

Heraeus

Heraeus Finance GmbH

(Hanau, Federal Republic of Germany)

EUR 500,000,000 2.625 per cent. Notes due 2027

unconditionally and irrevocably guaranteed by

Heraeus Holding GmbH

(Hanau, Federal Republic of Germany)

ISIN DE000A30VGD9, Common Code 247550437, WKN A30VGD

Issue Price 99.727 per cent.

Heraeus Finance GmbH, Heraeusstraße 12-14, 63450 Hanau, Federal Republic of Germany (the "**Issuer**") will issue on 9 June 2022 (the "**Issue Date**") EUR 500,000,000 2.625 per cent. Notes due 2027 (the "**Notes**") in the denomination of EUR 100,000 per Note.

The Notes have the benefit of an unconditional and irrevocable guarantee (the "**Guarantee**") of Heraeus Holding GmbH (the "**Guarantor**") and together with its consolidated subsidiaries, the "**Group**" or "**Heraeus**"). The Notes and the Guarantee will be governed by the laws of the Federal Republic of Germany ("**Germany**").

The Notes will bear interest on their outstanding amount from and including the Issue Date to but excluding 9 June 2027 at a rate of 2.625 per cent. per annum, payable annually in arrear on 9 June of each year, commencing on 9 June 2023. Unless previously redeemed or repurchased and cancelled, the Notes will be redeemed at par on 9 June 2027 (the "**Maturity Date**").

The Issuer may, at its option, redeem the Notes prior to the Maturity Date on the terms set forth in §4 of the terms and conditions of the Notes (the "**Terms and Conditions**"). Upon occurrence of a Put Event or an event of default (each as described in the Terms and Conditions), each holder of Notes (a "**Noteholder**") will have the option to declare all or some only of its Notes not previously redeemed due prior to the Maturity Date. In such case the Issuer will redeem such Notes at their principal amount.

The Notes will initially be represented by a temporary global note in bearer form (the "**Temporary Global Note**"). Interests in the Temporary Global Note will be exchangeable, in whole or in part, for interests in a permanent global note (the "**Permanent Global Note**") and, together with the Temporary Global Notes, each a "**Global Note**") on or after the date 40 days after the later of the commencement of the offering and the Issue Date (the "**Exchange Date**"), upon certification as to non-U.S. beneficial ownership. The Global Notes will be deposited prior to the Issue Date with Clearstream Banking Aktiengesellschaft ("**Clearstream Frankfurt**").

This prospectus (the "**Prospectus**") does not constitute a prospectus within the meaning of Regulation (EU) 2017/1129 of the European Parliament and of the Council of 14 June 2017 (as amended, the "**Prospectus Regulation**"). No "competent authority" (as defined in the Prospectus Regulation) has approved this Prospectus or reviewed information contained in this Prospectus.

This Prospectus constitutes a prospectus for the purpose of Part IV of the Luxembourg Law of 16 July 2019 on Prospectuses for Securities. Application has been made to list the Notes on the official list (the "**Official List**") of the Luxembourg Stock Exchange and for admission to trading of the Notes on the Euro MTF Market operated by the Luxembourg Stock Exchange, which is a multilateral trading facility for the purposes of Directive 2014/65/EU of the European Parliament and of the Council on markets in financial instruments, as amended, ("**MiFID II**"), and, therefore, not an EU-regulated market.

This Prospectus does not constitute an offer to sell, or the solicitation of an offer to buy, the Notes in any jurisdiction where such offer or solicitation is unlawful.

The Notes have not been and will not be registered under the U.S. Securities Act of 1933, as amended (the "Securities Act"), and, subject to certain exceptions, the Notes may not be offered or sold within the United States or to, or for the account or benefit of, U.S. persons.

Prospective purchasers of the Notes should ensure that they understand the nature of the Notes and the extent of their exposure to risks and that they consider the suitability of the Notes as an investment in light of their own circumstances and financial condition. Investing in the Notes involves certain risks. Please review the section entitled "**Risk Factors**" beginning on page 7 of this Prospectus.

Joint Bookrunners

Commerzbank

Deutsche Bank

ING

UniCredit

RESPONSIBILITY STATEMENT

Each of the Issuer and the Guarantor, both with registered office in Hanau, Germany, accepts responsibility for the information contained in this Prospectus and hereby declares that, having taken all reasonable care to ensure that such is the case, the information contained in this Prospectus is, to the best of its knowledge, in accordance with the facts and does not omit anything likely to affect the import of such information.

The Issuer and the Guarantor further confirm that (i) this Prospectus contains all information with respect to the Issuer, the Guarantor, the Notes and the Guarantee which is material in the context of the issue and offering of the Notes, including all information which, according to the particular nature of the Issuer, the Guarantor, the Notes and Guarantee, is necessary to enable investors and their investment advisers to make an informed assessment of the assets and liabilities, financial position, profits and losses, and prospects of the Issuer and the Guarantor and of the rights attached to the Notes and the Guarantee; (ii) the statements contained in this Prospectus relating to the Issuer, the Guarantor, the Notes and the Guarantee are in every material respect true and accurate and not misleading; (iii) there are no other facts in relation to the Issuer, the Guarantor, the Notes or the Guarantee the omission of which would, in the context of the issue and offering of the Notes, make any statement in this Prospectus misleading in any material respect; (iv) reasonable enquiries have been made by the Issuer and the Guarantor to ascertain such facts and to verify the accuracy of all such information and statements; and (v) the statements of opinion, intention, belief or expectation expressed in the Prospectus are honestly and reasonably held.

IMPORTANT NOTICE

No person is authorised to give any information or to make any representation other than those contained in this Prospectus and, if given or made, such information or representation must not be relied upon as having been authorised by or on behalf of the Issuer, the Guarantor or the Joint Bookrunners (as defined in the section "*Subscription and Sale of the Notes*").

This Prospectus should be read and understood in conjunction with any supplement hereto and any documents incorporated herein or therein by reference.

Each investor contemplating purchasing any Notes should make its own independent investigation of the financial condition and affairs, and its own appraisal of the creditworthiness, of the Issuer and the Guarantor. This Prospectus does not constitute an offer of Notes or an invitation by or on behalf of the Issuer, the Guarantor or the Joint Bookrunners to purchase any Notes. Neither this Prospectus nor any other information supplied in connection with the Notes should be considered as a recommendation by the Issuer, the Guarantor or the Joint Bookrunners to a recipient hereof and thereof that such recipient should purchase any Notes.

This Prospectus reflects the status as of its date. The offering, sale and delivery of the Notes and the distribution of this Prospectus and any other information supplied in connection with the issue of the Notes may not be taken as an implication that the information contained herein or therein is accurate and complete subsequent to the date hereof or thereof or that there has been no adverse change in the financial condition of the Issuer, the Guarantor or the Group since the date hereof.

To the extent permitted by the laws of any relevant jurisdiction, neither any Joint Bookrunners nor any of its respective affiliates nor any other person mentioned in this Prospectus, except for the Issuer and the Guarantor, accepts responsibility for the accuracy and completeness of the information contained in this Prospectus or any document incorporated by reference, and accordingly, and to the extent permitted by the laws of any relevant jurisdiction, none of these persons accept any responsibility for the accuracy and completeness of the information contained in any of these documents. The Joint Bookrunners have not independently verified any such information and accept no responsibility for the accuracy thereof.

This Prospectus does not constitute, and may not be used for the purposes of, an offer or solicitation by anyone in any jurisdiction in which such offer or solicitation is not authorised or to any person to whom it is unlawful to make such offer or solicitation.

The distribution of this Prospectus and the offering, sale and delivery of the Notes in certain jurisdictions may be restricted by law. Persons into whose possession this Prospectus comes are required to inform themselves about and to observe any such restrictions. No representation is being made by the Joint Bookrunners that the Prospectus may be lawfully distributed or that the Notes may be lawfully sold in any jurisdiction. For a description of the restrictions applicable in the United States of America ("**United States**" or "**U.S.**"), the United Kingdom of Britain and Northern Ireland ("**United Kingdom**" or "**UK**") and the Republic of Singapore ("**Singapore**"), see "*Subscription and Sale of the Notes – Selling Restrictions*".

For the avoidance of doubt, the content of any website referred to in this Prospectus does not form part of this Prospectus (except for the information expressly incorporated by reference into this Prospectus) and the information on such websites has not been scrutinised or approved by the Luxembourg Stock Exchange.

The language of this Prospectus is English. In respect of the Terms and Conditions and the Guarantee, German is the controlling and legally binding language.

In this Prospectus all references to "**€**", "**EUR**" or "**Euro**" are to the currency introduced at the start of the third stage of the European Economic and Monetary Union, and as defined in Article 2 of Council Regulation (EC) No 974/98 of 3 May 1998 on the introduction of the Euro, as amended.

MIFID II PRODUCT GOVERNANCE / TARGET MARKET: PROFESSIONAL INVESTORS AND ECPS ONLY

Solely for the purposes of each manufacturer's product approval process, the target market assessment in respect of the Notes has led to the conclusion that: (i) the target market for the Notes is eligible counterparties and professional clients only, each as defined in MiFID II, each having (1) at least basic knowledge and/or experience with financial products, (2) a medium-term investment horizon, (3) asset accumulation as investment objective, (4) the ability to bear no loss / small losses and (5) the risk tolerance and compatibility of the risk/reward profile corresponding to 3 as Summary Risk Indicator (SRI); and (ii) all channels for distribution of the Notes to eligible counterparties and professional clients are appropriate. Any person subsequently offering, selling or recommending the Notes (a "**Distributor**") should take into consideration the manufacturers' target market assessment; however, a distributor subject to MiFID II is responsible for undertaking its own target market assessment in respect of the Notes (by either adopting or refining the manufacturers' target market assessment) and determining appropriate distribution channels.

UK MIFIR PRODUCT GOVERNANCE / PROFESSIONAL INVESTORS AND ECPS ONLY TARGET MARKET

Solely for the purposes of the manufacturer's product approval process, the target market assessment in respect of the Notes has led to the conclusion that: (i) the target market for the Notes is only eligible counterparties, as defined in the FCA Handbook Conduct of Business Sourcebook ("**COBS**"), and professional clients, as defined in the UK MiFIR, each having (1) at least basic knowledge and/or experience with financial products, (2) a medium-term investment horizon, (3) asset accumulation as investment objective, (4) the ability to bear no loss / small losses and (5) the risk tolerance and compatibility of the risk/reward profile corresponding to 3 as Summary Risk Indicator (SRI); and (ii) all channels for distribution of the Notes to eligible counterparties and professional clients are appropriate. Any Distributor should take into consideration the manufacturer's target market assessment; however, a distributor subject to the FCA Handbook Product Intervention and Product Governance Sourcebook (the "**UK MiFIR Product Governance Rules**") is responsible for undertaking its own target market assessment in respect of the Notes (by either adopting or refining the manufacturer's target market assessment) and determining appropriate distribution channels.

PRIIPS REGULATION / PROHIBITION OF SALES TO RETAIL INVESTORS IN THE EUROPEAN ECONOMIC AREA

The Notes are not intended to be offered, sold or otherwise made available to and should not be offered, sold or otherwise made available to any retail investor in the European Economic Area (the "EEA"). For these purposes, a retail investor means a person who is one (or more) of: (i) a retail client as defined in point (11) of Article 4 (1) of MiFID II; or (ii) a customer within the meaning of the Directive 2016/97/EU of the European Parliament and of the Council of 20 January 2016 on insurance distribution (recast), as amended (the "**Insurance Distribution Directive**"), where that customer would not qualify as a professional client as defined in point (10) of Article 4 (1) of MiFID II. Consequently, no key information document required by the Regulation (EU) No 1286/2014 (as amended, the "**PRIIPs Regulation**") for offering or selling the Notes or otherwise making them available to retail investors in the EEA has been prepared and therefore offering or selling the Notes or otherwise making them available to any retail investor in the EEA may be unlawful under the PRIIPs Regulation.

UK PRIIPS REGULATION / PROHIBITION OF SALES TO UK RETAIL INVESTORS

The Notes are not intended to be offered, sold or otherwise made available to and should not be offered, sold or otherwise made available to any retail investor in the UK. For these purposes, a retail investor means a person who is one (or more) of: (i) a retail client, as defined in point (8) of article 2 of the Regulation (EU) No 2017/565 as it forms part of domestic law by virtue of the European Union (Withdrawal) Act 2018 ("EUWA"); or (ii) a customer within the meaning of the provisions of the Financial Services and Markets Act 2000, as amended (the "**FSMA**") and any rules or regulations made under the FSMA to implement the Insurance Distribution Directive, where that customer would not qualify as a professional client, as defined in point (8) of article 2 (1) of Regulation (EU) No 600/2014 as it forms part of domestic law by virtue of the EUWA. Consequently, no key information document required by the UK PRIIPs Regulation (EU) No 1286/2014 as it forms part of domestic law by virtue of the EUWA (the "**UK PRIIPs Regulation**") for offering or selling the Notes or otherwise making them available to retail investors in the UK has been prepared and therefore offering or selling the Notes or otherwise making them available to any retail investor in the UK may be unlawful under the UK PRIIPs Regulation.

SINGAPORE SECURITIES AND FUTURES ACT PRODUCT CLASSIFICATION

In connection with Section 309B of the Securities and Futures Act 2001, as modified or amended from time to time (the "**SFA**") and the Securities and Futures (Capital Markets Products) Regulations 2018 of Singapore (the "**CMP Regulations 2018**"), the Issuer has determined, and hereby notifies all relevant persons (as defined in Section 309A(1) of the SFA), that the Notes are 'prescribed capital markets products' (as defined in the CMP Regulations 2018) and Excluded Investment Products (as defined in MAS Notice SFA 04-N12: Notice on the Sale of Investment Products and MAS Notice FAA-N16: Notice on Recommendations on Investment Products).

STABILISATION

IN CONNECTION WITH THE ISSUE OF THE NOTES, COMMERZBANK AKTIENGESELLSCHAFT (THE "STABILISING MANAGER") (OR ANY PERSON ACTING ON BEHALF OF ANY STABILISING MANAGER) MAY OVER-ALLOT NOTES OR EFFECT TRANSACTIONS WITH A VIEW TO SUPPORTING THE MARKET PRICE OF THE NOTES AT A LEVEL HIGHER THAN THAT WHICH MIGHT OTHERWISE PREVAIL. HOWEVER, STABILISATION MAY NOT NECESSARILY OCCUR. ANY STABILISATION ACTION MAY BEGIN ON OR AFTER THE DATE ON WHICH ADEQUATE PUBLIC DISCLOSURE OF THE TERMS OF THE OFFER OF THE NOTES IS MADE AND, IF BEGUN, MAY CEASE AT ANY TIME, BUT IT MUST END NO LATER THAN THE EARLIER OF 30 DAYS AFTER THE ISSUE DATE OF THE NOTES AND 60 DAYS AFTER THE DATE OF THE ALLOTMENT OF THE NOTES. ANY STABILISATION ACTION OR OVER-ALLOTMENT MUST BE CONDUCTED BY THE STABILISING MANAGER (OR ANY PERSON ACTING ON BEHALF OF THE STABILISING MANAGER) IN ACCORDANCE WITH ALL APPLICABLE LAWS AND RULES.

FORWARD-LOOKING STATEMENTS

This Prospectus includes certain "*forward-looking statements*". All statements other than statements of historical facts included in this Prospectus, including, without limitation, those regarding the Issuer's or the Guarantor's financial positions, business strategies, plans and objectives of management for future operations, are forward-looking statements. These forward-looking statements can be identified by the use of forward-looking terminology, including the terms "*aim*", "*anticipate*", "*believe*", "*continue*", "*could*", "*estimate*", "*expect*", "*forecast*", "*guidance*", "*intend*", "*may*", "*plan*", "*project*", "*probability*", "*target*", "*goal*", "*objective*", "*should*" or "*will*". The absence of these words does not necessarily mean that a statement is not forward-looking. Their negative, or other variations or comparable terminology can indicate a forward-looking terminology. Such forward-looking statements involve known and unknown risks, uncertainties and other factors, which may cause the actual results, performance or achievements of the Issuer or the Guarantor, or industry results, to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. Such forward-looking statements are based on numerous assumptions regarding the Issuer's and Guarantor's present and future business strategies and the environment in which the Issuer and/or the Guarantor operate in the future. In addition, even if their financial condition, results of operations and cash flows, and the development of the industry in which they operate, are consistent with the forward-looking statements contained in this Prospectus, those results or developments may not be indicative of results or developments in subsequent periods.

Any forward-looking statements in this Prospectus speak only as of the date on which they are made. The Issuer, the Guarantor and the Joint Bookrunners expressly disclaim any obligation or undertaking to release publicly any updates or revisions to any forward-looking statement contained herein to reflect any change in their respective expectations with regard thereto or any change in events, conditions or circumstances on which any such statement is based.

ALTERNATIVE PERFORMANCE MEASURES

The Issuer and the Guarantor believe that the alternative performance measures contained in this Prospectus (together, the "**Alternative Performance Measures**"), such as EBIT Margin, EBITDA, EBITDA Margin, Net Working Capital, Free Cash Flow, Equity Ratio, Net Debt, Net Leverage Ratio and Interest Coverage Ratio, which are useful in evaluating the Group's operating performance and liquidity. However, the Alternative Performance Measures are not recognized as financial measures under International Financial Reporting Standards as adopted by the European Union (the "**IFRS**") and should not be considered as substitutes for financial measures on profit before taxes, profit after taxes, net liabilities, net cash provided by operating activities or other consolidated income statement, consolidated balance sheet or consolidated cash flow statement data, as determined in accordance with IFRS, or as financial measures of profitability, liquidity or indebtedness. The Alternative Performance Measures do not necessarily indicate whether net cash will be sufficient or available for the Group's cash requirements, nor whether any such financial measure is indicative of the Group's historical operating results. The Alternative Performance Measures are not meant to be indicative of future results. Because not all companies calculate these financial measures in the same way, the Group's presentation of the Alternative Performance Measures is not necessarily comparable with similarly titled financial measures used by other companies.

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RISK FACTORS

An investment in the Notes is subject to risks. In addition to the other information contained in this Prospectus, you should carefully consider the following risk factors before purchasing the Notes. If any of the events described in the risk factors below occurs, the Issuer's, the Guarantor's and the Group's margins and results of operations and financial condition could be materially and adversely affected, which, in turn, could adversely affect the Issuer's and the Guarantor's ability to repay the Notes. All of these factors are contingencies which may or may not occur and each of the Issuer and the Guarantor is not in a position to express a view on the likelihood of any such contingency occurring.

Factors which the Issuer or the Guarantor believes may be material for the purpose of assessing the market risks associated with the Notes or the Guarantee are also described below.

Each of the Issuer and the Guarantor believes that the factors described below represent the principal risks inherent in investing in the Notes as guaranteed by the Guarantee. However, either the Issuer or the Guarantor may be unable to pay interest, principal or other amounts on or in connection with the Notes or the Guarantee, respectively, for other reasons and neither the Issuer nor the Guarantor represents that the statements below regarding the risks of holding any Notes as guaranteed by the Guarantee are exhaustive. Prospective investors should also read the detailed information set out elsewhere in this Prospectus (including any documents deemed to be incorporated by reference herein) and reach their own views prior to making any investment decision. Prospective investors should note that the risks relating to the Issuer and the Guarantor, their respective industries and the Notes summarized in this section are the risks that the Issuer and the Guarantor believe to be the most essential to an assessment by a prospective investor of whether to consider an investment in the Notes. However, as these risks relate to events and depend on circumstances that may or may not occur in the future, prospective investors should consider not only the information on the key risks summarized in this section, but also, among other things, should consult their financial, legal and tax advisers.

Risks relating to the Issuer, the Guarantor and the Group

Risks relating to the nature of the Issuer as a finance subsidiary

The Issuer is a financing vehicle for the Guarantor and the Group. As such, it raises funds through the issue of notes and on-lends monies to the Guarantor or other companies within the Group by way of intra-group loans. The assets of the Issuer mainly consist of receivables from loans to Group companies.

The ongoing business activities of the Issuer depend on the ability of the Guarantor and other companies of the Group to fulfil their payment obligations *vis-à-vis* the Issuer. If individual or all members of the Group were unable to meet their payment obligations to the Issuer in due time, the Issuer may not be able to meet its payment obligations under the Notes.

Risks relating to the nature of the Guarantor as a holding company

The Guarantor acts as the holding company for the Group and is responsible for the strategic and financial management of the Group. All business operations are conducted by the Group's global business units ("**GBUs**") and the respective operating subsidiaries in which the Guarantor holds direct or indirect participations. The assets of the Guarantor mainly consist of the shares in its operating subsidiaries and related financing. Therefore, in order to be able to meet its operating and other expenses, including the payment of interest and principal to the Noteholders under the Guarantee, the Guarantor is dependent on its operating subsidiaries. The inability of such subsidiaries to distribute sufficient profits could have a material adverse effect on the ability of the Guarantor to pay interest on and repay the principal amount of the Notes under the Guarantee.

In connection with the business activities of the GBUs, the Guarantor has issued certain maximum amount guarantees and letters of comfort to a number of suppliers, lenders and business partners of its subsidiaries. As of the date of this Prospectus, such guarantees and letters of comfort relate to an aggregate amount of approximately EUR 540 million. If a relevant subsidiary of the Guarantor defaults on its obligations *vis-a-vis* the respective counterparty, the Guarantor

could be required to cover the agreed amounts, which could have a negative impact on the financial condition of the Guarantor and thus on its ability to pay amounts under the Guarantee.

Strategic risks

The Group as well as individual GBUs are exposed to threats to their core competencies and their reputation.

Heraeus is exposed to threats to its core competencies, critical success factors, strategic goals and, in particular, the reputation of the Group, its GBUs and their brands. In the assessment of the Group, its long-term success is in particular based on its customers' perceptions of the competitive advantages of the Group GBUs, their ability to generate competitive advantages in the future and to adequately handle highly valuable goods. Any damage to the reputation of the Group or its GBUs as well as any damage to their core competencies, critical success factors or strategic goals or the customers' perceptions of competitive advantages could have a material adverse effect on the financial condition and results of operations of the Group.

