MOODY'S INVESTORS SERVICE

Rating Action: Moody's downgrades MAHLE's ratings to Ba2 from Ba1, outlook negative

30 Sep 2022

Frankfurt am Main, September 30, 2022 -- Moody's Investors Service ("Moody's") has today downgraded the corporate family rating (CFR), and the senior unsecured instrument ratings of German automotive parts supplier MAHLE GmbH ("MAHLE" or "the company") to Ba2 from Ba1. Concurrently' Moody's downgraded the company's senior unsecured euro medium term note programme rating to (P)Ba2 from (P)Ba1 and the probability of default rating (PDR) to Ba2-PD from Ba1-PD. The outlook on the ratings remains negative.

"The rating downgrade reflects challenges to pass-on higher raw material and energy costs and the ongoing challenges in the Thermal Management and Electronics and Mechatronics divisions, reflected in weak margins and elevated leverage, which are not commensurate with the expectations for the Ba1 rating category", said Matthias Heck, a Moody's Vice President – Senior Credit Officer and Lead Analyst for MAHLE. "The negative outlook reflects challenges for the company to improve its margins in an increasingly difficult macroeconomic environment to at least 3% and restore currently negative free cash flow within the next 12-18 months", added Mr. Heck. "We positively recognize MAHLE's good liquidity profile, which provides the company with a solid cushion until performance is restored to adequate levels for the Ba2 rating category", Mr. Heck continues.

RATINGS RATIONALE

In the first half of 2022, MAHLE's revenues increased by 4.1% to €5.9 billion, outperforming global light vehicle sales (minus 9.6%) by approximately 1,370 basis points. At the same time, however, the company recorded an EBIT loss of €182 million, as higher cost for materials, freight and energy could not be passed on to customers. Free cash flows amounted to even minus €417 million, including an expansion of working capital and cash outs for restructuring. Concurrently, MAHLE's net debt increased to €1,682 million at the end of June, compared to €1,056 million at the end of December 2021.

Moody's expects that global light vehicle sales will recover in the second half, so 2022 sales will almost reach previous year's level. This volume recovery, and price increases (due to the pass-on of higher raw material cost) should enable MAHLE to recover the losses seen in the first half and achieve a small operating profit margin of around 1% (Moody's adjusted EBITA) this year, a considerable decline versus the 2.1% achieved in 2021 and well below 4%, which Moody's considered as the minimum for the Ba1.

For 2023, Moody's expects a recovery of global light vehicle sales, in an overall more difficult automotive sector environment, where increasing interest rates and weaker consumer affordability dampen light vehicle demand and profitability of automakers. In this environment, Moody's expects a modest recovery of MAHLE's operating profit margins.

At the end of June 2022, MAHLE's debt (Moody's adjusted, including pension provisions) amounted to €3.0 billion, which leads to a debt/EBITDA (Moody's adjusted) of 9x, given the weak profitability. Including the operating improvements expected in the second half of 2022, Moody's expects debt/EBITDA to decrease to around 4.5x, which is still well above the maximum of 3.0x, which Moody's expected for the Ba1 rating category. In 2023, Moody's expects a further de-leveraging to a range of 3.0x-3.5x, which is commensurate with a Ba2.

The negative outlook reflects the slow recovery of global light vehicle sales in an increasingly difficult macroeconomic environment. This might make it challenging to improve margins (Moody's adjusted EBITA) to at least 3% and to reduce debt/EBITDA (Moody's adjusted) to a maximum of 3.5x within the next 12-18 months.

The Ba2 CFR reflects as positives the company's (1) size & scale as one of the world's 25 largest tier 1 automotive parts suppliers, with annual revenues of around €12 billion during the years 2016-19 and a well-diversified Original Equipment Manufacturer (OEM) customer base, (2) top 3 market position in its main product categories of engine systems and coolings, filtration and engine peripherals and thermal management, (3) positive strategic alignment with a dual strategy to address the disruptive automotive industry trend of electrification by using cash flow generated in the internal combustion engines (ICE) business to further

broaden and grow its exposure to electric vehicle platforms and products that are not dependent on the powertrain (4) conservative financial policy, as reflected in a history of relatively low financial leverage and modest shareholder distributions, and (5) good liquidity profile.

