelve months to March 2020. Evonik's next bond redemption of €500 million falls due in April 2020. We assume that Evonik will repay this bond with proceeds from its MMA disposal.

Rating Methodology and Scorecard Factors

The principal methodology used in rating Evonik is Moody's rating methodology for the Chemical Industry, which can be found at the www.moody.com website and was updated in March 2019.

The scorecard indicates a Baa2 for the year ended December 2018 and our forward-view over the next 12-18 months. This reflects leverage in the 2.5x-3.0x range and low asset return metrics. Due to the disposal of MMA we expect a smaller scale which will have an impact on the size factor as measured by net asset.

Exhibit 7

Scorecard and scorecard factors

Chemical Industry Grid [1][2]			Current FY 12/31/2018		Moody's 12-18 Month Forward View As of 5/24/2019 [3]	
Factor 1 : Scale (15%)	Measure	Score	Measure	Score	Measure	Score
a) Revenue (USD Billion)	\$17.7	A			\$15.2 - \$15.4	A
b) PP&E (net) (USD Billion)	\$8.5	A			\$7.8 - \$8	Baa
Factor 2 : Business Profile (25%)						
a) Business Profile	A	A			A	A
Factor 3 : Profitability (10%)						
a) EBITDA Margin	16.3%	Baa			16.5% - 17.5%	Baa
b) ROA (Return on Average Assets)	7.2%	Ba			6.5% - 7.5%	Ba
Factor 4 : Leverage & Coverage (30%)						
a) Debt / EBITDA	2.9x	Baa			2.6x - 2.8x	Baa
b) RCF / Debt	20.5%	Baa			15% - 20%	Ba
c) EBITDA / Interest Expense	10.7x	Baa			8.2x - 9x	Baa
Factor 5 : Financial Policy (20%)						
a) Financial Policy	Baa	Baa			Baa	Baa
Rating:						
a) Indicated Outcome from Scorecard		Baa2				Baa2
b) Actual Rating Assigned						Baa1

[1] All ratios are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations.

[2] As of 12/31/2018

[3] This represents Moody's forward view; not the view of the issuer; and unless noted in the text, does not incorporate significant acquisitions and divestitures. Forward looking view excludes MMA Verbund and incorporate the pre-financing of the fixed-interest bond 2013/2020 with a nominal value of €500m.

Source: Moody's Financial Metrics™

Appendix

Exhibit 8

Evonik Industries AG peer comparison

(in US millions)	Evonik Industries AG Baa1 Stable			Solvay SA Baa2 Stable			Arkema Baa2 Positive			Lanxess AG Baa2 Stable		
	FYE Dec-16	FYE Dec-17	FYE Dec-18	FYE Dec-16	FYE Dec-17	FYE Dec-18	FYE Dec-16	FYE Dec-17	FYE Dec-18	FYE Dec-16	FYE Dec-17	FYE Dec-18
Revenue	\$14,087	\$16,251	\$17,742	\$10,587	\$11,440	\$12,113	\$8,337	\$9,407	\$10,411	\$8,519	\$7,378	\$8,499
EBITDA	\$2,567	\$2,589	\$2,884	\$2,051	\$2,320	\$2,207	\$1,256	\$1,567	\$1,695	\$1,085	\$1,016	\$1,174
Total Debt	\$8,325	\$8,733	\$7,981	\$10,150	\$9,817	\$9,196	\$3,088	\$3,913	\$3,688	\$4,164	\$4,523	\$4,098
Cash & Cash Equiv.	\$4,888	\$1,216	\$1,139	\$1,145	\$1,258	\$1,339	\$657	\$1,727	\$1,647	\$2,658	\$706	\$1,531
EBITDA Margin	18.2%	15.9%	16.3%	19.4%	20.3%	18.2%	15.1%	16.7%	16.3%	12.7%	13.8%	13.8%
ROA - EBIT / Avg. Assets	8.0%	6.6%	7.2%	3.3%	4.4%	4.1%	7.0%	9.3%	9.4%	5.2%	4.8%	5.6%
EBITDA / Int. Exp.	11.4x	9.6x	10.7x	5.5x	6.7x	6.5x	11.4x	12.5x	14.6x	8.2x	7.0x	8.7x
Debt / EBITDA	3.4x	3.2x	2.9x	5.2x	4.0x	4.3x	2.6x	2.3x	2.2x	4.0x	4.2x	3.6x
RCF / Debt	12.5%	14.6%	20.5%	14.6%	16.4%	16.7%	22.4%	27.1%	30.2%	16.8%	18.6%	20.8%

Note: All ratios are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations.