The Group's strategy or the strategy of the individual GBUs may not prove effective.

The strategy of the Group as well as the strategy of the GBUs were developed to the best available knowledge. However, the analysis of the Group's or the individual GBU's strategic position, the assessment of customer needs and potential market disruptions as well as the focus of the Group's and the individual GBU's product and technology roadmap include an element of business judgement and the Group's overall strategy or the strategy of individual GBUs may prove not to be effective. This includes the risk of making wrong business decisions, implementing decisions poorly or inconsistently, or being unable to adapt to changes in the operating environment.

Any such strategic errors or a flawed or inconsistent implementation of the Group's or individual GBU's strategy, including with respect to the allocation of capital expenditures, could have a material adverse effect on the financial condition and results of operations of the Group.

The Group's investments in research and development activities may not yield the desired returns.

Given the ongoing changes affecting the Group's markets, it depends on the continued development of new and improved products and technologies to maintain its competitive position. To this end, the Group invests substantial resources in research and development. There is, however, no guarantee that this allocation of resources correctly reflects future market demand and consequently the Group's investments may turn out to be inefficient.

Furthermore, the development process itself is subject to uncertainties and the Group may not be able to successfully develop the new products and technologies currently envisioned. The success of its research and development efforts may take several years to materialize, in particular for major development projects, and costs of such projects may turn out to be substantially higher than originally anticipated. Even if the Group develops an innovative product or technology, there is no guarantee that the market will accept its solution, particularly where several years have passed since the commencement of the development process and market conditions have changed significantly (e.g., due to the introduction of competing products and technologies). If the Group starts the development of new products and technologies that ultimately fail to be accepted in the marketplace or fail to become commercially viable, all or part of its investment in the development of these technologies and products may be lost.

The materialization of any of the risks described above could have a material adverse effect on the financial condition and results of operations of the Group.

Market risks

The Group's GBUs depend on the performance of the global economy.

The GBUs of the Group are dependent on general global economic conditions, in particular in respect of the countries and markets in which they operate. A significant deterioration in market conditions, such as a continued economic slowdown, disruptions in countries and regions that are major economic centres or are relevant to the global supply chain, in particular China, a decline in customer demand, production overcapacities or low-cost competition, could have a material adverse effect on the financial condition and results of operations of the Group.

The outbreak of SARS-CoV-2 first identified in December 2019 and its associated disease ("COVID-19") has had a material adverse effect on the global economy and international financial markets in general and on the markets in which the Group operates. As of the date of this Prospectus, the future implications and duration of the COVID-19 pandemic, the possible emergence of new virus variants and the success of the ongoing vaccination campaigns cannot be predicted. As a result of its dependency on the state of the global economy, the Group's business could be adversely affected if the ongoing COVID-19 pandemic has a further negative impact on market conditions, customer demand or production capacities in particular in Europe, the Americas or China.

The business of the Group's GBUs is further subject to risks from international conflicts and other geopolitical tensions and uncertainties. In particular the military invasion of Ukraine by Russia and the related rapidly evolving and increasingly severe economic sanctions and export controls imposed on Russia and certain Russian companies and individuals as well as related countermeasures and any additional countermeasures that could be adopted by the governments of Russia or other jurisdictions, have severely restricted the level of economic activity in those countries. It also led to increased volatility and uncertainty in the global financial markets, disrupted supply chains, resulted in significant increases in the prices of many raw materials and energy and adversely affected the operations of many of the Group's customers. A potential disruption of energy supplies from Russia could have additional substantial negative effects on the economic growth, production processes, raw material prices and security of supply, and thus have a considerable negative impact on the business of the Group and its customers.

A number of companies, including some of the Group's customers, have announced plans to divest interests or otherwise curtail business dealings in Russia and/or with Russian businesses, or have been required to halt, reduce or delay production due to the unavailability of raw materials or components, which could adversely affect those customers' demands for the Group's products. The ramifications of the Russia-Ukraine war, sanctions and export controls, may not be limited to Russia, Ukraine and Russian and Ukrainian companies, but may negatively impact other regional and global economic markets (including Europe and the United States), companies in other countries (particularly those that have done business with Russia and Ukraine), various sectors, industries, securities markets and commodities globally (such as oil, natural gas, engineering, metals and mining), global supply chains, inflation and growth in gross domestic product.

While, as of the date of this Prospectus, Heraeus cannot reliably predict the direct or indirect impact that the Russia-Ukraine war, any related international sanctions or a potential energy crisis may have on its business, any of the factors described above could adversely affect the financial condition and results of operations of the Group.

The Group's GBUs are exposed to threats to their market position.

In the assessment of the Group, many of its GBUs are market leaders in their respective business areas. However, the Group is exposed to the risk of losing its market position and competitive advantages due to increased competition including the market entry of new competitors.

The Group aims to address such risks through a broadly diversified product and customer structure that limits exposure to individual markets, investments in customer relationships, and in-depth market monitoring in the respective fields of activity, as well as through the development of alternative products. There can, however, be no assurance that such efforts will prove to be effective or sufficient. Should the Group's GBUs fail to maintain their market position in the relevant markets, this could have a material adverse effect on the financial condition and results of operations of the Group.

The markets in which the Group's GBU operate are constantly changing.

The markets in which the Group's GBUs operates are characterized by changing technologies, evolving technical standards, changes in customer preferences and the frequent introduction of new products. As a result, the Group's GBUs may not be able to maintain their competitive position if they fails to adapt its business to these ongoing changes. In particular, there is growing demand for more efficient, environmentally friendly, sustainable and cheaper solutions. While the Group's GBUs aim to differentiate themselves from their competition through their innovative strength, there can be no assurance that such efforts will prove to be effective or sufficient. If the Group's GBUs fail to successfully adapt their operations and product offering to the evolving demands of their customers, their existing products and technologies may become obsolete or be replaced by products and technologies of competitors that are

perceived as better solutions and it may not be able to offer competitive prices, which could have a material adverse effect on the financial condition and results of operations of the Group.

Some of Group's GBUs are dependent on a number of key customers.

Some of the Group's GBUs generate a material part of their sales from a limited number of customers and the Group is therefore strongly dependent on maintaining such relationships. If any of the major customers were to discontinue the business relationship with the Group, this could have a material adverse effect on the Group.

In addition, the Group's GBUs cannot be certain to what extent their customers will continue to manufacture goods that incorporate their products. The Group's GBU's customers, in turn, could themselves be adversely affected by a number of developments, including adverse economic conditions and loss of market share.

A decline in sales to the major customers of one of the Group's GBU or the loss of one or more major customers of a GBU, either due to a development on the side of the GBU or the insolvency or another reason on the side of its customers, could have a material adverse effect on the financial condition and results of operations of the Group.

The Group's GBUs are exposed to procurement risks and some of them are dependent on a limited number of key suppliers.

The Group's GBUs are dependent on the supply of raw materials and other base products such as precious metal. In the event of shortages in the availability of certain materials or in case of disruptions in the relevant supply chains, due to, *inter alia*, economic, environmental or political factors, the Group's GBUs may not be able to obtain suitable or cost-effective substitutes. For example, the current comprehensive measures taken by the Chinese government to contain the COVID-19 pandemic ("Zero COVID Strategy") have led to considerable restrictions on operations with regard to production and logistics in China. In addition, the war in Ukraine started by Russia has led to significant trade restrictions, material shortages and logistical challenges, which could be further exacerbated by a possible imminent cut-off of energy and raw material deliveries.

For certain specialized materials, base products and components, a number of the Group's GBUs rely on a limited number of key suppliers. Such GBUs may not be able to source the relevant raw materials or components from other suppliers upon short notice and/or at the required volume if any of its key suppliers fails to meet its delivery obligations (e.g., due to an insolvency, impairment of production facilities, including as a result of the COVID-19 pandemic, strikes or refusal to perform following a change in control).

Any such inability to obtain suitable or cost-effective supply could result in a shortage of raw materials required to manufacture the relevant GBU's products, interruptions in its production processes or underutilization of its production sites, and ultimately cause delays in the delivery of products to its customers.

Although the Group has long-term supply contracts with producers of the relevant base products and, in the case of precious metal, access to fine metal (pure precious metal) from the recovery of refining batches and from used products that are reintroduced to the precious metals cycle, it cannot be ensured that the Group will have sufficient access to the required supply at all times. On the other hand, the long-term supply agreements may negatively affect the Group in case the demand for the relevant products were to decline.

Besides the dependency on the quantitative abilities of its suppliers, the Group is also dependent upon the ability of its suppliers to meet specifications, quality standards and delivery schedules for the components, finished products, services and raw materials they provide. Quality deficiencies in the Group's supply could lead to an actual or perceived decrease in the quality of the products of the Group's GBUs which could damage the Group's or such GBU's reputation and result in a loss of sales, customers and market share.

Any of the supply and procurement risks described above could have a material adverse effect on the financial condition and results of operations of the Group.

Financial risks

The Group and the Group's GBUs are exposed to counterparty risks.

In the past, some of the Group's customers have suffered from declines in sales and production, tightened liquidity and increased cost of capital, which, together with structural issues specific to these companies (such as significant overcapacity and pension and healthcare costs), have caused them to undergo restructurings and reorganizations. If the creditworthiness of the Group's customers were to decline, the Group would face an increased default risk with respect to its trade receivables. In addition, if such customers fail to make payments for products that the Group has already delivered (e.g., in case of an insolvency), the Group may not be able to recover those receivables.

The Group and its GBUs are further exposed to the risk of loss if financial counterparties fail or are otherwise unable to meet their obligations. The Group and its GBUs have exposure to many different industries and counterparties and routinely executes transactions with counterparties in the financial industry, brokers, commercial banks and investment banks. Defaults by, or even the perceived creditworthiness or questioning of, one or more financial services institutions or the financial services industry in general have led and may again lead to market-wide liquidity problems and could also lead to losses or defaults.

Any of the counterparty risks described above could have a material adverse effect on the financial condition and results of operations of the Group.

The Group is exposed to exchange rate fluctuations.

Due to its global footprint the Group does business in a number of currencies, in particular Euro, U.S. Dollars and Chinese Renminbi. Exchange rate fluctuations could cause losses if assets denominated in currencies with a falling exchange rate lose value, while at the same time liabilities denominated in currencies with a rising exchange rate appreciate. Such developments could also increase prices of raw materials. In addition, exchange rate fluctuations may adversely affect the Group's revenue and its competitive position if its competitors manufacture their products in countries with a depreciating currency.

While the Group partly seeks to reduce the impact of exchange rate fluctuations through derivative hedging instruments, there is, however, no guarantee that sufficient derivative hedging instruments will be available on acceptable terms going forward or that the scope of the hedging activities will fully meet actual requirements. As a result, the Group's hedging strategy may prove to be ineffective. Furthermore, the value of derivative hedging instruments is subject to market fluctuations, which may result in mark-to-market losses.

Any of these exchange rate risks described above could have a material adverse effect on the financial condition and results of operations of the Group.

The Group is exposed to risks in connection with material investments.

Many investments undertaken by the Group require high initial expenditures as well as ongoing expenditures for modernization and expansion. Such investments can only be operated profitably if their sufficient utilization is warranted by corresponding demands. Should the Group build up overcapacities that remain unused due to erroneous assessments of the market development this could jeopardize the Group's profitability to a considerable extent. Based on circumstances which are not necessarily in the Group's sphere of influence, complex investment projects such as new production facilities may be subject to significant cost excesses or delays despite diligent planning. The Group cannot rule out that defects or other external factors may cause interruptions in the operation after the construction has been completed. The realization of such risks could have a material adverse effect on the financial condition and results of operations of the Group.

The Group is exposed to risks in connection with acquisitions and divestments.

The Group has recently completed the acquisition of Norwood Medical LLC, a full-service provider of advanced outsourced medical manufacturing solutions (the "**Norwood Medical Acquisition**", please see "*Description of the Guarantor and the Group – Recent Developments*") and expects to continue to invest in businesses or otherwise capitalize on attractive growth opportunities. Such acquisitions and investments may, however, require substantial funds, or cause the Group to incur additional debt or to assume loss-making businesses.

In addition, acquisitions, including the Norwood Medical Acquisition, involve a number of risks, including:

- significant impairment charges;
- unexpected losses of key employees of the acquired operations;
- extraordinary or unexpected legal, regulatory, contractual or other costs;
- difficulties in integrating the acquired business with its existing operations;
- challenges in managing the increased scope, geographic diversity and complexity of the Group's operations;
- mitigating contingent and/or assumed liabilities;
- the possible loss of customers and/or suppliers; and
- control issues in relation to acquisitions through joint ventures and other arrangements where the Group does not exercise sole control.

The Group may not be able to realize the anticipated synergies, future earnings, transfer of know-how or other benefits that it intends to achieve from such acquisitions or takeovers. The Group cannot guarantee that any acquisition will yield benefits that are sufficient to justify the expenses the Group has incurred.

Further, there can be no guarantee that all circumstances, material for the evaluation of the target, are known to the Group prior to an investment decision. Should important, previously unknown, circumstances material for the evaluation of the target subsequently become known, this could lead to a deterioration of the economic results of the acquisition.

In the case of disinvestments, there is a risk that these prove in the retrospect to have negative effects on the Group's business activities or that the expected positive effects do not occur or not to the extent envisaged. Synergy effects, for instance, that have not been recognized or were wrongly assessed may cease to exist. The Group could also be subject to claims based on warranty provisions agreed to in divestment agreements.

The materialization of any of the risks described above could have a material adverse effect on the financial condition and results of operations of the Group.

The Group is exposed to risks which could impact its precious metals business.

The Group generates a significant portion of its total revenue from sales and purchases in precious metals. Due to the nature of this business, the Group is exposed to specific risks that could lead to an increase in costs, a deterioration of margins, a reduction of market share or other adverse consequences.

The risks faced by the Group include, but are not limited to:

- a deterioration of the Group's (credit) ratings, which could, for example, limit the ability of the Group to obtain future funding and negatively impact the lending business in precious metals;
- a reduction in the number of service and financing providers active in the market, leading to less competition and thus to less favourable conditions for the Group (e.g. in terms of required deposits and costs);
- flaws in the Group's hedging strategy or shortages in the availability of hedging instruments;
- significant price changes in the market prices of precious metals, which could lead to increased financing costs, a sharp reduction in metal volumes and reluctance of customers to deliver or purchase metals.

Furthermore, it is uncertain whether the Group would be able to fully pass on any additional financing costs to its customers.

The materialization of any of the risks described above could have a material adverse effect on the financial condition and results of operations of the Group. For a description of further risks related to the precious metals business of the Group, please refer to the risk factor "*The Group is exposed to risks in connection with the trading of precious metals*" below.

The Group could incur unexpected charges in connection with its pension and benefit obligations.

Heraeus maintains a contractual trust arrangement ("CTA") for pensions which is funded in full in the amount of the new obligations that arise. Since the inception of the CTA in 2014, the overall return has been positive. Nevertheless, the CTA could lose value in the event of substantial capital market losses. The pensioners would then only receive their guaranteed minimum interest, which would have to be compensated by Heraeus if the minimum return was not achieved.

For pensions and similar obligations not covered by the CTA, the Group has recorded balance sheet provisions of EUR 566 million as of 31 December 2021. Future changes to parameters, such as longevity of beneficiaries and changes in market interest rates, relevant for the calculation of the Group's pension and benefit obligations, may result in actuarial losses and Heraeus may be required to provide additional funds to cover shortfalls in the funding of such obligations. In addition, changes in new laws and regulations could lead to an increase in its pension obligations.

The materialization of any of the risks described above could have a material adverse effect on the financial condition of the Group.

Operational risks

The success of the Group depends on the quality of its products and the delivery of clients on time.

For customers, one of the determining factors in purchasing products and components is product quality. A decrease in the actual or perceived quality of the Group's products (e.g., as a result of product defects or deficient components supplied by third parties) could therefore damage its reputation and result in a loss of sales, customers and market share. The adverse effect on its reputation could be particularly pronounced in case of a public dispute over alleged or actual product defects with a major customer. Furthermore, the Group manufactures many products pursuant to the specific requirements of its customers. If its products do not meet these requirements, production of the relevant products is generally discontinued until the cause of the product defect has been identified and remedied. In such case, longer interruptions to its manufacturing processes and costly investigations may ensue.

Given that the Group's customers incorporate its products as components into their own products and run highly complex manufacturing processes themselves, a timely delivery of its products and in some cases a just-in-time delivery is another key requirement the Group has to meet to satisfy such customers. A failure to deliver products of the agreed quality in time (e.g., due to a lack of raw materials, a breakdown of machinery, goods being held up in transition or its manufacturing facilities being shut down due to measures to combat the spread of the COVID-19 pandemic, fires or other accidents and force majeure events) could cause the Group's customers to reduce future orders and such customers could bring claims for damages on the basis of breach of contract, even if the cause of the defect is remedied at a later point in time. Maintaining efficient manufacturing processes may be particularly challenging if its customers fail to inform the Group of changes to their production needs in a timely manner. Such failure may result in underutilization or a lack of capacity and therefore adversely affect the Group's profitability.

For certain products, the Group's manufacturing processes are dependent on critical pieces of equipment and machines and this equipment may temporarily be out of service as a result of unanticipated failures. As a result, production bottlenecks and breakdowns may occur, particularly where a manufacturing site only operates a single unit of a particular type of equipment.

A failure to meet the standards expected by the Group's customers and to deliver such products on time could adversely affect demand for its products which could have a material adverse effect on the financial condition and results of operations of the Group.

The success of the Group depends on its qualified employees and key personnel.

Due to intense competition and the technological transformation within the industry, it is essential for the Group to retain key personnel and qualified employees in general and to remain able to find a sufficient number of appropriate new employees. The loss of key personnel or a larger number of qualified employees or the failure in attracting such employees could have a material adverse effect on the Group's competitive position and prospects, in particular considering the technological challenges in the upcoming years.

Furthermore, if relationships with its employees and employee representatives were to deteriorate, the Group could experience strikes or other types of conflicts. As a result, the Group's operations could be interrupted, and its reputation could suffer.

The materialization of any of the risks described above could have a material adverse effect on the financial condition and results of operations of the Group.

The Group is exposed to risks in connection with product liability.

If a product sold by the Group fails to perform in a manner consistent with quality specifications, a customer could seek replacement of the product or damages for costs incurred as a result of the product failing to perform as designed and marketed. The sale of these products may also give rise to product liability claims or other claims based on damage caused by the Group's products. For example, the Group's customers could be forced to recall their own products sold to third parties if components supplied by the Group are defective or do not meet required specifications and claim compensation for the costs incurred.

If a consumer were to bring a product liability claim with respect to a product that contains the Group's products, the Group could be named as a defendant in that claim or could become subject to separate litigation brought by one of its customers or a third party. A successful claim or series of claims against the Group could cause reputational harm and could result in a loss of customers.

The materialization of product liability risks could have a material adverse effect on the financial condition and results of operations of the Group.

The Group is exposed to risks related to information technology system failures and data security breaches.

The Group is dependent upon technology for its production processes (including the operation of relevant equipment), the precious metal trading as well as the distribution of information within the Group and to customers and suppliers. This information technology is subject to risks associated with defects, errors, failures, computer viruses, data losses, breaches of data security, unauthorized attempts by external parties to access the Group's information technology systems and similar events, which could lead to material disruptions of operations. Similar risks also exist at the Group's suppliers, customers and service providers.

While increasing connectivity means more convenience and efficiency, it also creates more cyber risks. In general, companies face an increasing number of fraud attempts and cybercrime attacks like phishing. Despite the Group's high safety standards, the success of such attempts cannot be ruled out. Unauthorised access to the Group's information systems or the use of information in an unauthorised manner as well as loss, misuse or theft could result in, among other things, interruptions in the production and/or trading processes, unfavourable publicity, regulatory investigations and inspections, and litigation and claims for damages by affected parties.

The materialization of any of the risks described above could have a material adverse effect on the financial condition and results of operations of the Group.

The Group is exposed to risks in connection with disruptions of its operations, damages to equipment and physical loss of precious metals.

As an industrial group, the Group is exposed to risks of interruptions in its operations and unexpected technical difficulties. A further operational risk is the physical loss of precious metals either on the sites of the Group or during transport e.g. by error, operational malfunctions, fraud or other criminal actions. Despite the high technical, security and safety standards the Group applies both to the transport of valuable goods as well as to the construction, operation and maintenance of its production sites the risk of operational disturbances cannot be excluded. These may be caused both by external factors, which the Group is unable to influence, such as natural disasters, war, acts of terrorism, strikes, official orders (such as governmental measures to combat the COVID-19 pandemic), technical interruptions or material defects, or accidents or other mistakes in internal procedures such as fires, explosions and release of toxic or hazardous substances. Due to the high value of precious metals a single event may result in significant losses which might not be fully covered by third party liability and or insurance. In all of these cases humans, third party property or the environment may sustain damages resulting in material financial liabilities for the Group, and any such event could also result in further civil or criminal law consequences.

The materialization of any of the risks described above could have a material adverse effect on the financial condition and results of operations of the Group.

Legal risks

The Group is exposed to risks in connection with an inadvertent infringement of intellectual property.

The Group continually seeks to improve its business processes and to develop new production technologies and new products and applications. Many of its competitors have a substantial amount of intellectual property that the Group must continually strive to avoid infringing. Although it is the Group's policy and intention not to infringe valid patents of which it is aware, the Group cannot provide assurances that its processes and products and other activities do not and will not infringe issued patents (whether present or future) or other intellectual property rights belonging to others. The Group could be liable for infringement of intellectual property rights of third parties, or could experience supply and production restrictions and disruptions as a result of actual or alleged infringements of intellectual property rights. The Group may also be subject to indemnity claims by its customers and business partners arising out of claims of their alleged infringement of the patents, trademarks and other intellectual property rights of third parties in connection with their use of the Group's products.

The Group may have to obtain third party licenses to gain access to technology, which could entail considerable costs. The Group may be unable to acquire licenses that it will need for its future business with the appropriate scope or under acceptable conditions or may be unable to acquire such licences at all.