The rating reflects as negatives the company's (1) exposure to the cyclicality of automotive production, which has passed its peak in 2018 and is expected to return to previous peak levels only at around mid-decade, (2) relatively low margins, given the highly competitive sector environment and limited ability to timely and completely pass-on higher production cost, and weak free cash flow generation over the last few years, (3) relatively low exposure to the automotive aftermarket business, which is less cyclical and more profitable, (4) high investment needs into R&D and capex to make the product portfolio more independent from ICEs, and (5) challenges related to carbon transition, given the high dependency on products for internal combustion engines, at a time where automakers have accelerated their electrification targets.

LIQUIDITY

Moody's considers MAHLE's liquidity position to be good. The company's main sources of liquidity include (1) cash on the balance sheet of €431 million (as of June 2022) and (2) Moody's estimate of annual funds from operations of around €400 million. The company also has a €1.8 billion revolving credit facility (RCF) maturing in 2024 (€0.3 billion) and 2025 (€1.5 billion), of which €1.4 billion was undrawn. In addition, the company entered into a €300 million 10-year term loan with EIB in August. With this, MAHLE's liquidity sources over the next 12 months amount to approximately €2.5 billion under the stressed assumption of no access to capital markets.

These liquidity sources comfortably exceed liquidity uses of around €1.2 billion, mainly comprising of capital spending, which Moody's expects at around €600 million, and €300 million short-term debt maturities. Uses of liquidity further include Moody's working cash assumption of €300 million.

STRUCTURAL CONSIDERATIONS

MAHLE's Ba2 senior unsecured instrument rating recognizes trade claims and pension provisions at the level of operating subsidiaries which are in aggregate material in size and have higher seniority in the debt structure of MAHLE. The debt has nonetheless not been notched as a reflection of the investment-grade debt structure of the group, and its good liquidity. Moody's might, however, introduce a notching if MAHLE's CFR were to be downgraded below the Ba2 level.

FACTORS THAT COULD LEAD TO AN UPGRADE OR DOWNGRADE OF THE RATINGS

A downgrade of the ratings could arise for MAHLE if debt/EBITDA (Moody's adjusted) failed to improve to below 3.5x, EBITA margins remained below 3% (Moody's adjusted), retained cash flow (RCF) / net debt below 15%, or liquidity weakened.

Moody's would consider an upgrade of the ratings should MAHLE achieve sustainably Debt/EBITDA (Moody's adjusted) below 3.0x, EBITA margins (Moody's adjusted) above 5%, and RCF/net debt of more than 20%.

PRINCIPAL METHODOLOGY

The principal methodology used in these ratings was Automotive Suppliers published in May 2021 and available at https://ratings.moodys.com/api/rmc-documents/72204. Alternatively, please see the Rating Methodologies page on https://ratings.moodys.com for a copy of this methodology.

COMPANY PROFILE

MAHLE GmbH, headquartered in Stuttgart, Germany, is one of the top 25 global automotive parts suppliers. MAHLE's three main business segments are Thermal management (37% of 2021 sales), Engine Systems and Components (24%) and Filtration and Engine Peripherals (18%). In 2021, MAHLE generated revenues of around €10.9 billion. MAHLE, which employed around 71.000 employees and produced in around 160 locations worldwide in 2021, is owned by the MAHLE Foundation.

REGULATORY DISCLOSURES

For further specification of Moody's key rating assumptions and sensitivity analysis, see the sections Methodology Assumptions and Sensitivity to Assumptions in the disclosure form. Moody's Rating Symbols and Definitions can be found on https://ratings.moodys.com/rating-definitions.