Source: Moody's Financial Metrics™

Exhibit 9

Evonik Industries AG historical Moody's adjusted debt breakdown

(in EUR Millions)	FYE Dec-13	FYE Dec-14	FYE Dec-15	FYE Dec-16	FYE Dec-17	FYE Dec-18
As Reported Total Debt	1,664.0	1,135.0	1,706.0	3,735.0	4,144.0	4,020.0
Pensions	2,791	2,892	3,221	3,733	2,800	2,693
Operating Leases	402	401	437	569	589	609
Hybrid Securities	0	0	0	0	(248)	(248)
Non-Standard Adjustments	(55)	(171)	(107)	(144)	(13)	(92)
Moody's-Adjusted Debt	4,801.6	4,256.4	5,257.1	7,893.2	7,272.9	6,981.8

Source: Moody's Financial Metrics™

Exhibit 10

Evonik Industries AG historical Moody's adjusted EBITDA breakdown

(in EUR Millions)	FYE Dec-13	FYE Dec-14	FYE Dec-15	FYE Dec-16	FYE Dec-17	FYE Dec-18
As Reported EBITDA	1,929.0	1,737.0	2,388.0	2,068.0	2,151.0	2,254.0
Pensions	25	20	18	25	29	36
Operating Leases	105	108	99	131	142	139
Interest Expense – Discounting	(21)	(60)	(23)	(33)	(22)	(17)
Unusual	1	(1)	(144)	90	1	38
Non-Standard Adjustments	(8)	(14)	15	39	(10)	(8)
Moody's-Adjusted EBITDA	2,031.0	1,790.0	2,353.0	2,320.0	2,291.0	2,442.0

Source: Moody's Financial Metrics™

Exhibit 11

Evonik Industries AG historical and projected Moody's adjusted financial data

EUR million	2015	2016	2017	2018	2019PF	2020e
INCOME STATEMENT						
Revenues	13,507	12,732	14,383	15,024	13,616	13,762
EBITDA	2,353	2,320	2,291	2,442	2,244	2,335
EBIT	1,571	1,502	1,339	1,493	1,344	1,435
BALANCE SHEET						
Cash & Cash Equivalents	2,630	4,634	1,013	996	1,764	1,923
Total Debt	5,257	7,893	7,273	6,982	6,346	6,346
Net Debt	2,627	3,259	6,260	5,986	4,582	4,423
CASH FLOW						
Funds from Operations	1,734	1,535	1,617	1,986	1,514	1,819
Change in Working Capital items	273	323	107	(136)	0	(80)
Cash Flow from Operations (CFO)	2,007	1,858	1,724	1,850	1,514	1,739
Capital Expenditures (CAPEX)	(998)	(1,059)	(1,163)	(1,144)	(950)	(1,000)
Dividends	(477)	(545)	(553)	(557)	(557)	(581)
Free Cash Flow (FCF)	532	254	9	149	6	159
Retained Cash Flow (RCF)	1,257	990	1,065	1,429	956	1,239
CFO/ Total Debt	38%	24%	24%	26%	24%	27%
CFO/ Net Debt	76%	57%	28%	31%	33%	39%
RCF / Total Debt	24%	13%	15%	20%	15%	20%
RCF / Net Debt	48%	30%	17%	24%	21%	28%
FCF / Total Debt	10%	3%	0%	2%	0%	2%
PROFITABILITY						
% Change of Sales (YoY)	5%	-6%	13%	4%	-9%	1%
EBIT Margin %	12%	12%	9%	10%	9%	10%
EBITDA Margin %	17%	18%	16%	16%	16%	17%
INTEREST COVERAGE						
EBIT / Interest Expense	8.1x	7.4x	5.6x	6.5x	4.9x	5.5x
EBITDA / Interest Expense	12.1x	11.4x	9.6x	10.7x	8.2x	8.9x
LEVERAGE						
Total Debt / EBITDA	2.2x	3.4x	3.2x	2.9x	2.8x	2.7x
Net Debt / EBITDA	1.1x	1.4x	2.7x	2.5x	2.0x	1.9x

[1] All ratios are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations.

[2] 2019PF -2020e represents Moody's forward view; not the view of the issuer; and unless noted in the text, does not incorporate significant acquisitions and divestitures.

[3] 2019 Pro-forma financials are excluding MMA Verbund and incorporate the pre-financing of the fixed-interest bond 2013/2020 with a nominal value of €500m.

[4] For 2019 and 2020, we incorporated a lower equity credit compared to FY 2018 due to the lower pension obligations related to discontinued operations. In FY 2019, we also took into consideration the decrease in discount rate (Germany) communicated by Evonik (Q1 2019).

Source: Moody's Financial Metrics™

Ratings

Exhibit 12

Category	Moody's Rating
EVONIK INDUSTRIES AG	
Outlook	Stable
Issuer Rating -Dom Curr	Baa1
Senior Unsecured -Dom Curr	Baa1
Jr Subordinate -Dom Curr	Baa3
EVONIK FINANCE B.V.	
Outlook	Stable
Bkd Senior Unsecured -Dom Curr	Baa1

Source: Moody's Investors Service

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