Intellectual property litigation is often expensive and time consuming, regardless of the merits of any claim, and the Group's involvement in such litigation could divert its management's attention from operating its business. Moreover, if the Group is sued for infringement and losses, the Group could be required to pay substantial damages and/or be enjoined from using or selling the infringing products or technology. Furthermore, a lost infringement suit may damage the Group's reputation and image.

The materialization of any of the risks described above could have a material adverse effect on the financial condition and results of operations of the Group.

The Group could fail to protect its intellectual property.

The Group's success depends to a significant degree upon its ability to protect, preserve and enforce its intellectual property and other proprietary information. However, the Group may be unable to prevent third parties from using its intellectual property and other proprietary information without its authorization or from independently developing intellectual property that is similar to or competes with the Group's, particularly in those countries where the laws do not protect proprietary rights to the same degree as in Germany, the European Union or the United States. Any inability by the Group to effectively prevent the unauthorized use of its intellectual property and other proprietary information by others could reduce or eliminate any competitive advantage it has developed, cause it to lose sales or otherwise harm its business. If it becomes necessary for the Group to initiate litigation to protect its proprietary rights, any proceedings could be burdensome and costly, and the Group may not prevail.

The materialization of any of the risks described above could have a material adverse effect on the financial condition and results of operations of the Group.

The Group is exposed to risks in connection with personal injury of individuals.

The Group faces the risk that individuals, including the Group's employees, could seek damages for personal injury for example (i) due to exposure to chemicals or other hazardous substances, mechanical or temperature hazards at its production facilities or other business sites, (ii) chemicals or other hazardous substances that have been released from its production facilities or other business sites, (iii) chemicals or other hazardous substances otherwise owned or controlled by the Group, or (iv) chemicals or other hazardous substances that allegedly migrated from products containing the Group's products. The Group is subject to numerous laws in the national and local jurisdictions in which it operates relating to the management of workplace risks associated with hazardous chemicals. Failure to comply with such laws could subject the Group to both civil and criminal penalties, which could affect its product sales, reputation and profitability. The Group may be subject to claims with respect to workplace exposure, workers' compensation, and other health and safety matters.

The materialization of any of the risks described above could have a material adverse effect on the financial condition and results of operations of the Group.

The Group has to comply with complex laws and regulations which are constantly evolving.

The Group is subject to complex laws and regulations which vary across the multiple countries in which the Group operates, including increasingly stringent environmental laws and regulations. Such laws and regulations also require permits or authorizations to be obtained, and forms to be completed and delivered in connection with the operation of the Group's business. National laws in the Group's various markets across the world cover similar aspects. Any violations of applicable laws and regulations may result in fines and penalties, monetary and reputational damages, third-party liabilities, limitations on its business operations and site closures.

Complying with the complex regulatory framework applicable to the Group's operations imposes a significant day-to-day burden on the Group. If the Group fails to comply with the requirements promulgated by the relevant laws and regulations applicable to the Group's components, the Group may no longer be able to market these products or be forced to recall products already distributed in the market. In such cases, customers may seek recompense from the Group or discontinue their relationship with the Group, which may adversely affect its revenue and profitability. In addition, the reputation may suffer if the Group's components and services fail to comply with the latest legal requirements, in particular laws and regulations aimed at improving product safety.

While already complex, the laws applicable to its operations are continuously evolving and becoming even more stringent, and the Group expects that additional laws and regulations will be passed that affect its operations. It may be difficult and costly for the Group to comply with such laws and regulations or changes to the existing legal framework, and new legislation may force it to change the way it operates its business or adversely affect demand for its products and services.

The materialization of any of the risks described above could have a material adverse effect on the financial condition and results of operations of the Group.

The Group is exposed to risks in connection with contamination of land and environmental damages.

The Group has been and is likely in the future to be liable for the costs of investigating and cleaning up or stabilizing environmental contamination on or from its properties or at off-site locations where it transported, disposed of or arranged for the disposal or treatment of hazardous materials and waste, or from disposal activities that predated its purchase of its businesses. The Group may therefore incur additional costs and expenditures beyond those currently anticipated to address all such known and unknown situations under existing and future regulations. In some countries in which the Group operates, the Group may also be exposed to claims for damages, penalties, operating restrictions or the revocation of permits to operate its sites.

The environmental liabilities at any particular production facility could increase as a result of, among other things, changes in laws and regulations, modifications to the site's investigation and remediation plans, unanticipated construction problems, identification of additional areas or quantities of contamination, increases in labour, equipment and technology costs, significant changes in the financial condition of the Group or other responsible parties, and the outcome of any related legal and administrative proceedings to which the Group may become a party.

The materialization of any of the risks described above could have a material adverse effect on the financial condition and results of operations of the Group.

The Group is exposed to risks in connection with litigation and other legal and regulatory actions.

With its international operations, the Group is exposed to numerous legal and regulatory risks. These may include, *inter alia*, risks relating to product liability, competition and antitrust laws, export control, data protection, intellectual property laws, tax legislation and environmental protection in the countries where the Group operates. The Group is involved in legal, regulatory, governmental and arbitration proceedings and may become involved in additional proceedings in the future. These proceedings involve claims by and against the Group which arise in the ordinary course of its business, including in connection with its business activities or its role as employer, investor and taxpayer. The outcome of current pending or future proceedings and investigations cannot be predicted with certainty.

Legal or regulatory proceedings or agreed settlements may give rise to significant losses, costs and expenses which are not covered, or not fully covered, by insurance benefits or provisions.

Investigations of possible legal or regulatory violations, such as potential infringements of antitrust law, may result in civil or criminal penalties – including substantial monetary fines – or other adverse financial consequences, and may harm the Group's reputation and ultimately hamper its commercial success.

The materialization of any of the risks described above could have a material adverse effect on the financial condition and results of operations of the Group.

The Group is exposed to risks in connection with corruption, sanctions and trade restrictions.

Given the global scope of the Group's operations and, in particular, the fact that corruption and extortion are widespread in certain of the countries in which it operates, its risk management and compliance programs may prove to be insufficient to prevent or detect unlawful conduct. Despite such programs, its employees, consultants, agents or suppliers may still engage in illegal practices or corruption to win business or to conspire in order to circumvent its compliance controls. Similarly, the Group's risk management function may fail to identify, mitigate or manage such behaviour.

In addition, the Group's international operations require it to comply with trade and economic sanctions and restrictions as well as regulations on responsible sourcing of certain goods such as precious metals or conflict minerals. If the Group fails to comply with such laws and regulations, it may be subject to fines and could be forced to modify its compliance management programs, which could increase the Group's compliance costs. New sanctions, embargoes and other restrictions, with respect to additional countries or goods, could prevent it from continuing to market its products and operate its business as currently conducted.

The materialization of any of the risks described above could have a material adverse effect on the financial condition and results of operations of the Group.

The Group is exposed to risks related to changes in regulations.

The Group must comply with, and is affected by, a large number of different legal and regulatory frameworks, including tax laws. There is a risk that changes in these frameworks may materially adversely affect the Group's legal and regulatory environment. The risks faced by the Group include, but are not limited to:

- healthcare reforms adversely affecting consumer demand for medical and healthcare products;
- foreign currency control regulations and other regulations related to exchange rates and foreign currencies (such as the abandonment of exchange rate pegs);
- changes in laws and regulations, in particular related to environment, health and safety;
- measures to counter foreign trade imbalances such as foreign direct investment controls and export controls;
- restrictions on the ability to repatriate funds from subsidiaries;
- restrictions on the ability to own or operate subsidiaries or acquire new businesses in certain countries, including rules on local ownership of businesses;
- differences in legal and administrative systems, which could lead to insufficient protection of intellectual property, impair the Group's ability to enforce contracts or jeopardize its ability to collect accounts receivables and other claims outstanding;
- nationalizations; and
- imposition of withholding or other taxes and transfer pricing regulations.

The materialization of any of these risks could severely impact the Group's sourcing, sales, production, operations and logistics, could lead to a loss of customers and access to customers, know-how and tangible and intangible property and could have a material adverse effect on the financial condition and results of operations of the Group.

Other risks

The Group is exposed to risks in connection with the trading of precious metals.

The precious metals trading of the Group involves various trading risks. Such trading risks include market price risks, the risk that individuals exceed trading limits or otherwise violate trading rules, misjudgements in respect of hedging transactions and other trades as well as counterparty risks, i.e. the risk that counter parties with whom Group entities have entered into precious metals transactions default under such transactions. In addition, negative changes to the precious metals markets including disadvantageous modifications to the trade and customs regulations may result in increased costs. It is uncertain whether the Group would be able to fully pass on such additional costs to its customers, which may result in a reduction of the margins to be achieved in the precious metals business areas. Trading losses, counterparty defaults and negative changes to the precious metals markets could have a material adverse effect on the financial condition and results of operations of the Group.

The Group is exposed to risks related to the economic, political or legal situation in its business locations.

The Group operates in numerous countries and distributes its products and services globally. The general conditions in some of the countries in which the Group operates or to which it exports its products are different to those in Western Europe. The Group therefore faces a number of political, social, economic, financial and market-related risks, including risks resulting from:

- an underdeveloped infrastructure;
- a lack of qualified management or adequately trained personnel;
- divergent labour regulations or cultural expectations regarding employment;
- precious metals control regulations;
- currency exchange controls, exchange rate fluctuations and devaluations;
- governmental restrictions on foreign investments or transfers of funds;
- protectionist trade measures, such as anti-dumping measures, duties, tariffs or embargoes;
- prohibitions or restrictions on acquisitions or joint ventures;
- opaque legal regimes and unpredictable or unlawful government actions;
- the difficulty of enforcing agreements and collecting receivables through foreign legal systems;
- lower protection of intellectual property and other legal rights;
- business environments in which fraud, bribery or corruption are common, condoned or encouraged by private or official actors;
- nationalization of enterprises or other expropriations;
- international sanctions or boycotts; and
- social unrest, civil war or acts of sabotage or terrorism.

The materialization of any of the risks described above could have a material adverse effect on the financial condition and results of operations of the Group.

Risks relating to the Notes and the Guarantee

Risk relating to the nature of the Notes

The Notes may not be a suitable investment for all investors.

Potential investors should consider whether an investment in the Notes is appropriate in their respective circumstances and should consult with their legal, business and tax advisors to determine the consequences of an investment in the Notes and to get their own idea about the investment.

An investment in the Notes is only suitable for investors who:

- possess the required knowledge and experience in financial and business matters to evaluate the chances and risks of an investment in the Notes and the information contained or incorporated by reference into the Prospectus;
- have access to, and knowledge of, appropriate analytical tools to evaluate such chances and risks in the context of the potential investor's particular financial situation and to evaluate the impact the Notes will have on their overall investment portfolio;
- understand thoroughly the terms of the Notes and are familiar with the behaviour of the financial markets;
- are capable of bearing the economic risk of an investment in the Notes, including where the currency for principal payments is different from the potential investor's currency;
- know that it may not be possible to dispose of the Notes for a substantial period of time, if at all; and
- are able to evaluate (either alone or with the help of a financial advisor) possible scenarios for economic and other factors that may affect its investment and ability to bear the applicable risks.

Noteholders are subject to the risk of a partial or total failure of the Issuer and the Guarantor to make interest and/or redemption payments.

Any person who purchases the Notes is relying on the creditworthiness of the Issuer and the Guarantor and has no rights against any other person. Noteholders are subject to the risk of a partial or total failure of the Issuer and the Guarantor to make interest and/or redemption payments that such Issuer and the Guarantor is obliged to make under the Notes or the Guarantee, respectively. The worse the creditworthiness of the Issuer and the Guarantor, the higher the risk of loss (see also "*Risks relating to the Issuer, the Guarantor and the Group*" above). A materialization of the credit risk may result in partial or total failure of the Issuer and the Guarantor to make interest and/or redemption payments under the Notes or the Guarantee.

The Notes are long-term securities.

The Issuer will redeem the Notes on the Maturity Date, unless they have been previously redeemed or repurchased and cancelled.

The Noteholders will only be entitled to request a redemption of their Notes prior to the Maturity Date upon occurrence of a Put Event or an event of default (each as described in the Terms and Conditions).

There is also no guarantee that an active public market in the Notes will develop. In an illiquid market, an investor might not be able to sell Notes at any time at fair market prices or at all.

Prospective investors should be aware that they may be required to bear the financial risk of an investment in the Notes until their Maturity Date and may not recover their investment before the end of this period.

Risk of early redemption.

At the Issuer's option, the Notes may be redeemed prior to the Maturity Date at their principal amount plus accrued interest if, as a result of a future change of the applicable tax and fiscal laws and regulations the Issuer or the Guarantor will be obliged to pay Additional Amounts (as defined in the Terms and Conditions).

The Notes may also be redeemed prior to the Maturity Date at the option of the Issuer at their principal amount plus accrued interest (i) on each business day in the period from and including 9 March 2027 to but excluding the Maturity Date or (ii) if at any time the aggregate principal amount of the Notes outstanding is equal to or less than 20 per cent. of the aggregate principal amount of the Notes originally issued.

Further, the Notes may be redeemed at any time prior to the Maturity Date at the option of the Issuer at the Make-Whole Redemption Amount (as defined in the Terms and Conditions).

If the Notes are redeemed earlier than expected by a Noteholder, a Noteholder is exposed to the risk that due to the early redemption his investment will have a lower than expected yield and to the risks connected with any reinvestment of the cash proceeds received as a result of the early redemption. The redemption amount may be lower than the then prevailing market price of and the purchase price for the Notes paid by the Noteholder for the Notes so that the Noteholder in such case would not receive the total amount of the capital invested.

Risks related to the effective subordination of the Notes.

Although the Terms and Conditions and the Guarantee restrict the Issuer's and the Guarantor's ability to provide asset security for the benefit of other debt and require the Issuer to secure the Notes equally if they provide security for the benefit of Capital Markets Indebtedness (as defined in the Terms and Conditions), the requirement to provide equal security to the Notes is subject to a number of exceptions and carve-outs.

To the extent the Issuer or the Guarantor provides asset security for the benefit of other debt without also securing the Notes, the Notes will be effectively junior to such debt to the extent of such assets.

As a result of the foregoing, holders of any secured debt of the Issuer or the Guarantor may recover disproportionately more on their claims than the Noteholders in an insolvency, bankruptcy or similar proceeding. The Issuer and the Guarantor may not have sufficient assets remaining to make payments on the Notes or the Guarantee, as applicable.

The Notes are structurally subordinated to creditors of the Guarantor's other subsidiaries.

The Notes will not be guaranteed by any member of the Group except for the Guarantor. Generally, claims of creditors of a subsidiary, including trade creditors, secured creditors, and creditors holding indebtedness and guarantees issued by the subsidiary, will have priority with respect to the assets and earnings of the subsidiary over the claims of creditors of its parent company. In the event of a liquidation, winding-up or dissolution or a bankruptcy, administration, reorganization, insolvency, receivership or similar proceeding of any subsidiary of the Guarantor other than the Issuer, such subsidiary will pay the holders of its own debt (including holders of third-party debt which such subsidiaries have guaranteed) before they would be able to distribute any of their assets to the Guarantor. As a result, the Guarantor may not have sufficient assets to make payments on the Guarantee.

The Notes do not contain any financial covenants.

Neither the Issuer, the Guarantor nor any of their subsidiaries will be restricted from incurring additional unsecured debt or other liabilities, including debt ranking equal to the obligations under or in connection with the Notes.

If the Issuer or the Guarantor incurs additional debt or liabilities, its ability to pay its obligations under the Notes or the Guarantee, as applicable, could be adversely affected. Such issuance of further debt could further reduce the amount recoverable by the Noteholders upon liquidation of the Issuer or the Guarantor.

Additionally, neither the Issuer nor the Guarantor is subject to a restriction on investments in other entities, which could ultimately subordinate the Noteholders' claims to obligations of such entities towards their respective creditors.

Noteholders will not be protected under the terms of the Notes in the event of a highly leveraged transaction, a reorganization or a restructuring, merger or similar transaction that may adversely affect Noteholders.

Noteholders are exposed to risks relating to fixed interest rate notes.

The Noteholders are exposed to the risk that the prices of the Notes can fall as a result of changes in the interest rate on the market. The nominal interest rate of the Notes of 2.625 per cent. *per annum* is fixed for the entire period of the Notes. However, the current interest rate on the capital market ("**market interest rate**") typically changes on a

daily basis. As the market interest rate changes, the price of securities with a fixed interest rate also changes – but in the opposite direction. If the market interest rate increases, the price of securities with a fixed interest rate typically falls until the yield of such instrument approximately equals the market interest rate. If the market interest rate decreases, the price of a fixed interest rate security typically increases, until the yield of such instrument is approximately equal to the market interest rate. Noteholders should be aware that movements of the market interest rate can adversely affect the market price of the Notes and can lead to losses for Noteholders if they sell their Notes.

In addition, the credit spread of the Issuer and the Guarantor, on which the fixed interest rate was based, may change. A credit spread is the margin payable by the Issuer to the Noteholders as a premium for the assumed credit risk of the Issuer. Credit spreads are offered and sold as premiums on current risk-free interest rates or as discounts on the price. Factors influencing the credit spread include, among other things, the creditworthiness and rating of the Issuer and the Guarantor, probability of default, recovery rate, remaining term to maturity of obligations under any collateralisation or guarantee and declarations as to any preferred payment or subordination. The liquidity situation, the general level of interest rates, overall economic developments, and the currency, in which the relevant obligation is denominated may also have a positive or negative effect.

Investors are exposed to the risk that the credit spread of the Issuer and/or the Guarantor widens, resulting in a decrease in the price of the Notes.

Risk relating to specific provisions in the Terms and Conditions of the Notes

Risks in connection with the Application of the German Act on Issues of Debt Securities (Gesetz über Schuldverschreibungen aus Gesamtemissionen, "SchVG").

Since the Terms and Conditions of the Notes provide for meetings of Noteholders or the taking of votes without a meeting, the Terms and Conditions of the Notes may be amended by majority resolution of the Noteholders and a Noteholder is subject to the risk of being outvoted by a majority resolution of the Noteholders. The rules pertaining to resolutions of Noteholders are set out in the SchVG and are largely mandatory. Pursuant to the SchVG the relevant majority for Noteholders' resolutions is generally based on votes cast, rather than on the aggregate principal amount of the Notes outstanding, therefore, any such resolution may effectively be passed with the consent of less than a majority of the aggregate principal amount of the Notes outstanding. As such majority resolution is binding on all Noteholders, certain rights of a Noteholder against the Issuer under the Terms and Conditions may be amended or reduced or even cancelled.

Since the Terms and Conditions provide that the Noteholders are entitled to appoint a Noteholders' Representative by a majority resolution, it is possible that a Noteholder may be deprived of its individual right to pursue and enforce its rights under the Terms and Conditions against the Issuer, such right passing to the Noteholders' Representative who is then exclusively responsible to claim and enforce the rights of all Noteholders.

10% quorum in case of certain events of default.

The Terms and Conditions provide that, in case of certain events of default, any notice declaring the Notes due and payable shall become effective only when the Principal Paying Agent has received such default notices from Noteholders representing at least 10% of the aggregate principal amount of Notes then outstanding. In addition, under the SchVG, even if a default notice had been given by a sufficient number of Noteholders, the Noteholders could rescind such acceleration by majority resolution within three months. A simple majority of votes would be sufficient for a resolution on the rescission of such acceleration but, in any case, more Noteholders would have to consent to a rescission than have delivered default notices.

Market and other risks relating to the Notes

Risk of change in market value.

The market value of the Notes is influenced by a change in the creditworthiness (or the perception thereof) of the Issuer and by the credit rating of the Guarantor and a number of other factors including, but not limited to, market

interest and rate of return and certain market expectations with regard to the Issuer making use of a right to call the Notes for redemption.

The value of the Notes depends on a number of interacting factors, including, but not limited to, economic and political events in Germany, the European Union or elsewhere, factors affecting the capital markets in general and the stock exchanges on which the Notes are traded. The price at which a Noteholder can sell the Notes might be considerably below the issue price or the purchase price paid by such Noteholder.

There is no active public trading market for the Notes.

There is currently no secondary market for the Notes.

Application has been made to the Luxembourg Stock Exchange to list the Notes on the Official List of the Luxembourg Stock Exchange and for admission to trading of the Notes on the Euro MTF Market operated by the Luxembourg Stock Exchange, which is a multilateral trading facility for the purposes of MiFID II, and, therefore, not an EU-regulated market.

There can, however, be no assurance regarding the future development of a liquid secondary market for the Notes or the ability of Noteholders to sell their Notes or the price at which Noteholders may be able to sell their Notes. If such a market were to develop, the Notes could trade at prices that may be higher or lower than the initial offering price depending on many factors, including prevailing interest rates, the Issuer's operating results, the market for similar securities and other factors, including general economic conditions, performance and prospects, as well as recommendations of securities analysts. The liquidity of, and the trading market for, the Notes may also be adversely affected by declines in the market for debt securities generally. Such a decline may affect any liquidity and trading of the Notes independent of the Issuer's financial performance and prospects. In an illiquid market, an investor might not be able to sell the Notes at any time at fair market prices. The possibility to sell the Notes might additionally be restricted by country specific reasons.

Risk of change in rating.

Ratings assigned to the Guarantor by certain independent rating agencies are an indicator of the Guarantor's ability to meet its obligations in a timely manner. The lower the assigned rating is on the respective scale the higher the respective rating agency assesses the risk that obligations will not be met at all or not be met in a timely manner. The market value of the Notes from time to time is likely to depend upon the level of credit rating assigned to the long-term debt of the Guarantor. Rating agencies may change, suspend or withdraw their ratings at short notice. A rating's change, suspension or withdrawal may affect the price and the market value of the outstanding Notes. An investor may thus incur financial disadvantages as he may not be able to sell the Notes at a fair price. The Notes are expected to be assigned a credit rating. The rating may not reflect the potential impact of all risks related to the structure, market and additional factors discussed herein, and other factors that may affect the value of the Notes. A credit rating is not a recommendation to buy, sell or hold securities and may be revised or withdrawn by the respective rating agency at any time.