For ratings issued on a program, series, category/class of debt or security this announcement provides certain regulatory disclosures in relation to each rating of a subsequently issued bond or note of the same series, category/class of debt, security or pursuant to a program for which the ratings are derived exclusively from existing ratings in accordance with Moody's rating practices. For ratings issued on a support provider, this announcement provides certain regulatory disclosures in relation to the credit rating action on the support provider and in relation to each particular credit rating action for securities that derive their credit ratings from the support provider's credit rating. For provisional ratings, this announcement provides certain regulatory disclosures in relation to a definitive rating that may be assigned subsequent to the final issuance of the debt, in each case where the transaction structure and terms have not changed prior to the assignment of the definitive rating in a manner that would have affected the rating. For further information please see the issuer/deal page for the respective issuer on https://ratings.moodys.com.

For any affected securities or rated entities receiving direct credit support from the primary entity(ies) of this credit rating action, and whose ratings may change as a result of this credit rating action, the associated regulatory disclosures will be those of the guarantor entity. Exceptions to this approach exist for the following disclosures, if applicable to jurisdiction: Ancillary Services, Disclosure to rated entity, Disclosure from rated entity.

The ratings have been disclosed to the rated entity or its designated agent(s) and issued with no amendment resulting from that disclosure.

These ratings are solicited. Please refer to Moody's Policy for Designating and Assigning Unsolicited Credit Ratings available on its website https://ratings.moodys.com.

Regulatory disclosures contained in this press release apply to the credit rating and, if applicable, the related rating outlook or rating review.

Moody's general principles for assessing environmental, social and governance (ESG) risks in our credit analysis can be found at https://ratings.moodys.com/documents/PBC_1288235.

The Global Scale Credit Rating on this Credit Rating Announcement was issued by one of Moody's affiliates outside the UK and is endorsed by Moody's Investors Service Limited, One Canada Square, Canary Wharf, London E14 5FA under the law applicable to credit rating agencies in the UK. Further information on the UK endorsement status and on the Moody's office that issued the credit rating is available on https://ratings.moodys.com.

Please see https://ratings.moodys.com for any updates on changes to the lead rating analyst and to the Moody's legal entity that has issued the rating.

Please see the issuer/deal page on https://ratings.moodys.com for additional regulatory disclosures for each credit rating.

Matthias Heck, CFA VP - Senior Credit Officer Corporate Finance Group Moody's Deutschland GmbH An der Welle 5 Frankfurt am Main, 60322 Germany JOURNALISTS: 44 20 7772 5456 Client Service: 44 20 7772 5454

Christian Hendker, CFA Associate Managing Director Corporate Finance Group JOURNALISTS: 44 20 7772 5456 Client Service: 44 20 7772 5454

Releasing Office: Moody's Deutschland GmbH An der Welle 5 Frankfurt am Main, 60322 Germany JOURNALISTS: 44 20 7772 5456 Client Service: 44 20 7772 5454

MOODY'S INVESTORS SERVICE

© 2022 Moody's Corporation, Moody's Investors Service, Inc., Moody's Analytics, Inc. and/or their licensors and affiliates (collectively, "MOODY'S"). All rights reserved.