An investment in the Notes may be subject to the risk of inflation.

The inflation risk is the risk of future money depreciation. The real yield from an investment is reduced by inflation. The higher the rate of inflation, the lower the real yield on the Notes. If the inflation rate is equal to or higher than the nominal yield, the real yield is zero or even negative.

There may be transaction costs and/or charges in connection with the purchase or sale of the Notes.

When the Notes are purchased or sold, several types of incidental costs (including transaction fees and commissions) are incurred in addition to the purchase or sale price of the Notes. Credit institutions as a rule charge commissions which are either fixed minimum commissions or pro-rata commissions, depending on the order value. To the extent that additional – domestic or foreign – parties are involved in the execution of an order, including but not limited to domestic dealers or brokers in foreign markets, Noteholders may also be charged for the brokerage fees, commissions and other fees and expenses of such parties (third party costs). These incidental costs may significantly reduce or eliminate any profit from holding the Notes.

The income under the Notes and/or the Guarantee may be reduced by taxes.

Potential purchasers and sellers of the Notes should be aware that they may be required to pay taxes or other documentary charges or duties in accordance with the laws and practices of the country where the Notes are transferred or other jurisdictions. In some jurisdictions, no official statements of the tax authorities or court decisions may be available for financial instruments such as the Notes. Potential investors are advised to ask for their own tax adviser's advice on their individual taxation with respect to the acquisition, sale and redemption of the Notes. Only these advisors are in a position to duly consider the specific situation of the potential investor.

No assurance can be given as to the impact of any possible judicial decision or change of laws or administrative practices after the date of this Prospectus.

The Terms and Conditions of the Notes and the conditions of the Guarantee are based on German law in effect as at the date of this Prospectus. No assurance can be given as to the impact of any possible judicial decision or change to German law or administrative practice or the official application or interpretation of German law after the date of this Prospectus.

A potential investor may not rely on the Issuer, the Guarantor, the Joint Bookrunners or any of their respective affiliates in connection with its determination as to the legality of its acquisition of the Notes.

Each potential investor in the Notes must determine, based on its own independent review and such professional advice as it deems appropriate under the circumstances, that its acquisition of the Notes is fully consistent with its (or if it is acquiring the Notes in a fiduciary capacity, the beneficiary's) financial needs, objectives and conditions, complies and is fully consistent with all investment policies, guidelines and restrictions applicable to it (whether acquiring the Notes as principal or in a fiduciary capacity) and is a fit, proper and suitable investment for it (or if it is acquiring the Notes in a fiduciary capacity, for the beneficiary), notwithstanding the clear and substantial risks inherent in investing in or holding the Notes.

A potential investor may not rely on the Issuer, the Guarantor, the Joint Bookrunners or any of their respective affiliates in connection with its determination as to the legality of its acquisition of the Notes or as to the other matters referred to above.

Without independent review and advice, an investor may not adequately understand the risks inherent with an investment in the Notes and may lose parts or all of its capital invested without taking such or other risks into consideration before investing in the Notes.

Exchange rate risks and exchange controls.

The Notes are denominated in Euro. Potential investors should bear in mind that an investment in the Notes could involve currency risks. This presents certain risks relating to currency conversions if a Noteholder's financial activities are denominated principally in a currency or currency unit (the investor's currency) other than Euro. These include the risk that exchange rates may change significantly (including changes due to devaluation of the Euro or revaluation of the investor's currency) and the risk that authorities with jurisdiction over the investor's currency may impose or modify exchange controls. An appreciation in the value of the investor's currency relative to the Euro would decrease (i) the investor's currency-equivalent yield on the Notes, (ii) the investor's currency equivalent value of the principal payable on the Notes and (iii) the investor's currency-equivalent market value of the Notes.

In addition, government and monetary authorities may impose (as some have done in the past) exchange controls that could adversely affect an applicable currency exchange rate. As a result, Noteholders may receive less principal than expected, or no principal at all.

USE OF PROCEEDS

In connection with the issue of the Notes, the Issuer will receive net proceeds of EUR 497,510,000.

The Issuer intends to use the net proceeds for the refinancing of existing debt including early repayment of the Bridge Loan (as defined below) and general corporate purposes.

TERMS AND CONDITIONS OF THE NOTES

EMISSIONSBEDINGUNGEN DEUTSCHE FASSUNG

Diese Emissionsbedingungen sind in deutscher Sprache abgefasst. Eine Übersetzung in die englische Sprache ist beigelegt. Der deutsche Text ist bindend und maßgeblich. Die Übersetzung in die englische Sprache ist unverbindlich.

§ 1 WÄHRUNG, STÜCKELUNG, FORM, BESTIMMTE DEFINITIONEN

(1) *Währung, Stückelung.* Diese Emission von Schuldverschreibungen der Heraeus Finance GmbH (die "**Emittentin**") wird in Euro ("€" und die "**festgelegte Währung**") im Gesamtnennbetrag von €500.000.000 (in Worten: Fünfhundert Millionen Euro) in einer Stückelung von je €100.000 (die "**Festgelegte Stückelung**") begeben (die "**Schuldverschreibungen**").

(2) *Form.* Die Schuldverschreibungen lauten auf den Inhaber und sind durch eine oder mehrere Globalurkunden verbrieft (jeweils eine "**Globalurkunde**").

(3) *Vorläufige Globalurkunde – Austausch gegen Dauerglobalurkunde.* Die Schuldverschreibungen sind zunächst in einer vorläufigen Globalurkunde (die "**Vorläufige Globalurkunde**") ohne Zinsscheine verbrieft. Die Vorläufige Globalurkunde wird (insgesamt oder teilweise und unentgeltlich) an oder nach dem Tag, der 40 Tage nach dem Tag der Begebung der Schuldverschreibungen, frühestens jedoch 40 Tage nach dem Tag des Beginns des Angebots liegt, gegen Nachweis über das Nichtbestehen wirtschaftlichen U.S.-Eigentums im Sinne des U.S.-Rechts (*non-U.S. beneficial ownership*) in der in der Vorläufigen Globalurkunde vorgesehenen Form, gegen eine dauerhafte Globalurkunde (die "**Dauerglobalurkunde**") (die Vorläufige Globalurkunde und die Dauerglobalurkunde jeweils auch eine "**Globalurkunde**") ohne Zinsscheine ausgetauscht. Ein Recht der Anleihegläubiger (wie nachstehend definiert) auf Ausgabe und Lieferung von Einzelurkunden oder Zinsscheinen besteht nicht.

(4) *Clearingsystem.* Die Globalurkunde wird von oder im Namen des Clearingsystems verwahrt, bis sämtliche Verbindlichkeiten der Emittentin aus den Schuldverschreibungen erfüllt sind.

"**Clearingsystem**" bezeichnet Clearstream Banking AG (Mergenthalerallee 61, 65760 Eschborn, Deutschland) ("**CBF**") und jeden Funktionsnachfolger.

TERMS AND CONDITIONS ENGLISH LANGUAGE VERSION

These Terms and Conditions are written in the German language and provided with an English language translation. The German text shall be prevailing and binding. The English language translation is non-binding.

§ 1 CURRENCY, DENOMINATION, FORM, CERTAIN DEFINITIONS

(1) *Currency, Denomination.* This issue of notes of Heraeus Finance GmbH (the "**Issuer**") is being issued in Euro ("€" and the "**Specified Currency**") in the aggregate principal amount of €500,000,000 (in words: five hundred million Euro) in the denomination of €100,000 (the "**Specified Denomination**") each (the "**Notes**").

(2) *Form.* The Notes are being issued in bearer form and represented by one or more global notes (each a "**Global Note**").

(3) *Temporary Global Note – Exchange for Permanent Global Note.* The Notes are initially represented by a temporary global note (the "**Temporary Global Note**") without interest coupons. The Temporary Global Note will be exchangeable (in whole or in part and free of charge) on or after the day that is 40 days after the later of the commencement of the offering and the date of issue of the Notes for a permanent global note (the "**Permanent Global Note**") (the Temporary Global Note and the Permanent Global Note, each a "**Global Note**") without interest coupons upon certification as to non-U.S. beneficial ownership in the form set out in the Temporary Global Note. The right of the Noteholders (as defined below) to require the issue and delivery of definitive notes or interest coupons is excluded.

(4) *Clearing System.* The Global Note will be kept in custody by or on behalf of the Clearing System until all obligations of the Issuer under the Notes have been satisfied.

"**Clearing System**" means Clearstream Banking AG (Mergenthalerallee 61, 65760 Eschborn, Germany) ("**CBF**") and any successor in such capacity.

Die Vorläufige Globalurkunde und die Dauerglobalurkunde werden jeweils von zwei ordnungsgemäß bevollmächtigten Vertretern der Emittentin eigenhändig unterschrieben und tragen jeweils die eigenhändige Unterschrift eines Kontrollbeauftragten der Hauptzahlstelle.

(6) *Anleihegläubiger*. "**Anleihegläubiger**" bezeichnet jeden Inhaber eines Miteigentumsanteils oder anderen Rechts an den Schuldverschreibungen.

§ 2

STATUS, NEGATIVERKLÄRUNG DER EMITTENTIN; GARANTIE UND NEGATIVERKLÄRUNG DER GARANTIN

(1) *Status*. Die Schuldverschreibungen begründen nicht besicherte und nicht nachrangige Verbindlichkeiten der Emittentin, die untereinander und die mit allen anderen nicht besicherten und nicht nachrangigen gegenwärtigen und zukünftigen Verbindlichkeiten der Emittentin gleichrangig sind, soweit diesen Verbindlichkeiten nicht durch zwingende gesetzliche Bestimmungen ein Vorrang eingeräumt wird.

(2) *Negativerklärung der Emittentin*. Solange noch Kapital- oder Zinsbeträge aus den Schuldverschreibungen ausstehen, jedoch nur bis zu dem Zeitpunkt, an dem alle auf die Schuldverschreibungen gemäß diesen Emissionsbedingungen zu zahlenden Beträge dem Clearingsystem zur Verfügung gestellt worden sind, verpflichtet sich die Emittentin, kein Grundpfandrecht, Mobiliarpfandrecht, Pfandrecht oder sonstiges dingliches Sicherungsrecht (jedes ein "**Sicherungsrecht**") an ihren gesamten gegenwärtigen oder zukünftigen Vermögenswerten oder Einkünften oder Teilen davon zur Besicherung einer Kapitalmarktverbindlichkeit zu gewähren oder bestehen zu lassen, ohne zuvor oder gleichzeitig entweder die Anleihegläubiger gleichrangig und anteilig an einem solchen Sicherungsrecht zu beteiligen oder zu Gunsten der Anleihegläubiger ein anderes, gleichwertiges Sicherungsrecht zu bestellen, welches von einem unabhängigen Sachverständigen als gleichwertige Sicherheit beurteilt wird.

Die Verpflichtung nach Satz 1 dieses § 2(2) findet keine Anwendung auf ein Sicherungsrecht, das:

- (i) nach dem anzuwendenden Recht zwingend notwendig ist; oder
- (ii) als Voraussetzung einer staatlichen Genehmigung erforderlich ist; oder
- (iii) zur Besicherung einer in Bezug auf oder im Zusammenhang mit einer Verbriefung oder vergleichbaren Finanzierungsvereinbarung in Bezug

The Temporary Global Note and the Permanent Global Note shall each be signed manually by two authorised signatories of the Issuer and bear the manual signature of an authentication officer of the Principal Paying Agent.

(6) *Noteholders*. "**Noteholder**" means any holder of a proportionate co-ownership or other beneficial interest or right in the Notes.

§ 2

STATUS, NEGATIVE PLEDGE OF THE ISSUER, GUARANTEE AND NEGATIVE PLEDGE OF THE GUARANTOR

(1) *Status*. The obligations under the Notes constitute unsecured and unsubordinated obligations of the Issuer ranking *pari passu* among themselves and *pari passu* with all other unsecured and unsubordinated present and future obligations of the Issuer unless such other obligations take priority by mandatory provisions of law.

(2) *Negative Pledge of the Issuer*. So long as any amounts of interest or principal remain outstanding under the Notes, but only up to the time all amounts payable to Noteholders under the Notes in accordance with these Terms and Conditions have been placed at the disposal of the Clearing System, the Issuer undertakes not to create or permit to subsist any mortgage, charge, pledge or other form of encumbrance *in rem* (each a "**Security Interest**") over the whole or any part of its present or future assets or revenues to secure any Capital Markets Indebtedness, without prior thereto or at the same time letting the Noteholders either share equally and rateably in such Security Interest or benefit from an equivalent other Security Interest which will be approved by an independent expert as being equivalent security.

The undertaking pursuant to sentence 1 of this § 2(2) will not apply to a Security Interest which:

- (i) is mandatory according to applicable laws; or
- (ii) is required as a prerequisite for governmental approvals; or
- (iii) is provided to secure any Capital Markets Indebtedness incurred in respect of or in connection with any securitisation or similar financing arrangement relating

auf Vermögenswerte der Emittentin eingegangenen Kapitalmarktverbindlichkeit gestellt wird, bei der die Rückgriffsrechte der Gläubiger der betreffenden Kapitalmarktverbindlichkeit ausschließlich auf die betreffenden Vermögenswerte oder die daraus erzielten Erträge beschränkt sind, oder

- (iv) am Vermögen einer von der Emittentin erst nach dem Tag der Begebung der Schuldverschreibungen erworbenen Person bestellt wurde, die mit dem Erwerb zu einer Tochtergesellschaft wird, sofern das betreffende Sicherungsrecht bereits im Zeitpunkt des Erwerbs durch die Emittentin bestand, es sei denn, das betreffende Sicherungsrecht war im Hinblick auf den bevorstehenden Erwerb dieser Person durch die Emittentin begründet worden; oder
- (v) an einem Vermögensgegenstand bestellt wurde, der von der Emittentin erst nach dem Tag der Begebung der Schuldverschreibungen erworben wurde, sofern das betreffende Sicherungsrecht bereits im Zeitpunkt des Erwerbs durch die Emittentin bestand, es sei denn, das betreffende Sicherungsrecht war im Hinblick auf den bevorstehenden Erwerb dieses Vermögensgegenstands durch die Emittentin begründet worden; oder
- (vi) an dem Tag der Begebung der Schuldverschreibungen bereits besteht; oder
- (vi) der Erneuerung, Verlängerung oder dem Austausch irgendeines Sicherungsrechts gemäß den vorstehenden Ziffern (i) bis (vi) dient.

Ein nach diesem § 2(2) zu leistendes Sicherungsrecht kann auch zu Gunsten eines Treuhänders der Anleihegläubiger bestellt werden.

"**Kapitalmarktverbindlichkeit**" ist jede gegenwärtige oder zukünftige Verbindlichkeit zur Zahlung oder Rückzahlung aufgenommener Gelder (einschließlich Verpflichtungen aus Garantien oder anderen Haftungsübernahmen für eine solche Verbindlichkeit eines Dritten) aus Schuldverschreibungen oder sonstigen Wertpapieren mit einer ursprünglichen Laufzeit von mehr als einem Jahr, die an einer Börse, einem Over-the-Counter-Markt oder an einem anderen anerkannten Wertpapiermarkt notiert oder gehandelt werden oder werden können, oder aus Schuldscheindarlehen oder Namensschuldverschreibungen.

(3) *Garantie*. Heraeus Holding GmbH (die "**Garantin**") hat in einer Garantie vom Mai 2022 (die "**Garantie**") gegenüber der Hauptzahlstelle zugunsten der Anleihegläubiger die unbedingte und unwiderrufliche Garantie für die Zahlung aller von der Emittentin auf die Schuldverschreibungen zu

to assets owned by the Issuer and where the recourse of the holders of such Capital Markets Indebtedness is limited solely to such assets or any income generated therefrom; or

- (iv) was granted over assets of a person acquired by the Issuer only after the issue date of the Notes which becomes a Subsidiary upon such acquisition, provided that the Security Interest had been in existence at the time of the acquisition by the Issuer, unless such Security Interest was granted in respect of the impending acquisition of that person by the Issuer; or
- (v) was granted over assets acquired by the Issuer only after the issue date of the Notes, provided that the Security Interest had been in existence at the time of the acquisition by the Issuer, unless such Security Interest was granted in respect of the impending acquisition of that asset by the Issuer; or
- (vi) is already existing on the issue date of the Notes; or
- (vi) is provided in connection with the renewal, extension or replacement of any security pursuant to the foregoing clauses (i) through (vi).

Any Security Interest which is to be provided in accordance with this § 2(2) may also be provided to a person acting as trustee for the Noteholders.

"**Capital Markets Indebtedness**" means any present or future obligation for the payment or repayment of borrowed monies (including obligations by reason of any guarantee or other assumption of liability for any such obligation of a third-party) under any bonds, notes or other securities with an original maturity of more than one year which are or are capable of being quoted, listed, dealt in or traded on a stock exchange, an over-the-counter-market or other recognised securities market, or under Schuldschein loans or registered Notes (*Namensschuldverschreibungen*).

(3) *Guarantee*. Pursuant to a guarantee dated May 2022 (the "**Guarantee**"), Heraeus Holding GmbH (the "**Guarantor**") has given towards the Principal Paying Agent for the benefit of the Noteholders the unconditional and irrevocable guarantee for the due and punctual payment of any amounts

zahlenden Beträge, sobald diese gemäß diesen Emissionsbedingungen fällig werden, übernommen.

Die Garantie begründet eine unmittelbare, nicht nachrangige und unbesicherte Verpflichtung der Garantin, die mit allen anderen gegenwärtigen und zukünftigen nicht besicherten und nicht nachrangigen Verbindlichkeiten der Garantin zumindest im gleichen Rang steht, mit Ausnahme von Verbindlichkeiten, die nach geltenden Rechtsvorschriften vorrangig sind. Zugleich mit der Erfüllung einer Verpflichtung der Garantin zugunsten eines Anleihegläubigers aus der Garantie erlischt das jeweilige garantierte Recht eines Anleihegläubigers aus diesen Emissionsbedingungen.

Die Garantie stellt einen Vertrag zugunsten der jeweiligen Anleihegläubiger als begünstigte Dritte gemäß § 328 Absatz 1 BGB dar, so dass ausschließlich die jeweiligen Anleihegläubiger Erfüllung der Garantie unmittelbar von der Garantin verlangen und die Garantie unmittelbar gegen die Garantin durchsetzen können.

(4) *Negativerklärung der Garantin.* In der Garantie hat sich die Garantin verpflichtet, solange noch Kapital- oder Zinsbeträge aus den Schuldverschreibungen ausstehen, jedoch nur bis zu dem Zeitpunkt, an dem alle auf die Schuldverschreibungen gemäß diesen Emissionsbedingungen zu zahlenden Beträge dem Clearingsystem zur Verfügung gestellt worden sind, (i) kein Sicherungsrecht an ihren gesamten gegenwärtigen oder zukünftigen Vermögenswerten oder Einkünften oder Teilen davon zur Besicherung einer anderen gegenwärtigen oder zukünftigen Kapitalmarktverbindlichkeit zu gewähren oder bestehen zu lassen, und (ii) soweit rechtlich möglich, zu veranlassen, dass keine ihrer Tochtergesellschaften Sicherungsrechte an gegenwärtigen oder zukünftigen Teilen ihres Vermögens oder ihres Vermögens insgesamt zur Sicherung gegenwärtiger oder zukünftiger Kapitalmarktverbindlichkeiten bestellt oder fortbestehen lässt, ohne zuvor oder gleichzeitig entweder die Anleihegläubiger gleichrangig und anteilig an einem solchen Sicherungsrecht zu beteiligen oder zu Gunsten der Anleihegläubiger ein anderes, gleichwertiges Sicherungsrecht zu bestellen, welches von einem unabhängigen Sachverständigen als gleichwertige Sicherheit beurteilt wird.

Die vorgenannte Verpflichtung findet keine Anwendung auf ein Sicherungsrecht, das:

- (i) nach dem anzuwendenden Recht zwingend notwendig ist; oder

to be paid by the Issuer, as and when the same will become due in accordance with these Terms and Conditions.

The Guarantee constitutes a direct, unsubordinated and unsecured obligation of the Guarantor, ranking at least *pari passu* with all other present and future unsecured and unsubordinated obligations of the Guarantor, save for such obligations which may be preferred by applicable law. Upon discharge of any obligation of the Guarantor subsisting under the Guarantee in favour of any Noteholder, the relevant guaranteed right of such Noteholder under these Terms and Conditions will cease to exist.

The Guarantee constitutes a contract in favour of the respective Noteholders as third-party beneficiaries pursuant to § 328(1) BGB (German Civil Code) so that only the respective Noteholders will be entitled to claim performance of the Guarantee directly from the Guarantor and to enforce the Guarantee directly against the Guarantor.

(4) *Negative Pledge of the Guarantor.* In the Guarantee the Guarantor has undertaken, so long as any amounts of interest or principal remain outstanding under the Notes, but only up to the time all amounts payable to Noteholders under the Notes in accordance with these Terms and Conditions have been placed at the disposal of the Clearing System, (i) not to create or permit to subsist any Security Interest over the whole or any part of its present or future assets or revenues to secure any Capital Markets Indebtedness, and (ii) to procure, to the extent legally possible, that none of its Subsidiaries will grant or permit to subsist any Security Interest over any or all of its present or future assets, as security for any present or future Capital Markets Indebtedness, without prior thereto or at the same time letting the Noteholders either share equally and rateably in such Security Interest or benefit from an equivalent other Security Interest which will be approved by an independent expert as being equivalent security.

The undertaking set out above will not apply to a Security Interest which:

- (i) is mandatory according to applicable laws; or

- (ii) als Voraussetzung einer staatlichen Genehmigung erforderlich ist; oder
 - (iii) zur Besicherung einer in Bezug auf oder im Zusammenhang mit einer Verbriefung oder vergleichbaren Finanzierungsvereinbarung in Bezug auf Vermögenswerte der Garantin oder Tochtergesellschaft eingegangenen Kapitalmarktverbindlichkeit gestellt wird, bei der die Rückgriffsrechte der Gläubiger der betreffenden Kapitalmarktverbindlichkeit ausschließlich auf die betreffenden Vermögenswerte oder die daraus erzielten Erträge beschränkt sind, oder
 - (iv) am Vermögen einer von der Garantin oder einer Tochtergesellschaft erst nach dem Tag der Begebung der Schuldverschreibungen erworbenen Person bestellt wurde, die mit dem Erwerb zu einer Tochtergesellschaft wird, sofern das betreffende Sicherungsrecht bereits im Zeitpunkt des Erwerbs durch die Garantin oder die Tochtergesellschaft bestand, es sei denn, das betreffende Sicherungsrecht war im Hinblick auf den bevorstehenden Erwerb dieser Person durch die Garantin oder die Tochtergesellschaft begründet worden; oder
 - (v) an einem Vermögensgegenstand bestellt wurde, der von der Garantin oder einer Tochtergesellschaft erst nach dem Tag der Begebung der Schuldverschreibungen erworben wurde, sofern das betreffende Sicherungsrecht bereits im Zeitpunkt des Erwerbs durch die Garantin oder die Tochtergesellschaft bestand, es sei denn, das betreffende Sicherungsrecht war im Hinblick auf den bevorstehenden Erwerb dieses Vermögensgegenstands durch die Garantin oder die Tochtergesellschaft begründet worden; oder
 - (vi) an dem Tag der Begebung der Schuldverschreibungen bereits besteht; oder
 - (vii) der Erneuerung, Verlängerung oder dem Austausch irgendeines Sicherungsrechts gemäß den vorstehenden Ziffern (i) bis (vi) dient.
- (ii) is required as a prerequisite for governmental approvals; or
 - (iii) is provided to secure any Capital Markets Indebtedness incurred in respect of or in connection with any securitisation or similar financing arrangement relating to assets owned by the Guarantor or any Subsidiary and where the recourse of the holders of such Capital Markets Indebtedness is limited solely to such assets or any income generated therefrom; or
 - (iv) was granted over assets of a person acquired by the Guarantor or a Subsidiary only after the issue date of the Notes which becomes a Subsidiary upon such acquisition, provided that the Security Interest had been in existence at the time of the acquisition by the Guarantor or the Subsidiary, unless such Security Interest was granted in respect of the impending acquisition of that person by the Guarantor or the Subsidiary; or
 - (v) was granted over assets acquired by the Guarantor or a Subsidiary only after the issue date of the Notes, provided that the Security Interest had been in existence at the time of the acquisition by the Guarantor or the Subsidiary, unless such Security Interest was granted in respect of the impending acquisition of that asset by the Guarantor or the Subsidiary; or
 - (vi) is already existing on the issue date of the Notes; or
 - (vii) is provided in connection with the renewal, extension or replacement of any security pursuant to the foregoing clauses (i) through (vi).

"Tochtergesellschaft" ist jede Gesellschaft, Personengesellschaft oder jedes sonstige Unternehmen, an der bzw. dem die Garantin direkt oder indirekt insgesamt mehr als 50 % des Kapitals oder der Stimmrechte hält und die bzw. das die Garantin vollständig in ihren Konzernabschluss einzubeziehen hat.

"Subsidiary" means any corporation, partnership or other enterprise in which the Guarantor directly or indirectly holds in the aggregate more than 50 per cent. of the capital or the voting rights and which is required to be fully consolidated in the consolidated accounts of the Guarantor.

§ 3
ZINSEN

(1) *Zinssatz und Zinszahlungstage.* Die Schuldverschreibungen werden ab dem 9. Juni 2022 (einschließlich) mit 2,625 % *per annum* auf ihre Festgelegte Stückelung verzinst. Die Zinsen sind jährlich nachträglich am 9. Juni eines jeden Jahres zahlbar (jeweils ein "**Zinszahlungstag**"). Die erste Zinszahlung erfolgt am 9. Juni 2023.

(2) *Zinslauf.* Der Zinslauf der Schuldverschreibungen endet am Ende des Tages, der dem Tag vorangeht, an dem sie zur Rückzahlung fällig werden. Falls die Emittentin die Schuldverschreibungen bei Fälligkeit nicht zurückzahlt, endet die Verzinsung des ausstehenden Nennbetrages der Schuldverschreibungen nicht am Tag der Fälligkeit, sondern erst am Ende des Tages vor der tatsächlichen Rückzahlung der Schuldverschreibungen. Weitergehende Ansprüche der Anleihegläubiger bleiben unberührt.

(3) *Berechnung der Zinsen für Teile von Zeiträumen.* Sofern Zinsen für einen beliebigen Zeitraum zu berechnen sind, erfolgt die Berechnung auf der Grundlage des Zinstagequotienten (wie nachstehend definiert).

(4) *Zinstagequotient.* "**Zinstagequotient**" bezeichnet im Hinblick auf die Berechnung des Zinsbetrages auf eine Schuldverschreibung für einen beliebigen Zeitraum (der "**Zinsberechnungszeitraum**")

(a) wenn der Zinsberechnungszeitraum der Feststellungsperiode entspricht, in die er fällt, oder kürzer als diese ist, die Anzahl von Tagen in dem Zinsberechnungszeitraum dividiert durch das Produkt aus (i) der Anzahl von Tagen in der betreffenden Feststellungsperiode und (ii) der Anzahl der Feststellungsperioden, die üblicherweise in einem Jahr enden; und

(b) wenn der Zinsberechnungszeitraum länger als eine Feststellungsperiode ist, die Summe aus

(i) der Anzahl der Tage in dem betreffenden Zinsberechnungszeitraum, die in die Feststellungsperiode fallen, in der sie beginnt, dividiert durch die Anzahl der Tage in der betreffenden Feststellungsperiode; und

(ii) die Anzahl der Tage in dem betreffenden Zinsberechnungszeitraum, die in die nachfolgende Feststellungsperiode fallen, dividiert durch die Anzahl der Tage in der betreffenden Feststellungsperiode.

§ 3
INTEREST

(1) *Rate of Interest and Interest Payment Dates.* The Notes shall bear interest on their Specified Denomination at the rate of 2.625 per cent. *per annum* from and including 9 June 2022. Interest shall be payable in arrear on 9 June in each year (each such date, an "**Interest Payment Date**"). The first payment of interest shall be made on 9 June 2023.

(2) *Accrual of Interest.* The Notes shall cease to bear interest from the end of the day preceding the day on which they become due for redemption. If the Issuer shall fail to redeem the Notes when due, interest shall continue to accrue on the outstanding principal amount of the Notes beyond the due date until the end of the day preceding the actual redemption of the Notes. This does not affect any additional rights that might be available to the Noteholders.

(3) *Calculation of Interest for Partial Periods.* If interest is required to be calculated for any period of time, such interest shall be calculated on the basis of the Day Count Fraction (as defined below).

(4) *Day Count Fraction.* "**Day Count Fraction**" means, in respect of the calculation of an amount of interest on any Note for any period of time (the "**Calculation Period**"),

(a) if the Calculation Period is equal to or shorter than the Determination Period during which it falls, the number of days in the Calculation Period divided by the product of (i) the number of days in such Determination Period and (ii) the number of Determination Periods normally ending in any year; and

(b) if the Calculation Period is longer than one Determination Period, the sum of:

(i) the number of days in such Calculation Period falling in the Determination Period in which it begins divided by the number of days in such Determination Period; and

(ii) the number of days in such Calculation Period falling in the next Determination Period divided by the number of days in such Determination Period.

Dabei gilt Folgendes:

"**Feststellungsperiode**" bezeichnet jede Periode ab einem Feststellungstermin (einschließlich), der in ein beliebiges Jahr fällt, bis zum nächsten Feststellungstermin (ausschließlich).

"**Feststellungstermin**" bezeichnet jeden 9. Juni.

§ 4

RÜCKZAHLUNG

(1) *Rückzahlung bei Endfälligkeit.* Soweit nicht zuvor bereits ganz oder teilweise zurückgezahlt oder angekauft und entwertet, werden die Schuldverschreibungen zu ihrer festgelegten Stückelung am 9. Juni 2027 (der "**Endfälligkeitstag**") zurückgezahlt.

(2) *Vorzeitige Rückzahlung nach Wahl der Emittentin aus steuerlichen Gründen.* Wenn die Emittentin oder die Garantin bei der nächsten fälligen Zahlung auf die Schuldverschreibungen verpflichtet ist oder sein wird, zusätzliche Beträge gemäß § 7 zu zahlen, und zwar als Folge einer Änderung oder Ergänzung der Steuer- oder Abgabengesetze und -vorschriften des Landes, in dem die Emittentin oder die Garantin ihren Hauptsitz (oder Steuersitz) hat, oder dessen politischen Untergliederungen oder Steuerbehörden oder als Folge einer Änderung oder Ergänzung der Anwendung oder der offiziellen Auslegung dieser Gesetze und Vorschriften (vorausgesetzt diese Änderung oder Ergänzung wird an oder nach dem Tag der Begebung der Schuldverschreibungen wirksam), dann ist die Emittentin berechtigt, durch Kündigungserklärung gemäß § 4(5) die Schuldverschreibungen (insgesamt und nicht nur teilweise) jederzeit mit Wirkung zu dem in der Kündigungserklärung festgelegten Rückzahlungstag zur vorzeitigen Rückzahlung zu kündigen.

Eine solche Kündigung darf allerdings nicht (i) früher als 90 Tage vor dem frühestmöglichen Termin erfolgen, an dem die Emittentin oder die Garantin verpflichtet wäre, zusätzliche Beträge (wie in § 7 definiert) zu zahlen, falls eine Zahlung auf die Schuldverschreibungen dann fällig sein würde, oder (ii) erfolgen, wenn zu dem Zeitpunkt, zu dem die Kündigung erfolgt, die Verpflichtung zur Zahlung von solchen zusätzlichen Beträgen nicht mehr wirksam ist.

Wenn die Emittentin ihr Kündigungsrecht gemäß Satz 1 ausübt, ist die Emittentin verpflichtet, die Schuldverschreibungen an dem in der Kündigungserklärung festgelegten Rückzahlungstag zu ihrer festgelegten Stückelung zuzüglich der bis zu dem festgelegten Rückzahlungstag (ausschließlich) aufgelaufenen Zinsen zurückzuzahlen.

Where:

"**Determination Period**" means each period from and including a Determination Date in any year to but excluding the next Determination Date.

"**Determination Date**" means each 9 June.

§ 4

REDEMPTION

(1) *Redemption at Maturity.* Unless previously redeemed in whole or in part or purchased and cancelled, the Notes shall be redeemed at their Specified Denomination on 9 June 2027 (the "**Maturity Date**").

(2) *Early redemption at the option of the Issuer for Reasons of Taxation.* If on the occasion of the next payment due under the Notes, the Issuer or the Guarantor has or will become obliged to pay Additional Amounts pursuant to § 7 as a result of any change in, or amendment to, the tax or fiscal laws and regulations of the country in which the Issuer or the Guarantor is domiciled (or resident for tax purposes) or of any political subdivision or taxing authority thereof or therein, or as a result of any change in, or amendment to, an official interpretation or application of such laws or regulations, which amendment or change is effective on or after the date of issue of the Notes, the Issuer may, upon giving notice in accordance with § 4(5), call the Notes for early redemption (in whole but not in part) at any time with effect on the redemption date specified in the notice.

However, no such notice of redemption may be given (i) earlier than 90 days prior to the earliest date on which the Issuer or the Guarantor would be obligated to pay such Additional Amounts (as defined in § 7) were a payment in respect of the Notes then due, or (ii) if at the time such notice is given, such obligation to pay such Additional Amounts does not remain in effect.

If the Issuer exercises its call right in accordance with sentence 1, the Issuer shall redeem the Notes, on the redemption date specified in the notice, at their Specified Denomination together with interest accrued to but excluding the specified redemption date.

(3) *Vorzeitige Rückzahlung nach Wahl der Emittentin.* Die Emittentin ist berechtigt, durch Kündigungserklärung gemäß § 4(5) die Schuldverschreibungen (insgesamt und nicht nur teilweise) mit Wirkung zu jedem Optionalen Rückzahlungstag (wie nachstehend definiert) zur vorzeitigen Rückzahlung zu kündigen.

Wenn die Emittentin ihr Kündigungsrecht gemäß Satz 1 ausübt, ist die Emittentin verpflichtet, die Schuldverschreibungen an dem in der Kündigungserklärung festgelegten Optionalen Rückzahlungstag zu ihrer festgelegten Stückelung zuzüglich der bis zu dem festgelegten Optionalen Rückzahlungstag (ausschließlich) aufgelaufenen Zinsen zurückzuzahlen.

"Optionaler Rückzahlungstag" bezeichnet jeden Geschäftstag während des Zeitraums ab dem 9. März 2027 (der **"Erste Optionale Rückzahlungstag"**) (einschließlich) bis zum Endfälligkeitstag (ausschließlich).

(4) *Vorzeitige Rückzahlung bei geringem ausstehenden Gesamtnennbetrag.* Wenn der Gesamtnennbetrag der ausstehenden und nicht von der Emittentin gehaltenen Schuldverschreibungen 20 % oder weniger des Gesamtnennbetrags der Schuldverschreibungen, die ursprünglich ausgegeben wurden (einschließlich Schuldverschreibungen, die gemäß § 11(1) zusätzlich begeben worden sind), beträgt, ist die Emittentin berechtigt, durch Kündigungserklärung gemäß § 4(5) die Schuldverschreibungen (insgesamt und nicht nur teilweise) jederzeit mit Wirkung zu dem in der Kündigungserklärung festgelegten Rückzahlungstag zur vorzeitigen Rückzahlung zu kündigen.

Wenn die Emittentin ihr Kündigungsrecht gemäß Satz 1 ausübt, ist die Emittentin verpflichtet, die Schuldverschreibungen an dem in der Kündigungserklärung festgelegten Rückzahlungstag zu ihrer festgelegten Stückelung zuzüglich der bis zu dem festgelegten Rückzahlungstag (ausschließlich) aufgelaufenen Zinsen zurückzuzahlen.

(5) *Bekanntmachung der vorzeitigen Rückzahlung.* Die Emittentin kann ein Recht zur vorzeitigen Rückzahlung gemäß § 4(2), (3) und (4) durch eine Bekanntmachung an die Anleihegläubiger gemäß § 12 unter Einhaltung einer Frist von nicht weniger als 30 und nicht mehr als 60 Tagen ausüben. Die Bekanntmachung hat diejenigen Tatsachen anzugeben, auf welche die Emittentin ihr Kündigungsrecht stützt, und den für die Rückzahlung festgelegten Tag zu bezeichnen.

(3) *Early redemption at the option of the Issuer.* The Issuer may, upon giving notice in accordance with § 4(5), call the Notes for early redemption (in whole but not in part) with effect on any Optional Redemption Date (as defined below).

If the Issuer exercises its call right in accordance with sentence 1, the Issuer shall redeem the Notes, on the Optional Redemption Date specified in the notice, at their Specified Denomination together with any interest accrued to but excluding the specified Optional Redemption Date.

"Optional Redemption Date" means each Business Day during the period from and including 9 March 2027 (the **"First Optional Redemption Date"**) to but excluding the Maturity Date.

(4) *Early redemption in case of minimal outstanding aggregate principal amount.* If the aggregate principal amount of the Notes outstanding and held by persons other than the Issuer is equal to or less than 20 per cent. of the aggregate principal amount of the Notes originally issued (including any Notes additionally issued in accordance with § 11(1)), the Issuer may, upon giving notice in accordance with § 4(5), call the Notes for early redemption (in whole but not in part) at any time with effect on the redemption date specified in the notice.

If the Issuer exercises its call right in accordance with sentence 1, the Issuer shall redeem the Notes, on the redemption date specified in the notice, at their Specified Denomination together with interest accrued to but excluding the specified redemption date.

(5) *Notification of early redemption.* The Issuer will give not less than 30 and not more than 60 days' notice to the Noteholders in accordance with § 12 of any early redemption pursuant to § 4(2), (3) and (4). Such notice must set forth the underlying facts of the Issuer's right to early redemption and specify the date fixed for redemption.

(6) *Vorzeitige Rückzahlung nach Wahl der Emittentin zum Make-Whole-Rückzahlungsbetrag.*

- (a) Die Emittentin ist berechtigt, durch Kündigungserklärung gemäß § 4(6)(e) die Schuldverschreibungen (insgesamt und nicht nur teilweise) jederzeit bis zum Ersten Optionalen Rückzahlungstag (ausschließlich) mit Wirkung zu dem in der Kündigungserklärung festgelegten Rückzahlungstag (der "**Make-Whole-Rückzahlungstag**") zur vorzeitigen Rückzahlung zu kündigen.

Wenn die Emittentin ihr Kündigungsrecht gemäß Satz 1 ausübt, ist die Emittentin verpflichtet, die Schuldverschreibungen an dem Make-Whole-Rückzahlungstag zu ihrem Make-Whole-Rückzahlungsbetrag zuzüglich der bis zu dem Make-Whole-Rückzahlungstag (ausschließlich) aufgelaufenen Zinsen zurückzuzahlen.

- (b) Der "**Make-Whole-Rückzahlungsbetrag**" je Schuldverschreibung entspricht dem Abgezinsten Marktwert, mindestens jedoch der Festgelegten Stückelung. Der Make-Whole-Rückzahlungsbetrag wird von der Make-Whole-Berechnungsstelle berechnet.
- (c) Der "**Abgezinsten Marktwert**" ist die Summe aus
- (i) der auf den Make-Whole-Rückzahlungstag abgezinsten Festgelegten Stückelung (wobei unterstellt wird, dass die Schuldverschreibungen an dem Ersten Optionalen Rückzahlungstag zurückgezahlt würden); und
- (ii) der Summe der jeweils auf den Make-Whole-Rückzahlungstag abgezinsten Werte der verbleibenden Zinszahlungen für jede am oder nach dem Make-Whole-Rückzahlungstag endende Zinsperiode, welche Zinszahlungen ansonsten an jedem Zinszahlungstag nach dem Make-Whole-Rückzahlungstag bis zu dem Ersten Optionalen Rückzahlungstag (einschließlich) fällig werden würden (wobei unterstellt wird, dass der Zinslauf an dem Ersten Optionalen Rückzahlungstag (ausschließlich) endet), minus der bis zu dem Make-Whole-Rückzahlungstag (ausschließlich) aufgelaufenen Zinsen.
- (d) Die Make-Whole-Berechnungsstelle errechnet den Abgezinsten Marktwert gemäß der Marktconvention auf einer Grundlage, die der Berechnung von Zinsen gemäß § 3 entspricht, unter Anwendung eines

(6) *Early redemption at the option of the Issuer at the Make-Whole Redemption Amount.*

- (a) The Issuer may, upon giving notice in accordance with § 4(6)(e), call the Notes for early redemption (in whole but not in part) at any time to but excluding the First Optional Redemption Date with effect on the redemption date specified in the notice (the "**Make-Whole Redemption Date**").

If the Issuer exercises its call right in accordance with sentence 1, the Issuer shall redeem the Notes, on the Make-Whole Redemption Date, at their Make-Whole Redemption Amount together with interest accrued to but excluding the Make-Whole Redemption Date.

- (b) The "**Make-Whole Redemption Amount**" per Note shall be the higher of the Present Value and the Specified Denomination. The Make-Whole Redemption Amount shall be calculated by the Make-Whole Calculation Agent.
- (c) The "**Present Value**" will be the sum of
- (i) the Specified Denomination (assuming for this purpose that the Notes would be redeemed on the First Optional Redemption Date) discounted to the Make-Whole Redemption Date; and
- (ii) the sum of the remaining interest payments for each interest period ending on or after the Make-Whole Redemption Date, which interest payments would otherwise become due on each Interest Payment Date falling after the Make-Whole Redemption Date to and including the First Optional Redemption Date (assuming for this purpose that interest would cease to accrue on but excluding the First Optional Redemption Date), each discounted to the Make-Whole Redemption Date, minus interest accrued to but excluding the Make-Whole Redemption Date.
- (d) The Make-Whole Calculation Agent will calculate the Present Value in accordance with market convention on a basis which is consistent with the calculation of

Abzinsungssatzes, welcher der Benchmark-Rendite zuzüglich 0,30 % entspricht.

Die "**Benchmark-Rendite**" bezeichnet die am Rückzahlungs-Berechnungstag angezeigte Rendite wie sie um 12:00 Uhr (Frankfurter lokaler Zeit) auf der Benchmark-Wertpapier-Bildschirmseite hinsichtlich des Benchmark-Wertpapiers erscheint oder, falls eine solche Rendite zu dieser Uhrzeit nicht festgestellt werden kann, die Rendite, wie sie an dem Rückzahlungs-Berechnungstag zu einer anderen Uhrzeit, die der Make-Whole-Berechnungsstelle als angemessen erscheint, auf der Bildschirmseite angezeigt wird.

"**Benchmark-Wertpapier**" bezeichnet OBL 0% April 2027 (ISIN: DE0001141851) und, falls dieses Wertpapier am Rückzahlungs-Berechnungstag nicht länger aussteht, ein solches das Benchmark-Wertpapier ersetzendes Benchmark-Wertpapier, das von der Make-Whole-Berechnungsstelle festgelegt wird, das eine bis zum Ersten Optionalen Rückzahlungstag vergleichbare Restlaufzeit hat und das (soweit im Rahmen der Festlegung durch die Make-Whole-Berechnungsstelle einschlägig) zum Zeitpunkt der Auswahl für die Preisfestsetzung von neu begebenen Unternehmensanleihen mit einer Laufzeit vergleichbar zu der bis zum Ersten Optionalen Rückzahlungstag unter Anwendung einschlägiger Finanzpraxis üblicherweise herangezogen werden würde.

"**Benchmark-Wertpapier-Bildschirmseite**" bezeichnet die Bildschirmseite Bloomberg HP (Einstellung "*Last Yield To Convention*" unter Verwendung der Preisfestsetzungsquelle "FRNK") (oder eine Nachfolge-Bildschirmseite oder eine Nachfolge-Preisfestsetzungsquelle) für das Benchmark-Wertpapier, oder, falls diese Bloomberg Seite oder die Preisfestsetzungsquelle nicht erreichbar ist, eine etwaige andere Seite von einem anderen Informationsanbieter, die, wie es von der Make-Whole-Berechnungsstelle als angemessen erachtet wird, im Wesentlichen ähnliche Daten anzeigt.