CREDIT RATINGS ISSUED BY MOODY'S CREDIT RATINGS AFFILIATES ARE THEIR CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES. CREDIT COMMITMENTS. OR DEBT OR DEBT-LIKE SECURITIES, AND MATERIALS, PRODUCTS, SERVICES AND INFORMATION PUBLISHED BY MOODY'S (COLLECTIVELY, "PUBLICATIONS") MAY INCLUDE SUCH CURRENT OPINIONS. MOODY'S DEFINES CREDIT RISK AS THE RISK THAT AN ENTITY MAY NOT MEET ITS CONTRACTUAL FINANCIAL OBLIGATIONS AS THEY COME DUE AND ANY ESTIMATED FINANCIAL LOSS IN THE EVENT OF DEFAULT OR IMPAIRMENT. SEE APPLICABLE MOODY'S RATING SYMBOLS AND DEFINITIONS PUBLICATION FOR INFORMATION ON THE TYPES OF CONTRACTUAL FINANCIAL OBLIGATIONS ADDRESSED BY MOODY'S CREDIT RATINGS. CREDIT RATINGS DO NOT ADDRESS ANY OTHER RISK, INCLUDING BUT NOT LIMITED TO: LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. CREDIT RATINGS, NON-CREDIT ASSESSMENTS ("ASSESSMENTS"), AND OTHER OPINIONS INCLUDED IN MOODY'S PUBLICATIONS ARE NOT STATEMENTS OF CURRENT OR HISTORICAL FACT. MOODY'S PUBLICATIONS MAY ALSO INCLUDE QUANTITATIVE MODEL-BASED ESTIMATES OF CREDIT RISK AND RELATED OPINIONS OR COMMENTARY PUBLISHED BY MOODY'S ANALYTICS, INC. AND/OR ITS AFFILIATES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS DO NOT CONSTITUTE OR PROVIDE INVESTMENT OR FINANCIAL ADVICE, AND MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS ARE NOT AND DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS DO NOT COMMENT ON THE SUITABILITY OF AN INVESTMENT FOR ANY PARTICULAR INVESTOR. MOODY'S ISSUES ITS CREDIT RATINGS, ASSESSMENTS AND OTHER OPINIONS AND PUBLISHES ITS PUBLICATIONS WITH THE EXPECTATION AND UNDERSTANDING THAT EACH INVESTOR WILL, WITH DUE CARE, MAKE ITS OWN STUDY AND EVALUATION OF EACH SECURITY THAT IS UNDER CONSIDERATION FOR PURCHASE. HOLDING. OR SALE.

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS, AND PUBLICATIONS ARE NOT INTENDED FOR USE BY RETAIL INVESTORS AND IT WOULD BE RECKLESS AND INAPPROPRIATE FOR RETAIL INVESTORS TO USE MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS OR PUBLICATIONS WHEN MAKING AN INVESTMENT DECISION. IF IN DOUBT YOU SHOULD CONTACT YOUR FINANCIAL OR OTHER PROFESSIONAL ADVISER.

ALL INFORMATION CONTAINED HEREIN IS PROTECTED BY LAW, INCLUDING BUT NOT LIMITED TO, COPYRIGHT LAW, AND NONE OF SUCH INFORMATION MAY BE COPIED OR OTHERWISE REPRODUCED, REPACKAGED, FURTHER TRANSMITTED, TRANSFERRED, DISSEMINATED, REDISTRIBUTED OR RESOLD, OR STORED FOR SUBSEQUENT USE FOR ANY SUCH PURPOSE, IN WHOLE OR IN PART, IN ANY FORM OR MANNER OR BY ANY MEANS WHATSOEVER, BY ANY PERSON WITHOUT MOODY'S PRIOR WRITTEN CONSENT.

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS ARE NOT INTENDED FOR USE BY ANY PERSON AS A BENCHMARK AS THAT TERM IS DEFINED FOR REGULATORY PURPOSES AND MUST NOT BE USED IN ANY WAY THAT COULD RESULT IN THEM BEING CONSIDERED A BENCHMARK.