"**Rückzahlungs-Berechnungstag**" ist der sechste Geschäftstag (wie in § 5(5) definiert) vor dem Tag, an dem die Schuldverschreibungen gemäß diesem § 4(6) zurückgezahlt werden.

- (e) Die Emittentin kann ein Recht zur vorzeitigen Rückzahlung gemäß § 4(6) durch eine Bekanntmachung an die Anleihegläubiger gemäß § 12 unter Einhaltung einer Frist von nicht weniger als 10

interest as set out in § 3, using a discount rate equal to the Benchmark Yield plus 0.30 per cent.

The "**Benchmark Yield**" means the yield at the Redemption Calculation Date as appearing at around 12:00 noon (local time in Frankfurt am Main) on the Benchmark Security Screen Page in respect of the Benchmark Security, or if such yield cannot be so determined at such time, the yield determined as aforesaid as appearing on the Screen Page at such other time on the Redemption Calculation Date as may be considered to be appropriate by the Make-Whole Calculation Agent.

"**Benchmark Security**" means the OBL 0% April 2027 (ISIN: DE0001141851), or, if such security is no longer outstanding on the Redemption Calculation Date, such substitute benchmark security chosen by the Make-Whole Calculation Agent as having a maturity comparable to the remaining term of the Notes to the First Optional Redemption Date and (if applicable in the determination of the Make-Whole Calculation Agent) that would be used at the time of selection and in accordance with customary financial practice, in pricing new issues of corporate debt securities of comparable maturity to the First Optional Redemption Date.

"**Benchmark Security Screen Page**" means the screen page Bloomberg HP (setting "*Last Yield To Convention*" and using the pricing source "FRNK") (or any successor page or successor pricing source) for the Benchmark Security, or, if such Bloomberg page or pricing source is not available, such other page (if any) from such other information provider displaying substantially similar data as may be considered to be appropriate by the Make-Whole Calculation Agent.

"**Redemption Calculation Date**" means the sixth Business Day (as defined in § 5(5)) prior to the date on which the Notes are redeemed in accordance with this § 4(6).

- (e) The Issuer will give not less than 10 and not more than 60 days' notice to the Noteholders in accordance with § 12 of any early redemption pursuant to § 4(6). Such notice must specify the following:

und nicht mehr als 60 Tagen ausüben. Die Bekanntmachung hat folgende Angaben zu enthalten:

- (i) den Make-Whole-Rückzahlungstag; sowie
 - (ii) den Namen und die Geschäftsstelle der Institution, welche durch die Emittentin als Make-Whole-Berechnungsstelle ernannt wurde.
- (f) "**Make-Whole-Berechnungsstelle**" bezeichnet eine unabhängige international anerkannte Bank oder eine unabhängige Finanzberaterin mit einschlägiger Expertise, die von der Emittentin auf eigene Kosten rechtzeitig vor Ausübung des Kündigungsrechts gemäß diesem § 4(6) ausgewählt und bestellt werden wird.

(7) Vorzeitige Rückzahlung aufgrund eines Put-Ereignisses.

- (a) Wenn (i) ein Kontrollwechsel eintritt und (ii) vor dem Ende der Kontrollwechselfrist eine Herabstufung des Ratings eintritt (zusammen ein "**Put-Ereignis**"), dann hat jeder Anleihegläubiger das Recht, von der Emittentin zu verlangen, jede von dem Anleihegläubiger gehaltene Schuldverschreibung an dem Put-Rückzahlungstag zu ihrer Festgelegten Stückelung zuzüglich der bis zum Put-Rückzahlungstag (ausschließlich) aufgelaufenen Zinsen zurückzuzahlen.
- (b) Sobald die Garantin davon Kenntnis erhält, dass ein Put-Ereignis eingetreten ist, hat sie den Anleihegläubigern dies unverzüglich gemäß § 12 mitzuteilen (eine "**Put-Ereignis-Mitteilung**"). In der Put-Ereignis-Mitteilung sind die Art des Put-Ereignisses, die Umstände, die zu dem Put-Ereignis geführt haben, sowie die Modalitäten der Ausübung des in diesem § 4(7) geregelten Rechts auf vorzeitige Rückzahlung anzugeben.
- (c) Die wirksame Ausübung des in diesem § 4(7) geregelten Rechts auf vorzeitige Rückzahlung setzt voraus, dass der Anleihegläubiger innerhalb der Put-Ausübungsfrist
 - (i) der Hauptzahlstelle eine Erklärung über die Ausübung des Rechts auf vorzeitige Rückzahlung entweder in Textform oder nach dem hierfür von CBF vorgesehenen Prozedere übermittelt (welches auch vorsehen kann, dass die Mitteilung durch oder auf Veranlassung von CBF oder einer Depotbank auf elektronischem Wege an die Hauptzahlstelle übermittelt wird). In dieser Ausübungsmitteilung sind von dem jeweiligen ausübenden Anleihegläubiger (i) die Anzahl der Schuldverschreibungen, für die das

- (i) the Make-Whole Redemption Date; and
- (ii) name and address of the institution appointed by the Issuer as Make-Whole Calculation Agent.

- (f) "**Make-Whole Calculation Agent**" means an independent bank of international standing or an independent financial adviser with relevant expertise, which will be selected and appointed by the Issuer at its own expense in good time prior to the exercise of the call right in accordance with this § 4(6).

(7) Early Redemption for Reasons of a Put Event.

- (a) If at any time while any Notes remain outstanding (i) a Change of Control occurs and (ii) prior to the end of the Change of Control Period a Rating Downgrade occurs (together, a "**Put Event**"), each Noteholder will have the option to require the issuer to redeem each Note held by such Noteholder on the Put Redemption Date at its Specified Denomination together with interest accrued to but excluding the Put Redemption Date.
- (b) Promptly upon the Guarantor becoming aware that a Put Event has occurred the Guarantor shall give notice (a "**Put Event Notice**") to the Noteholders in accordance with § 12, specifying the nature of the Put Event and the circumstances giving rise to it and the procedure for exercising the option set out in this § 4(7).
- (c) In order to validly exercise the right to require redemption under this § 4(7), the Noteholder must, within the Put Exercise Period,
 - (i) deliver to the Principal Paying Agent the notice of such exercise either in text form or in accordance with the standard procedures of CBF applicable from time to time (which may include notice being given on his instruction by CBF or any Custodian to the Principal Paying Agent by electronic means). In such exercise notice the relevant exercising Noteholder must state (i) the number of Notes in respect of which the right to require redemption will be exercised and (ii) the

Recht auf vorzeitige Rückzahlung ausgeübt wird und (ii) die ISIN der Schuldverschreibungen (d.h. ISIN DE000A30VGD9) anzugeben; und

- (ii) die zurückzuzahlenden Schuldverschreibungen an die Hauptzahlstelle liefert, und zwar durch Lieferung (Umbuchung) der Schuldverschreibungen auf ein Konto der Hauptzahlstelle.

Die Ausübung des Rechts auf vorzeitige Rückzahlung durch einen Anleihegläubiger ist unwiderruflich.

- (d) In diesem § 4(7) haben die folgenden Begriffe die folgenden Bedeutungen:

Eine "**Herabstufung des Ratings**" in Bezug auf einen Kontrollwechsel liegt vor,

- (i) wenn vor dem Ende der Kontrollwechselfrist ein vormals für die Garantin vergebenes langfristiges Kredit-Rating von einer Ratingagentur

(A) zurückgezogen wird; oder

(B) von einem Investment Grade Rating (BBB- von S&P/Baa3 von Moody's oder jeweils gleichwertig, oder besser) in ein non-Investment Grade Rating (BB+ von S&P/Ba1 von Moody's oder jeweils gleichwertig, oder schlechter) herabgestuft wird; oder

(C) unterhalb des Investment Grade Ratings liegt und innerhalb der Non-Investment Grade-Ratingkategorie um mindestens einen ganzen Punkt (z.B. von Ba1 nach Ba2 von Moody's oder eine ähnliche Absenkung eines gleichwertigen Ratings) herabgestuft wird;

oder

- (ii) wenn zum Zeitpunkt des Eintritts des Kontrollwechsels für die Garantin kein langfristiges Kredit-Rating vergeben ist und keine Ratingagentur während des Kontrollwechselzeitraums ein langfristiges Investment Grade Kredit-Rating für die Garantin vergibt (es sei denn, die Emittentin ist trotz zumutbarer Anstrengungen innerhalb dieses Kontrollwechselzeitraums nicht in der

ISIN of the Notes (i.e., ISIN DE000A30VGD9); and

- (ii) deliverer to the Principal Paying Agent the Notes to be redeemed by transferring the Notes to an account of the Principal Paying Agent (book-entry transfer)

The exercise of the redemption right by a Noteholder is irrevocable.

- (d) In this § 4(7) the following terms shall have the following meanings:

A "**Rating Downgrade**" in respect of a Change of Control occurs

- (i) if, prior to the end of the Change of Control Period, any long-term credit rating previously assigned to the Guarantor by any Rating Agency

(A) is withdrawn; or

(B) is changed from an investment grade rating (BBB- by S&P, or its equivalent for the time being, or better/Baa3 by Moody's, or its equivalent for the time being, or better) to a non-investment grade rating (BB+ by S&P, or its equivalent for the time being, or worse/Ba1 by Moody's, or its equivalent for the time being, or worse); or

(C) is below an investment grade rating and is being lowered, within the non-investment grade rating category, by at least one full rating notch (e.g. from Ba1 to Ba2 by Moody's or such similar lower of equivalent rating);

or

- (ii) if at the time the Change of Control occurs no long-term rating is assigned to the Guarantor and no Rating Agency assigns, during the Change of Control Period, an investment grade long-term rating to the Guarantor (unless the Guarantor is unable to obtain such a rating within the Change of Control Period having used all reasonable endeavours to do so and such failure is unconnected with the occurrence of the Change of Control).

Lage, ein solches Rating zu erhalten, ohne dass dies seine Ursache im Kontrollwechsel hat).

"**Kontrolle**" bedeutet in Bezug auf die Garantin die Möglichkeit, auf die Garantin unmittelbar oder mittelbar einen beherrschenden Einfluss gemäß § 17 AktG ausüben zu können.

Ein "**Kontrollwechsel**" gilt als eingetreten, wenn eine Person oder abgestimmt handelnde Personen, die am Ausgabetag der Schuldverschreibungen noch keine Kontrolle (allein oder gemeinsam mit anderen) über die Garantin gehabt hat oder haben, Kontrolle über die Garantin erlangt oder erlangen, wobei jedoch kein Kontrollwechsel als eingetreten gilt, wenn eine Person oder abgestimmt handelnde Personen,

- (i) die nachfolgeberechtigt gemäß § 17 des Gesellschaftervertrags der Garantin in der Fassung vom 7. Juni 2021 ist bzw. sind (jeweils ein "**Nachfolgeberechtigter Gesellschafter**"), Kontrolle über die Garantin erlangt oder erlangen.
- (ii) die gemeinsam mit Nachfolgeberechtigten Gesellschaftern Partei eines Vertrags über die Bindung von Stimmrechten aus Anteilen an der Garantin (der "**Stimmenpool**") sind (und nur solange sie dies bleiben), Kontrolle über die Garantin, erlangen, vorausgesetzt dass
 - (A) die an diesem Stimmenpool teilnehmenden Nachfolgeberechtigten Gesellschafter die Mehrheit der Stimmrechte, die der Bindung durch den Stimmenpool unterliegen, halten;
 - (B) der Stimmenpool keinerlei Vetorechte zugunsten von Gesellschaftern, die nicht Nachfolgeberechtigte Gesellschafter sind, vorsieht; und
 - (C) der Stimmenpool die Garantin kontrolliert.

"**Kontrollwechselfrist**" ist der Zeitraum, der 120 Tage nach dem Mitteilungstag endet.

"**Mitteilungstag**" ist der Tag, an dem die Garantin bzw. eine Person oder gemeinsam handelnde Personen, die die Kontrolle übernehmen, zum ersten Mal mitteilt bzw. mitteilen, dass ein Kontrollwechsel eingetreten ist.

"**Control**" means in relation to the Guarantor the ability to directly or indirectly control the affairs of the Guarantor pursuant to § 17 AktG (German Stock Corporation Act).

A "**Change of Control**" shall be deemed to have occurred if a person or persons acting in concert, that did not have Control (alone or together with others) of the Guarantor on the issue date of the Notes acquires or acquire Control of the Guarantor, provided that no Change of Control shall be deemed to have occurred if a person or persons acting in concert that

- (i) are eligible to succeed (*nachfolgeberechtigt*) pursuant to § 17 of the articles of association of the Guarantor as in effect on 7 June 2021 (each an "**Eligible Shareholder**") acquires or acquire Control of the Guarantor; or
- (ii) are (and only during the time they remain) a party to an agreement on the pooling of the votes in the Guarantor together with Eligible Shareholders (a "**Shareholder Pool**") acquires or acquire Control of the Guarantor, provided that
 - (A) the Eligible Shareholders participating in such Shareholder Pool are holding the majority of the voting rights which are subject to the Shareholder Pool;
 - (B) the Shareholder Pool does not provide for any blocking rights of the shareholders which are not Eligible Shareholders; and
 - (C) the Shareholder Pool controls the Guarantor.

"**Change of Control Period**" means the period ending 120 days after the Date of Announcement.

"**Date of Announcement**" means the date of the first public announcement by the Guarantor or a person or persons acting in concert which acquire(s) Control, as the case may be, that a Change of Control has occurred.

"**Put-Ausübungsfrist**" ist der Zeitraum von 45 Tagen seit der Abgabe einer Put-Ereignis-Mitteilung (wobei der Tag der Put-Ereignis-Mitteilung mitzuzählen ist).

"**Put-Rückzahlungstag**" ist der siebte Tag nach dem letzten Tag der Put-Ausübungsfrist.

"**Ratingagenturen**" bezeichnet jeweils die S&P Global Ratings Europe Limited oder eine ihrer Nachfolgesellschaften ("**S&P**"), die Moody's Deutschland GmbH ("**Moody's**") oder eine andere durch die Garantin bezeichnete Ratingagentur mit internationaler Anerkennung, sowie deren jeweilige verbundene Unternehmen oder Nachfolgesellschaften, die von oder im Namen der Garantin beauftragt worden sind.

§ 5

ZAHLUNGEN

- (1)(a) *Zahlung von Kapital.* Die Zahlung von Kapital in Bezug auf die Schuldverschreibungen erfolgt nach Maßgabe von § 5(2) an das Clearingsystem oder an dessen Order zur Gutschrift auf die Konten der jeweiligen Kontoinhaber des Clearingsystems außerhalb der Vereinigten Staaten (wie in § 5(3) definiert).
- (b) *Zahlung von Zinsen.* Die Zahlung von Zinsen in Bezug auf die Schuldverschreibungen erfolgt nach Maßgabe von § 5(2) an das Clearingsystem oder an dessen Order zur Gutschrift auf die Konten der jeweiligen Kontoinhaber des Clearingsystems außerhalb der Vereinigten Staaten (wie in § 5(3) definiert).

Die Zahlung von Zinsen in Bezug auf die Schuldverschreibungen, die durch eine vorläufige Globalurkunde verbrieft sind, erfolgt nach Maßgabe von § 5(2) an das Clearingsystem oder an dessen Order zur Gutschrift auf die Konten der jeweiligen Kontoinhaber des Clearingsystems, und zwar nach ordnungsgemäßer Bescheinigung gemäß § 1(3).

(2) *Zahlungsweise.* Vorbehaltlich geltender steuerlicher und sonstiger gesetzlicher Regelungen und Vorschriften erfolgen zu leistende Zahlungen auf die Schuldverschreibungen in Euro.

(3) *Vereinigte Staaten.* **Vereinigte Staaten** bezeichnet die Vereinigten Staaten von Amerika (einschließlich deren Bundesstaaten und des "District of Columbia") sowie deren Territorien (einschließlich Puerto Rico, der U.S. Virgin Islands, Guam, American Samoa, Wake Island und Northern Mariana Islands).

"**Put Exercise Period**" means the period of 45 days from and including the date on which a Put Event Notice is given

"**Put Redemption Date**" is the seventh day after the last day of the Put Exercise Period.

"**Rating Agencies**" means each of S&P Global Ratings Europe Limited or any of its successors ("**S&P**"), Moody's Deutschland GmbH ("**Moody's**") or any other rating agency of international standing, as specified from time to time by the Guarantor, appointed from time to time by or on behalf of the Guarantor, and, in each case, their respective affiliates or successors.

§ 5

PAYMENTS

- (1)(a) *Payment of Principal.* Payment of principal on the Notes shall be made, subject to § 5(2), to, or to the order of, the Clearing System for credit to the accounts of the relevant accountholders of the Clearing System outside the United States (as defined in § 5(3)).
- (b) *Payment of Interest.* Payment of interest on the Notes shall be made, subject to § 5(2), to, or to the order of, the Clearing System for credit to the accounts of the relevant accountholders of the Clearing System outside the United States (as defined in § 5(3)).

Payment of interest on the Notes represented by a Temporary Global Note shall be made, subject to § 5(2), to, or to the order of, the Clearing System for credit to the accounts of the relevant accountholders of the Clearing System, upon due certification as provided for in § 1(3).

(2) *Manner of Payment.* Subject to applicable fiscal and other laws and regulations, payments of amounts due in respect of the Notes shall be made in Euro.

(3) *United States.* **United States** means the United States of America (including the States thereof and the District of Columbia) and its possessions (including Puerto Rico, the U.S. Virgin Islands, Guam, American Samoa, Wake Island and Northern Mariana Islands).

(4) *Erfüllung.* Die Emittentin bzw. die Garantin wird durch Leistung der Zahlung an das Clearingsystem oder an dessen Order von ihrer Zahlungspflicht befreit.

(5) *Geschäftstagekonvention.* Fällt der Fälligkeitstag einer Zahlung in Bezug auf eine Schuldverschreibung auf einen Tag, der kein Geschäftstag ist, dann hat der Anleihegläubiger keinen Anspruch auf Zahlung vor dem nächsten Geschäftstag. Der Anleihegläubiger ist nicht berechtigt, weitere Zinsen oder sonstige Zahlungen aufgrund dieser Verspätung zu verlangen.

"**Geschäftstag**" bezeichnet einen Tag (außer einem Samstag oder Sonntag), an dem (i) das Clearingsystem und (ii) das Trans-European Automated Real-time Gross Settlement Express Transfer-System (TARGET 2) Zahlungen abwickeln.

(6) *Bezugnahmen auf Kapital und Zinsen.* Bezugnahmen in diesen Emissionsbedingungen auf Kapital der Schuldverschreibungen schließen, soweit anwendbar, die folgenden Beträge ein: die Festgelegte Stückelung, den Make-Whole-Rückzahlungsbetrag sowie sonstige auf oder in Bezug auf die Schuldverschreibungen zahlbaren Beträge. Bezugnahmen in diesen Emissionsbedingungen auf Zinsen auf Schuldverschreibungen schließen, soweit anwendbar, sämtliche gemäß § 7 zahlbaren zusätzlichen Beträge ein.

§ 6

HAUPTZAHLSTELLE UND MAKE-WHOLE- BERECHNUNGSSTELLE

(1) *Bestellung; bezeichnete Geschäftsstelle.* Die anfänglich bestellte Hauptzahlstelle und deren anfänglich bezeichnete Geschäftsstelle lautet wie folgt:

Deutsche Bank Aktiengesellschaft

Taunusanlage 12
60325 Frankfurt am Main
Deutschland

Die Hauptzahlstelle behält sich das Recht vor, jederzeit die bezeichnete Geschäftsstelle durch eine andere bezeichnete Geschäftsstelle im selben Land zu ersetzen.

(2) *Änderung der Bestellung oder Abberufung.* Die Emittentin behält sich das Recht vor, jederzeit die Bestellung der Hauptzahlstelle zu ändern oder zu beenden und eine andere Hauptzahlstelle oder eine oder mehrere zusätzliche Zahlstellen zu bestellen. Die Emittentin wird sicherstellen, dass jederzeit (i) eine Hauptzahlstelle, (ii) eine Zahlstelle (die die Hauptzahlstelle sein kann) mit einer Geschäftsstelle in einem Land auf dem europäischen Festland und (iii) solange die Schuldverschreibungen auf Veranlassung der Emittentin an einer Börse notiert werden, eine Zahlstelle (die die

(4) *Discharge.* The Issuer or, as the case may be, the Guarantor shall be discharged by payment to, or to the order of, the Clearing System.

(5) *Business Day Convention.* If the date for payment of any amount in respect of any Note is not a Business Day, then the Noteholder shall not be entitled to payment until the next day that is a Business Day and shall not be entitled to further interest or other payment in respect of such delay.

"**Business Day**" means a day which is a day (other than a Saturday or a Sunday) on which both (i) the Clearing System, and (ii) the Trans-European Automated Real-time Gross Settlement Express Transfer System (TARGET 2) settle payments.

(6) *References to Principal and Interest.* Reference in these Terms and Conditions to principal in respect of the Notes shall be deemed to include, as applicable: the Specified Denomination; the Make-Whole Redemption Amount of the Notes; and any other amounts which may be payable under or in respect of the Notes. Reference in these Terms and Conditions to interest in respect of the Notes shall be deemed to include, as applicable, any Additional Amounts which may be payable under § 7.

§ 6

PRINCIPAL PAYING AGENT AND MAKE- WHOLE CALCULATION AGENT

(1) *Appointment; Specified Offices.* The initial Principal Paying Agent and its initial specified offices is:

Deutsche Bank Aktiengesellschaft

Taunusanlage 12
60325 Frankfurt am Main
Germany

The Principal Paying Agent reserves the right at any time to change its specified office to some other specified office in the same country.

(2) *Variation or Termination of Appointment.* The Issuer reserves the right at any time to vary or terminate the appointment of the Principal Paying Agent and to appoint another Principal Paying Agent or on or more other additional paying agents. The Issuer will at all times maintain (i) a Principal Paying Agent, (ii) a Paying Agent with a specified office in a continental European country (which may be the Principal Paying Agent) and (iii) so long as the Notes are listed on a stock exchange at the initiative of the Issuer, a Paying Agent (which may be the Principal Paying

Hauptzahlstelle sein kann) mit einer benannten Geschäftsstelle in dem von der betreffenden Börse vorgeschriebenen Land bestimmt ist. Die Hauptzahlstelle und etwaige weitere Zahlstellen behalten sich das Recht vor, jederzeit anstelle ihrer jeweils benannten Geschäftsstelle eine andere Geschäftsstelle in demselben Land zu bestimmen. Mitteilungen hinsichtlich aller Veränderungen im Hinblick auf die Hauptzahlstelle und etwaige Zahlstellen erfolgen unverzüglich durch die Emittentin gemäß § 12.

(3) *Beauftragte der Emittentin.* Die Hauptzahlstelle, jede etwaige Zahlstelle und eine etwaige gemäß § 4(6) bestellte Make-Whole-Berechnungsstelle handeln ausschließlich als Beauftragte der Emittentin und übernehmen keinerlei Verpflichtungen gegenüber den Anleihegläubigern; es wird kein Auftrags- oder Treuhandverhältnis zwischen ihnen und den Anleihegläubigern begründet.

§ 7 STEUERN

(1) *Zusätzliche Beträge.* Sämtliche auf die Schuldverschreibungen zu zahlenden Beträge (einschließlich sämtlicher von der Garantin auf die Garantie zu zahlender Beträge) werden ohne Einbehalt oder Abzug von Steuern, Abgaben, Festsetzungen oder behördlicher Gebühren jedweder Art geleistet ("**Steuern**"), die von dem Staat, in dem die Emittentin steuerlich ansässig ist bzw. von dem Staat, in dem die Garantin steuerlich ansässig ist oder einer deren jeweiligen Gebietskörperschaften oder einer deren jeweiligen zur Erhebung von Steuern berechtigten Behörden oder sonstigen Stellen auferlegt, erhoben, eingezogen, einbehalten oder festgesetzt werden, sofern nicht die Emittentin oder die Garantin kraft Gesetzes oder einer sonstigen Rechtsvorschrift zu einem solchen Einbehalt oder Abzug verpflichtet ist. Sofern die Emittentin oder die Garantin zu einem solchen Einbehalt oder Abzug verpflichtet ist, wird die Emittentin bzw. die Garantin zusätzliche Beträge (die "**Zusätzlichen Beträge**") an die Anleihegläubiger zahlen, so dass die Anleihegläubiger die Beträge erhalten, die sie ohne den betreffenden Einbehalt oder Abzug erhalten hätten. Solche Zusätzlichen Beträge sind jedoch nicht zahlbar wegen solcher Steuern in Bezug auf Schuldverschreibungen,

- (a) die wegen einer Verbindung des betreffenden Anleihegläubigers zu dem Staat, in dem die Emittentin steuerlich ansässig ist bzw. zu dem Staat, in dem die Garantin steuerlich ansässig ist, die nicht nur aus der bloßen Inhaberschaft der Schuldverschreibungen besteht, einzubehalten oder abzuziehen sind; oder
- (b) deren Einbehalt oder Abzug ein Anleihegläubiger durch Vorlage eines Formulars oder einer Bescheinigung und/oder durch Abgabe einer

Agent) with a specified office in such country as may be required by the rules of the relevant stock exchange. The Principal Paying Agent and any Paying Agent reserve the right at any time to change their respective specified offices to some other specified office in the same country. Notice of all changes in the identities or specified offices of the Principal Paying Agent and any Paying Agent will be given promptly by the Issuer to the Noteholders in accordance with § 12.

(3) *Agents of the Issuer.* The Principal Paying Agent, any paying agent and any Make-Whole Calculation Agent appointed pursuant to § 4(6) act solely as agents of the Issuer and do not have any obligations towards or relationship of agency or trust to any Noteholder.

§ 7 TAXATION

(1) *Additional Amounts.* All amounts to be paid in respect of the Notes (including all amounts to be paid by the Guarantor under the Guarantee) will be paid free and clear of, and without withholding or deduction for, any taxes, duties, assessments or governmental charges of whatever nature ("**Taxes**") imposed, levied, collected, withheld or assessed by the Issuer's country of domicile for tax purposes or the Guarantor's country of domicile for tax purposes (respectively) or any of their respective political subdivisions or any authority or any other agency of or in any such country having power to tax, unless the Issuer or the Guarantor is compelled by law to make such withholding or deduction. If the Issuer or the Guarantor is required to make such withholding or deduction, the Issuer or the Guarantor (as the case may be) will pay such additional amounts (the "**Additional Amounts**") to the Noteholders as the Noteholders would have received if no such withholding or deduction had been required, except that no such Additional Amounts will be payable for any such Taxes in respect of any Note:

- (a) which are to be withheld or deducted by reason of the relevant Noteholder having some connection with the Issuer's country of domicile for tax purposes or the Guarantor's country of domicile for tax purposes other than the mere holding of that Note; or
- (b) the withholding or deduction of which a Noteholder would be able to avoid by presenting any form or certificate and/or making a declaration of non-

Nichtansässigkeitserklärung oder Inanspruchnahme einer vergleichbaren Ausnahme oder Geltendmachung eines Erstattungsanspruches hätte vermeiden können, aber nicht vermieden hat; oder

- (c) die aufgrund (i) einer Richtlinie oder Verordnung der Europäischen Union betreffend die Besteuerung von Zinserträgen oder (ii) einer zwischenstaatlichen Vereinbarung, eines zwischenstaatlichen Abkommens oder einer zwischenstaatlichen Verständigung über deren Besteuerung, an der der Staat, in dem die Emittentin steuerlich ansässig ist bzw. der Staat, in dem die Garantin steuerlich ansässig ist oder die Europäische Union beteiligt ist, oder (iii) einer gesetzlichen Vorschrift, die diese Richtlinie, Verordnung, Vereinbarung, Verständigung oder dieses Abkommen umsetzt oder befolgt, abzuziehen oder einzubehalten sind; oder
- (d) von einer Zahlung an einen Anleihegläubiger abzuziehen oder einzubehalten sind, der in einem nicht kooperativen Steuerhoheitsgebiet im Sinne des Gesetzes zur Abwehr von Steuervermeidung und unfairem Steuerwettbewerb (Steueroasen-Abwehrgesetz) wie jeweils geändert oder ersetzt (einschließlich der aufgrund von diesem Gesetz ergangenen Verordnungen)) ansässig ist; oder
- (e) im Falle einer Kombination der vorgenannten Varianten.

(2) *FATCA*. Weder die Emittentin noch die Garantin sind verpflichtet, zusätzliche Beträge in Bezug auf einen Einbehalt oder Abzug von Beträgen zu zahlen, die gemäß Sections 1471 bis 1474 des U.S. Internal Revenue Code (in der jeweils geltenden Fassung oder gemäß Nachfolgeb Bestimmungen), gemäß zwischenstaatlicher Abkommen, gemäß den in einer anderen Rechtsordnung in Zusammenhang mit diesen Bestimmungen erlassenen Durchführungsvorschriften oder gemäß mit dem U.S. Internal Revenue Service geschlossenen Verträgen von der Emittentin, der jeweiligen Zahlstelle oder einem anderen Beteiligten abgezogen oder einbehalten wurden ("**FATCA-Steuerabzug**") oder Anleihegläubiger in Bezug auf einen FATCA-Steuerabzug schadlos zu halten.

§ 8

VORLEGUNGSFRIST

Die in § 801 Absatz 1 Satz 1 BGB bestimmte Vorlegungsfrist wird für die Schuldverschreibungen auf zehn Jahre abgekürzt.

residence or similar claim for exemption or refund but fails to do so; or

- (c) which are to be withheld or deducted pursuant to (i) any European Union Directive or Regulation concerning the taxation of interest income, or (ii) any international treaty, agreement or understanding relating to such taxation and to which the Issuer's country of domicile for tax purposes or the Guarantor's country of domicile for tax purposes or the European Union is a party, or (iii) any provision of law implementing, or complying with, or introduced to conform with, such Directive, Regulation, treaty, agreement or understanding; or
- (d) are to be withheld or deducted from any payment to be made to a Noteholder being resident a non-cooperative country or territory (*nicht kooperatives Steuerhoheitsgebiet*) within the meaning of the act to prevent tax evasion and unfair tax competition (*Steueroasen-Abwehrgesetz*) as amended or replaced from time to time (including any ordinance (*Verordnung*) enacted based on this act); or
- (e) in the case of any combination of the above items.

(2) *FATCA*. In any event, neither the Issuer nor the Guarantor will have any obligation to pay additional amounts deducted or withheld by the Issuer, the relevant Paying Agent or any other party in relation to any withholding or deduction of any amounts required by the rules of U.S. Internal Revenue Code Sections 1471 through 1474 (or any amended or successor provisions), pursuant to any inter-governmental agreement, or implementing legislation adopted by another jurisdiction in connection with these provisions, or pursuant to any agreement with the U.S. Internal Revenue Service ("**FATCA Withholding**"), or to indemnify any Noteholder in relation to any FATCA Withholding.

§ 8

PRESENTATION PERIOD

The presentation period provided in § 801(1), sentence 1 BGB (German Civil Code) is reduced to ten years for the Notes.

§ 9
KÜNDIGUNG

(1) *Kündigungsgründe.* Jeder Anleihegläubiger ist in den folgenden Fällen berechtigt, seine Schuldverschreibungen zu kündigen und deren sofortige Rückzahlung zu ihrer Festgelegten Stückelung zuzüglich etwaiger bis zum Tage der Rückzahlung (ausschließlich) aufgelaufener Zinsen zu verlangen:

- (a) die Emittentin zahlt Kapital oder Zinsen oder eine andere Zahlung auf die Schuldverschreibungen oder die Garantin leistet eine Zahlung auf die Garantie nicht innerhalb von 10 Tagen nach dem betreffenden Fälligkeitstag;
- (b) die Emittentin oder die Garantin erfüllt irgendeine andere Verpflichtung aus den Schuldverschreibungen oder der Garantie nicht ordnungsgemäß und die Unterlassung, sofern sie nicht unheilbar ist, dauert länger als 30 Tage fort, nachdem die Emittentin oder die Garantin (über die Hauptzahlstelle) hierüber eine Benachrichtigung von einem Anleihegläubiger erhalten hat; oder
- (c) eine Relevante Verbindlichkeit der Emittentin, der Garantin oder einer Tochtergesellschaft wird aufgrund des tatsächlichen Vorliegens einer Nichterfüllung oder eines Verzuges vorzeitig fällig gestellt oder anderweitig vorzeitig fällig, es sei denn, der Gesamtbetrag aller hierin genannten Relevanten Verbindlichkeiten unterschreitet € 50.000.000 (oder den entsprechenden Gegenwert in einer oder mehreren anderen Währung(en)).

Für diese Zwecke bezeichnet der Begriff "**Relevante Verbindlichkeiten**" jede gegenwärtige oder zukünftige Zahlungsverpflichtung im Zusammenhang mit einer Kapitalmarktverbindlichkeit oder einem Gelddarlehen (zur Vermeidung von Unklarheiten, mit Ausnahme von Verschuldung im Zusammenhang mit Edelmetalleihen bzw. -darlehen) mit einer ursprünglichen Laufzeit von mehr als einem Jahr, die von der Emittentin, der Garantin oder einer Tochtergesellschaft aufgenommen, begeben oder garantiert wurde, oder für die die Emittentin, die Garantin oder eine Tochtergesellschaft anderweitig die Haftung übernommen hat; oder

- (d) die Emittentin, die Garantin oder eine Wesentliche Tochtergesellschaft ihre Zahlungsunfähigkeit bekannt gibt oder ihre Zahlungen einstellt; oder
- (e) ein Gericht ein Insolvenzverfahren gegen die Emittentin, die Garantin oder eine Wesentliche

§ 9
TERMINATION

(1) *Events of Default.* Each Noteholder shall be entitled to declare his Notes due and demand immediate redemption thereof at the Specified Denomination, together with accrued interest (if any) to but excluding the date of repayment, in the event that:

- (a) the Issuer fails to pay principal or interest or any other amount in respect of the Notes or the Guarantor fails to pay or any amount in respect of the Guarantee within 10 days from the relevant due date;
- (b) the Issuer or the Guarantor fails to duly perform any other obligation arising from the Notes or the Guarantee and such default, except where such default is incapable of remedy, continues unremedied for more than 30 days after the Issuer or the Guarantor (through the Principal Paying Agent) has received notice thereof from a Noteholder; or
- (c) any Relevant Indebtedness of the Issuer, the Guarantor or any Subsidiary is declared to be or otherwise becomes due and payable prior to its stated maturity as a result of any actual default (however described), unless the aggregate amount of all Relevant Indebtedness referred to herein is less than € 50,000,000 (or its equivalent in any other currency or currencies).

For these purposes the term "**Relevant Indebtedness**" means any present or future indebtedness for or in respect of Capital Markets Indebtedness or monies borrowed (excluding for the avoidance of doubt any indebtedness incurred under and/or pursuant to precious metal loans (*Edelmetalleihen bzw. -darlehen*)) with an original maturity of more than one year borrowed or raised or guaranteed by the Issuer, the Guarantor or any Subsidiary or for which the Issuer, the Guarantor or any Subsidiary has otherwise assumed liability; or

- (d) the Issuer, the Guarantor or any Material Subsidiary announces its inability to meet its financial obligations or ceases its payments; or
- (e) a court opens insolvency proceedings against the Issuer, the Guarantor or any Material Subsidiary, or the

Tochtergesellschaft eröffnet, oder die Emittentin, die Garantin, die Wesentliche Tochtergesellschaft oder eine Aufsichts- oder sonstige Behörde, deren Zuständigkeit die Emittentin, die Garantin oder eine Wesentliche Tochtergesellschaft unterliegt, ein solches Verfahren einleitet oder beantragt; oder

- (f) die Emittentin, die Garantin oder eine Wesentliche Tochtergesellschaft aufgelöst oder liquidiert wird, es sei denn, dass die Auflösung oder Liquidation im Zusammenhang mit einer Verschmelzung oder einem sonstigen Zusammenschluss mit einem anderen Rechtsgebilde erfolgt, sofern dieses andere Rechtsgebilde alle Verbindlichkeiten der Emittentin, der Garantin oder eine Wesentliche Tochtergesellschaft aus den Schuldverschreibungen übernimmt, oder die Auflösung oder Liquidation betrifft eine Wesentliche Tochtergesellschaft und wird auf solventer Basis vollzogen; oder
- (g) die Emittentin oder die Garantin ihren Geschäftsbetrieb einstellt oder damit droht; oder
- (h) in der Bundesrepublik Deutschland ein Gesetz, eine Verordnung oder behördliche Anordnung erlassen wird oder ergeht, aufgrund derer die Emittentin oder die Garantin daran gehindert wird, die von ihr gemäß diesen Emissionsbedingungen oder der Garantie übernommenen Verpflichtungen in vollem Umfang zu beachten und zu erfüllen und diese Lage nicht binnen 90 Tagen behoben ist; oder
- (i) die Garantie mit rechtskräftiger Entscheidung eines zuständigen Gerichts für nicht vollumfänglich wirksam erklärt wird, oder die Garantin einen Mangel der Wirksamkeit behauptet.

"Wesentliche Tochtergesellschaft" bezeichnet jede Tochtergesellschaft der Garantin, deren unkonsolidiertes Bruttovermögen und/oder Umsatz (wie aus dem letzten unkonsolidierten Jahresabschluss dieser Tochtergesellschaft ermittelt) mehr als 5 Prozent der gesamten Aktiva und/oder Umsatzes aller Mitglieder der Gruppe (Summenbilanz) ausmacht (jeweils wie aus dem letzten unkonsolidierten Jahresabschluss des betreffenden Mitglieds der Gruppe ermittelt).

"Gruppe" bezeichnet die Garantin und ihre jeweiligen Tochtergesellschaften.

Das Kündigungsrecht erlischt, falls der Kündigungsgrund vor Ausübung des Rechts geheilt wurde, und es ist zulässig, den Kündigungsgrund gemäß § 9(1)(c) durch Rückzahlung der maßgeblichen Relevanten Verbindlichkeiten in voller Höhe zu heilen

Issuer, the Guarantor or a Material Subsidiary or a supervisory or other authority which has jurisdiction over the Issuer, the Guarantor or a Material Subsidiary institutes or applies for such proceedings; or

- (f) the Issuer, the Guarantor or any Material Subsidiary is dissolved or liquidated, unless such dissolution or liquidation is made in connection with a merger, consolidation or other combination with any other entity, provided that such other entity assumes all obligations of the Issuer, the Guarantor or a Material Subsidiary arising under the Notes, or such dissolution or liquidation relates to a Material Subsidiary and is on a solvent basis; or
- (g) the Issuer or the Guarantor ceases or threatens to cease to carry on its business; or
- (h) any governmental order, decree or enactment shall be made in or by the Federal Republic of Germany whereby the Issuer or the Guarantor is prevented from observing and performing in full its obligations as set forth in these Terms and Conditions or the Guarantee and this situation is not cured within 90 days; or
- (i) the Guarantee is determined by the final decision of a competent court or is claimed by the Guarantor not to be in full force.

"Material Subsidiary" means any Subsidiary of the Guarantor whose unconsolidated gross assets and/or turnover (as determined from the most recent annual unconsolidated financial statements of such Subsidiary) represent more than 5 per cent. of the aggregate unconsolidated gross assets (*Aktiva*) and/or turnover (*Umsatz*) of all members of the Group (*Summenbilanz*) (each as determined from the then most recent unconsolidated annual financial statements of the relevant member of the Group).

"Group" means the Guarantor and its Subsidiaries from time to time.

The right to declare Notes due shall terminate if the situation giving rise to it has been cured before the right is exercised and it shall be permissible to cure the event of default pursuant to § 9(1)(c) by repaying the concerned Relevant Indebtedness in full.

(2) *Kündigung.* Eine Kündigung der Schuldverschreibungen gemäß § 9(1) ist in Textform in deutscher oder englischer Sprache gegenüber der Hauptzahlstelle gemäß den Regeln und Verfahren des Clearingsystems zu erklären. Der Erklärung ist ein Nachweis beizufügen, aus dem sich ergibt, dass der betreffende Anleihegläubiger zum Zeitpunkt der Abgabe der Erklärung Inhaber der betreffenden Schuldverschreibung ist. Der Nachweis kann durch eine Bescheinigung der Depotbank (wie in § 14(5) definiert) oder auf andere geeignete Weise erbracht werden.

(3) *Quorum.* In den Fällen gemäß § 9(1)(b) und § 9(1)(c) wird eine Kündigungserklärung, sofern nicht bei deren Eingang zugleich einer der in § 9(1)(a) oder § 9(1)(d)-(i) bezeichneten Kündigungsgründe vorliegt, erst wirksam, wenn bei der Hauptzahlstelle Kündigungserklärungen von Anleihegläubigern im Nennbetrag von mindestens 10 % des Gesamtnennbetrags der zu diesem Zeitpunkt noch insgesamt ausstehenden Schuldverschreibungen eingegangen sind.

§ 10 ERSETZUNG

(1) *Ersetzung.* Die Emittentin ist jederzeit berechtigt, ohne Zustimmung der Anleihegläubiger, die Garantin oder eine andere Gesellschaft, die direkt oder indirekt von der Garantin kontrolliert wird, als neue Emittentin für alle sich aus oder im Zusammenhang mit den Schuldverschreibungen ergebenden Verpflichtungen mit schuldbefreiender Wirkung für die Emittentin an die Stelle der Emittentin zu setzen (die "**Nachfolgeschuldnerin**"), sofern

- (a) kein Verzug in Bezug auf die Zahlung von Kapital oder Zinsen auf die Schuldverschreibungen vorliegt,
- (b) die Nachfolgeschuldnerin sämtliche Verpflichtungen der Emittentin aus oder im Zusammenhang mit den Schuldverschreibungen übernimmt und, sofern eine Zustellung an die Nachfolgeschuldnerin außerhalb der Bundesrepublik Deutschland erfolgen müsste, einen Zustellungsbevollmächtigten in der Bundesrepublik Deutschland bestellt;
- (c) die Nachfolgeschuldnerin in der Lage ist, sämtliche zur Erfüllung der aufgrund der Schuldverschreibungen bestehenden Zahlungsverpflichtungen erforderlichen Beträge in Euro an das Clearingsystem oder die Hauptzahlstelle zu zahlen, und zwar ohne Abzug oder Einbehalt von Steuern oder sonstigen Abgaben jedweder Art, die von dem Land (oder den Ländern), in dem (in denen) die Nachfolgeschuldnerin ihren Sitz oder Steuersitz hat, auferlegt, erhoben oder eingezogen werden;

(2) *Notice.* Any notice declaring Notes due in accordance with § 9(1) will be made by means of a declaration in text form in the German or English language to the Principal Paying Agent in accordance with the rules and procedures of the Clearing System together with evidence that such Noteholder at the time of such notice is a holder of the relevant Notes by means of a certificate of the Custodian (as defined in § 14(5)) or in any other appropriate manner.

(3) *Quorum.* In the events specified in § 9(1)(b) and § 9(1)(c), any notice declaring Notes due will, unless at the time such notice is received any of the events specified in § 9(1)(a) or § 9(1)(d)-(i) entitling Noteholders to declare their Notes due has occurred, become effective only when the Principal Paying Agent has received such default notices from the Noteholders representing at least 10 per cent. of the aggregate principal amount of the Notes then outstanding.