All information contained herein is obtained by MOODY'S from sources believed by it to be accurate and reliable. Because of the possibility of human or mechanical error as well as other factors, however, all information contained herein is provided "AS IS" without warranty of any kind. MOODY'S adopts all necessary measures so that the information it uses in assigning a credit rating is of sufficient quality and from sources

MOODY'S considers to be reliable including, when appropriate, independent third-party sources. However, MOODY'S is not an auditor and cannot in every instance independently verify or validate information received in the rating process or in preparing its Publications.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability to any person or entity for any indirect, special, consequential, or incidental losses or damages whatsoever arising from or in connection with the information contained herein or the use of or inability to use any such information, even if MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers is advised in advance of the possibility of such losses or damages, including but not limited to: (a) any loss of present or prospective profits or (b) any loss or damage arising where the relevant financial instrument is not the subject of a particular credit rating assigned by MOODY'S.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability for any direct or compensatory losses or damages caused to any person or entity, including but not limited to by any negligence (but excluding fraud, willful misconduct or any other type of liability that, for the avoidance of doubt, by law cannot be excluded) on the part of, or any contingency within or beyond the control of, MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers, arising from or in connection with the information contained herein or the use of or inability to use any such information.

NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY CREDIT RATING, ASSESSMENT, OTHER OPINION OR INFORMATION IS GIVEN OR MADE BY MOODY'S IN ANY FORM OR MANNER WHATSOEVER.

Moody's Investors Service, Inc., a wholly-owned credit rating agency subsidiary of Moody's Corporation ("MCO"), hereby discloses that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by Moody's Investors Service, Inc. have, prior to assignment of any credit rating, agreed to pay to Moody's Investors Service, Inc. for credit ratings opinions and services rendered by it fees ranging from \$1,000 to approximately \$5,000,000. MCO and Moody's Investors Service also maintain policies and procedures to address the independence of Moody's Investors Service credit ratings and credit rating processes. Information regarding certain affiliations that may exist between directors of MCO and rated entities, and between entities who hold credit ratings from Moody's Investors Service and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at www.moodys.com under the heading "Investor Relations — Corporate Governance — Director and Shareholder Affiliation Policy."

Additional terms for Australia only: Any publication into Australia of this document is pursuant to the Australian Financial Services License of MOODY'S affiliate, Moody's Investors Service Pty Limited ABN 61 003 399 657AFSL 336969 and/or Moody's Analytics Australia Pty Ltd ABN 94 105 136 972 AFSL 383569 (as applicable). This document is intended to be provided only to "wholesale clients" within the meaning of section 761G of the Corporations Act 2001. By continuing to access this document from within Australia, you represent to MOODY'S that you are, or are accessing the document as a representative of, a "wholesale client" and that neither you nor the entity you represent will directly or indirectly disseminate this document or its contents to "retail clients" within the meaning of section 761G of the Corporations Act 2001. MOODY'S credit rating is an opinion as to the creditworthiness of a debt obligation of the issuer, not on the equity securities of the issuer or any form of security that is available to retail investors.

Additional terms for Japan only: Moody's Japan K.K. ("MJKK") is a wholly-owned credit rating agency subsidiary of Moody's Group Japan G.K., which is wholly-owned by Moody's Overseas Holdings Inc., a wholly-owned subsidiary of MCO. Moody's SF Japan K.K. ("MSFJ") is a wholly-owned credit rating agency subsidiary of MJKK. MSFJ is not a Nationally Recognized Statistical Rating Organization ("NRSRO"). Therefore, credit ratings assigned by MSFJ are Non-NRSRO Credit Ratings. Non-NRSRO Credit Ratings are assigned by an entity that is not a NRSRO and, consequently, the rated obligation will not qualify for certain types of treatment under U.S. laws. MJKK and MSFJ are credit rating agencies registered with the Japan Financial Services Agency and their registration numbers are FSA Commissioner (Ratings) No. 2 and 3 respectively.

MJKK or MSFJ (as applicable) hereby disclose that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by MJKK or MSFJ (as applicable) have, prior to assignment of any credit rating, agreed to pay to MJKK or MSFJ (as applicable) for

credit ratings opinions and services rendered by it fees ranging from JPY100,000 to approximately JPY550,000,000.

MJKK and MSFJ also maintain policies and procedures to address Japanese regulatory requirements.