§ 10 SUBSTITUTION

(1) *Substitution.* The Issuer may at any time, without the consent of the Noteholders, substitute for the Issuer either the Guarantor or any other company which is directly or indirectly controlled by the Guarantor as new issuer (the "**Substitute Debtor**") in respect of all obligations arising under or in connection with the Notes with the effect of releasing the Issuer of all such obligations, if:

- (a) no payment of principal of or interest on any of the Notes is in default;
- (b) the Substitute Debtor assumes any and all obligations of the Issuer arising under or in connection with the Notes and, if service of process vis-à-vis the Substitute Debtor would have to be effected outside Germany, appoints a process agent within Germany;
- (c) the Substitute Debtor is in the position to pay to the Clearing System or the Principal Paying Agent in the Specified Currency and without deducting or withholding any taxes or other duties of whatever nature imposed, levied, collected, withheld, assessed or charged by the country (or countries) in which the Substitute Debtor has its domicile for tax purposes all amounts required for the performance of the payment obligations arising from or in connection with the Notes;

- (d) die Garantin (außer in dem Fall, dass sie selbst die Nachfolgeschuldnerin ist) unbedingt und unwiderruflich die Verpflichtungen der Nachfolgeschuldnerin aus den Schuldverschreibungen zu Bedingungen garantiert, die sicherstellen, dass jeder Anleihegläubiger wirtschaftlich so gestellt wird, wie er ohne die Ersetzung stehen würde; und
- (e) die Nachfolgeschuldnerin sich verpflichtet hat, jeden Anleihegläubiger hinsichtlich solcher Steuern, Abgaben oder behördlichen Lasten freizustellen, die einem Anleihegläubiger bezüglich bzw. in Folge der Ersetzung auferlegt werden.

(2) *Bekanntmachung.* Jede Ersetzung ist gemäß § 12 bekannt zu machen. Mit der Mitteilung der Ersetzung wird die Ersetzung wirksam und die Emittentin und im Fall einer wiederholten Anwendung dieses § 10 jede frühere Nachfolgeschuldnerin von ihren sämtlichen Verpflichtungen aus den Schuldverschreibungen frei.

(3) *Änderung von Bezugnahmen.* Im Falle einer Ersetzung gilt jede Bezugnahme in diesen Emissionsbedingungen auf die Emittentin ab dem Zeitpunkt der Ersetzung als Bezugnahme auf die Nachfolgeschuldnerin, und jede Bezugnahme auf das Land, in dem die Emittentin ihren Hauptsitz (oder Steuersitz) hat, gilt von da an als Bezugnahme auf das Land, in dem die Nachfolgeschuldnerin ihren Hauptsitz (oder Steuersitz) hat.

§ 11

BEGEBUNG WEITERER SCHULDVERSCHREIBUNGEN, ANKAUF UND ENTWERTUNG

(1) *Begebung weiterer Schuldverschreibungen.* Die Emittentin ist berechtigt, jederzeit ohne Zustimmung der Anleihegläubiger weitere Schuldverschreibungen mit gleicher Ausstattung (gegebenenfalls mit Ausnahme des Tags der Begebung, des Verzinsungsbeginns, sofern die weiteren Schuldverschreibungen nicht während der ersten Feststellungsperiode begeben werden, und/oder des Ausgabepreises) in der Weise zu begeben, dass sie mit diesen Schuldverschreibungen eine einheitliche Serie bilden.

(2) *Ankauf.* Die Emittentin bzw. die Garantin ist berechtigt, Schuldverschreibungen im Markt oder anderweitig zu kaufen. Die von der Emittentin erworbenen Schuldverschreibungen können nach Wahl der Emittentin von ihr gehalten, weiterverkauft oder entwertet werden.

- (d) the Guarantor (except in the case that the Guarantor itself is the Substitute Debtor) irrevocably and unconditionally guarantees such obligations of the Substitute Debtor under the Notes on terms which ensure that each Noteholder will be put in an economic position that is as favourable as that which would have existed if the substitution had not taken place; and
- (e) the Substitute Debtor has agreed to indemnify and hold harmless each Noteholder against any tax, duty, assessment or governmental charge imposed on such Noteholder in respect or as a result of such substitution.

(2) *Notice.* Notice of any such substitution shall be published in accordance with § 12. Upon such publication, the substitution shall become effective, and the Issuer and, in the event of a repeated application of this § 10, any previous Substitute Debtor shall be discharged from any and all obligations under the Notes.

(3) *Change of References.* In the event of any such substitution, any reference in these Terms and Conditions to the Issuer shall from then on be deemed to refer to the Substitute Debtor, and any reference to the country of where the Issuer is domiciled (or resident for tax purposes) shall from then on be deemed to refer to the country where the Substitute Debtor is domiciled (or resident for tax purposes).

§ 11

FURTHER ISSUES, PURCHASES AND CANCELLATION

(1) *Further Issues.* The Issuer may from time to time, without the consent of the Noteholders, issue further Notes having the same terms and conditions as the Notes in all respects (or in all respects except for the issue date, interest commencement date, if the further Notes are not issued within the first Determination Period, and/or issue price) so as to form a single series with the Notes.

(2) *Purchase.* The Issuer and the Guarantor may at any time purchase Notes in the open market or otherwise. Notes purchased by the Issuer may, at the option of the Issuer, be held, resold or cancelled.

§ 12
MITTEILUNGEN

(1) *Bekanntmachung.* Alle Mitteilungen, die die Schuldverschreibungen betreffen, werden (solange die Schuldverschreibungen auf Veranlassung der Emittentin an der Luxemburger Börse notiert sind) auf der Internet-Seite der Luxemburger Börse (derzeit www.bourse.lu) veröffentlicht. Jede solche Mitteilung gilt am Tag der ersten Veröffentlichung als wirksam erfolgt.

(2) *Mitteilungen an das Clearingsystem.* Solange Schuldverschreibungen auf Veranlassung der Emittentin an der Luxemburger Börse notiert sind, findet § 12(1) Anwendung. Soweit dies Mitteilungen über den Zinssatz betrifft oder die Regeln der Luxemburger Börse es zulassen, kann die Emittentin eine Veröffentlichung nach § 12(1) (zum Beispiel Mitteilungen bezüglich des Zinssatzes) durch eine Mitteilung an das Clearingsystem zur Weiterleitung an die Anleihegläubiger ersetzen. Jede derartige Mitteilung gilt am fünften Geschäftstag nach dem Tag der Mitteilung an das Clearingsystem als wirksam erfolgt.

§ 13
**ÄNDERUNG DER EMISSIONSBEDINGUNGEN,
GEMEINSAMER VERTRETER,
ÄNDERUNG DER GARANTIE**

(1) *Änderung der Emissionsbedingungen.* Die Anleihegläubiger können gemäß den Bestimmungen des Gesetzes über Schuldverschreibungen aus Gesamtemissionen (das "**Schuldverschreibungsgesetz**" oder "**SchVG**") durch einen Beschluss mit der in § 13(2) bestimmten Mehrheit über einen im Schuldverschreibungsgesetz zugelassenen Gegenstand eine Änderung dieser Emissionsbedingungen mit der Emittentin vereinbaren. Ein ordnungsgemäß gefasster Mehrheitsbeschluss der Anleihegläubiger ist für alle Anleihegläubiger gleichermaßen verbindlich. Ein Mehrheitsbeschluss der Anleihegläubiger, der nicht gleiche Bedingungen für alle Anleihegläubiger vorsieht, ist unwirksam, es sei denn, die benachteiligten Anleihegläubiger stimmen ihrer Benachteiligung ausdrücklich zu. Eine Änderung der Emissionsbedingungen ohne Zustimmung der Emittentin und der Garantinnen scheidet aus.

(2) *Mehrheitserfordernisse.* Die Anleihegläubiger entscheiden mit einer Mehrheit von 75 % (eine "**Qualifizierte Mehrheit**") der abgegebenen Stimmen über wesentliche Änderungen der Emissionsbedingungen, insbesondere über die in § 5 Absatz 3 des Schuldverschreibungsgesetzes aufgeführten Maßnahmen. Beschlüsse, durch die der wesentliche Inhalt der

§ 12
NOTICES

(1) *Publication.* All notices regarding the Notes will be published (so long as the Notes are admitted to trading on the Luxembourg Stock Exchange at the request of the Issuer) on the website of the Luxembourg Stock Exchange (currently www.bourse.lu). Any such notice will become effective for all purposes on the date of the first such publication.

(2) *Notification to Clearing System.* As long as any Note is listed on the Luxembourg Stock Exchange at the request of the Issuer, § 12(1) shall apply. However, if the rules of the Luxembourg Stock Exchange so permit, the Issuer may deliver the relevant notice (e.g., notices regarding the rate of interest) to the Clearing System for communication by the Clearing System to the Noteholders in lieu of a publication in accordance with § 12(1) above. Any such notice shall be deemed to have been given to the Noteholders on fifth Business Day after the said notice was given to the relevant Clearing System.

§ 13
**AMENDMENT OF THE TERMS AND
CONDITIONS, JOINT REPRESENTATIVE,
AMENDMENTS TO THE GUARANTEE**

(1) *Amendment of the Terms and Conditions.* In accordance with the German Act on Debt Securities (*Gesetz über Schuldverschreibungen aus Gesamtemissionen*; the "**Act on Debt Securities**" or "**SchVG**") the Noteholders may agree with the Issuer on amendments of these Terms and Conditions with regard to matters permitted by the Act on Debt Securities by resolution with the majority specified in § 13(2). A duly passed majority resolution of the Noteholders shall be binding on all Noteholders alike. A majority resolution of the Noteholders which does not provide for identical conditions for all Noteholders is void unless Noteholders who are disadvantaged have expressly consented to their being treated disadvantageously. There will be no amendment of the Terms and Conditions without the consent of the Issuer and the Guarantors.

(2) *Majority Requirements.* Resolutions relating to material amendments of the Terms and Conditions, in particular consents to the measures set out in § 5(3) of the Act on Debt Securities shall be passed by a majority of not less than 75 per cent. (a "**Qualified Majority**") of the votes cast. Resolutions relating to amendments of the Terms and Conditions which are not material require a simple majority of the votes cast.

Emissionsbedingungen nicht geändert wird, bedürfen zu ihrer Wirksamkeit einer einfachen Mehrheit der abgegebenen Stimmen. Das Stimmrecht ruht, solange die Schuldverschreibungen der Emittentin oder einem mit ihr verbundenen Unternehmen (§ 271 Absatz 2 HGB) zustehen oder für Rechnung der Emittentin oder eines mit ihr verbundenen Unternehmens gehalten werden.

(3) *Beschlüsse.* Beschlüsse der Anleihegläubiger werden entweder in einer Gläubigerversammlung nach § 13(3)(a) oder im Wege der Abstimmung ohne Versammlung nach § 13(3)(b) getroffen, die von der Emittentin oder einem gemeinsamen Vertreter einberufen wird.

(a) Beschlüsse der Anleihegläubiger im Rahmen einer Gläubigerversammlung werden nach §§ 9 ff. SchVG getroffen. Die Einberufung der Gläubigerversammlung regelt die weiteren Einzelheiten der Beschlussfassung und der Abstimmung. Mit der Einberufung der Gläubigerversammlung werden in der Tagesordnung die Beschlussgegenstände sowie die Vorschläge zur Beschlussfassung den Anleihegläubigern bekannt gegeben.

(b) Beschlüsse der Anleihegläubiger im Wege der Abstimmung ohne Versammlung werden nach § 18 SchVG getroffen. Die Aufforderung zur Stimmabgabe regelt die weiteren Einzelheiten der Beschlussfassung und der Abstimmung. Mit der Aufforderung zur Stimmabgabe werden die Beschlussgegenstände sowie die Vorschläge zur Beschlussfassung den Anleihegläubigern bekannt gegeben.

(4) *Zweite Versammlung.* Wird die Beschlussfähigkeit bei der Gläubigerversammlung gemäß § 13(3)(a) oder der Abstimmung ohne Versammlung gemäß § 13(3)(b) nicht festgestellt, kann der Abstimmungsleiter eine zweite Versammlung im Sinne des § 15 Absatz 3 Satz 3 SchVG einberufen.

(5) *Anmeldung.* Die Stimmrechtsausübung ist von einer vorherigen Anmeldung der Anleihegläubiger abhängig. Die Anmeldung muss bis zum dritten Tag vor der Gläubigerversammlung im Fall einer Gläubigerversammlung (wie in § 13(3)(a) oder § 13(4) beschrieben) bzw. vor dem Beginn des Abstimmungszeitraums im Fall einer Abstimmung ohne Versammlung (wie in § 13(3)(b) beschrieben) unter der in der Aufforderung zur Stimmabgabe angegebenen Anschrift zugehen. Zusammen mit der Anmeldung müssen Anleihegläubiger den Nachweis ihrer Berechtigung zur Teilnahme an der Abstimmung durch eine besondere Bescheinigung ihrer jeweiligen Depotbank (wie in

The voting right is suspended as long as any Notes are attributable to the Issuer or any of its affiliates (within the meaning of § 271(2) HGB (German Commercial Code) or are being held for the account of the Issuer or any of its affiliates.

(3) *Resolutions.* Resolutions of the Noteholders will be made either in a Noteholders' meeting in accordance with § 13(3)(a) or by means of a vote without a meeting (*Abstimmung ohne Versammlung*) in accordance with § 13(3)(b), in either case convened by the Issuer or a joint representative, if any.

(a) Resolutions of the Noteholders in a Noteholders' meeting will be made in accordance with § 9 et seq. SchVG. The convening notice of a Noteholders' meeting will provide the further details relating to the resolutions and the voting procedure. The subject matter of the vote as well as the proposed resolutions will be notified to Noteholders in the agenda of the meeting.

(b) Resolutions of the Noteholders by means of a vote not requiring a physical meeting (*Abstimmung ohne Versammlung*) will be made in accordance § 18 SchVG. The request for voting will provide the further details relating to the resolutions and the voting procedure. The subject matter of the vote as well as the proposed resolutions will be notified to Noteholders together with the request for voting.

(4) *Second meeting.* If it is ascertained that no quorum exists for the Noteholders' meeting pursuant to § 13(3)(a) or the vote without a meeting pursuant to § 13(3)(b), the chair (*Abstimmungsleiter*) may convene a second meeting within the meaning of § 15(3) sentence 3 SchVG.

(5) *Registration.* The exercise of voting rights is subject to the registration of the Noteholders. The registration must be received at the address stated in the request for voting no later than the third day prior to the meeting in the case of a Noteholders' meeting (as described in § 13(3)(a) or § 13(4)) or the beginning of the voting period in the case of voting not requiring a physical meeting (as described in § 13(3)(b)), as the case may be. As part of the registration, Noteholders must demonstrate their eligibility to participate in the vote by means of a special confirmation of their Custodian (as defined in § 14(5)) hereof in text form and by submission of a blocking instruction by the Custodian stating that the

§ 14(5) definiert) in Textform und die Vorlage eines Sperrvermerks der Depotbank erbringen, aus dem hervorgeht, dass die relevanten Schuldverschreibungen für den Zeitraum vom Tag der Absendung der Anmeldung (einschließlich) bis zu dem angegebenen Ende der Versammlung (einschließlich) bzw. dem Ende des Abstimmungszeitraums (einschließlich) nicht übertragen werden können.

(6) *Gemeinsamer Vertreter.* Die Anleihegläubiger können durch Mehrheitsbeschluss die Bestellung und Abberufung eines gemeinsamen Vertreters, die Aufgaben und Befugnisse des gemeinsamen Vertreters, die Übertragung von Rechten der Anleihegläubiger auf den gemeinsamen Vertreter und eine Beschränkung der Haftung des gemeinsamen Vertreters bestimmen. Die Bestellung eines gemeinsamen Vertreters bedarf einer Qualifizierten Mehrheit, wenn er ermächtigt wird, wesentlichen Änderungen der Emissionsbedingungen gemäß § 13(2) zuzustimmen.

Der gemeinsame Vertreter hat die Aufgaben und Befugnisse, welche ihm durch Gesetz oder von den Anleihegläubigern durch Mehrheitsbeschluss eingeräumt wurden. Er hat die Weisungen der Anleihegläubiger zu befolgen. Soweit er zur Geltendmachung von Rechten der Anleihegläubiger ermächtigt ist, sind die einzelnen Anleihegläubiger zur selbständigen Geltendmachung dieser Rechte nicht befugt, es sei denn, der Mehrheitsbeschluss sieht dies ausdrücklich vor. Über seine Tätigkeit hat der gemeinsame Vertreter den Anleihegläubigern zu berichten. Für die Abberufung und die sonstigen Rechte und Pflichten des gemeinsamen Vertreters gelten die Vorschriften des Schuldverschreibungsgesetzes.

Die Haftung des gemeinsamen Vertreters ist auf das Zehnfache seiner jährlichen Vergütung beschränkt, es sei denn, dem gemeinsamen Vertreter fällt Vorsatz oder grobe Fahrlässigkeit zur Last.

(7) *Bekanntmachungen.* Bekanntmachungen betreffend diesen § 13 erfolgen gemäß den §§ 5ff. SchVG sowie nach § 12.

(8) *Änderung der Garantie.* Die oben aufgeführten auf die Änderung der Emissionsbedingungen anwendbaren Bestimmungen finden sinngemäß für Änderungen der Bedingungen der Garantie und der Bedingungen einer etwaigen Garantie gemäß § 10(1)(c) Anwendung.

relevant Notes are not transferable from and including the day such registration has been sent until and including the stated end of the meeting or day the voting period ends, as the case may be.

(6) *Joint Representative.* The Noteholders may by majority resolution provide for the appointment or dismissal of a joint representative, the duties and responsibilities and the powers of such joint representative, the transfer of the rights of the Noteholders to the joint representative and a limitation of liability of the joint representative. Appointment of a joint representative may only be passed by a Qualified Majority if such joint representative is to be authorised to consent to a material change in the substance of the Terms and Conditions in accordance with § 13(2) hereof.

The joint representative shall have the duties and powers provided by law or granted by majority resolution of the Noteholders. The joint representative shall comply with the instructions of the Noteholders. To the extent that the joint representative has been authorised to assert certain rights of the Noteholders, the Noteholders shall not be entitled to assert such rights themselves, unless explicitly provided for in the relevant majority resolution. The joint representative shall provide reports to the noteholders on its activities. The regulations of the Act on Debt Securities apply with regard to the recall and the other rights and obligations of the joint representative.

Unless the joint representative is liable for wilful misconduct (*Vorsatz*) or gross negligence (*grobe Fahrlässigkeit*), the joint representative's liability shall be limited to ten times the amount of its annual remuneration.

(7) *Notices.* Any notices concerning this § 13 will be made in accordance with § 5 et seq. SchVG and § 12.

(8) *Amendments to the Guarantee.* The provisions set out above applicable to the amendment of the Terms and Conditions shall apply *mutatis mutandis* to amendments of the terms of the Guarantee and the terms of any guarantee given pursuant to § 10(1)(c).

§ 14

ANWENDBARES RECHT, ERFÜLLUNGORT, GERICHTSSTAND UND GERICHTLICHE GELTENDMACHUNG

(1) *Anwendbares Recht.* Form und Inhalt der Schuldverschreibungen sowie die Rechte und Pflichten der Anleihegläubiger und der Emittentin bestimmen sich in jeder Hinsicht nach deutschem Recht.

(2) *Erfüllungsort.* Erfüllungsort ist Frankfurt am Main.

(3) *Gerichtsstand.* Vorbehaltlich eines zwingenden Gerichtsstandes für besondere Rechtsstreitigkeiten im Zusammenhang mit dem SchVG in der jeweils geltenden Fassung, sind die Gerichte in Frankfurt am Main nicht ausschließlich zuständig für sämtliche im Zusammenhang mit den Schuldverschreibungen entstehenden Klagen oder sonstige Verfahren (die "**Rechtsstreitigkeiten**").

(4) *Ernennung von Zustellungsbevollmächtigten.* Für etwaige Rechtsstreitigkeiten vor deutschen Gerichten hat die Emittentin die Garantin zu ihrer Zustellungsbevollmächtigten in Deutschland bestellt.

(5) *Gerichtliche Geltendmachung.* Jeder Anleihegläubiger einer Schuldverschreibung, der diese über ein Clearingsystem hält, ist berechtigt, in jeder Rechtsstreitigkeit gegen die Emittentin oder in jeder Rechtsstreitigkeit, in der der Anleihegläubiger und die Emittentin Partei sind, seine Rechte aus diesen Schuldverschreibungen im eigenen Namen auf der folgenden Grundlage zu schützen oder geltend zu machen: (i) er bringt eine Bescheinigung der Depotbank bei, bei der er für die Schuldverschreibungen ein Wertpapierdepot unterhält, die (a) den vollständigen Namen und die vollständige Adresse des Anleihegläubigers enthält, (b) den Gesamtnennbetrag der Schuldverschreibungen bezeichnet, die unter dem Datum der Bestätigung auf dem Wertpapierdepot verbucht sind, und (c) bestätigt, dass die Depotbank gegenüber dem Clearingsystem eine schriftliche Erklärung abgegeben hat, die die vorstehend unter (a) und (b) bezeichneten Informationen enthält, und (ii) er legt eine Kopie der die betreffenden Schuldverschreibungen verbriefenden Globalurkunde vor, deren Übereinstimmung mit dem Original eine vertretungsberechtigte Person des Clearingsystems oder des Verwahrers des Clearingsystems bestätigt hat, ohne dass eine Vorlage der Originalbelege oder der die Schuldverschreibungen verbriefenden Globalurkunde in einem solchen Verfahren erforderlich wäre. Für die Zwecke des Vorstehenden bezeichnet "**Depotbank**" jede Bank oder ein sonstiges anerkanntes Finanzinstitut, das berechtigt ist, das Wertpapierverwahrungsgeschäft zu betreiben und bei der/dem der Anleihegläubiger ein

§ 14

APPLICABLE LAW, PLACE OF PERFORMANCE, PLACE OF JURISDICTION AND ENFORCEMENT

(1) *Applicable Law.* The Notes, as to form and content, and all rights and obligations of the Noteholders and the Issuer, shall be governed by German law.

(2) *Place of Performance.* Place of performance shall be Frankfurt am Main.

(3) *Submission to Jurisdiction.* Subject to any exclusive court of venue for specific legal proceedings in connection with the SchVG, as amended, the courts in Frankfurt am Main shall have non-exclusive jurisdiction for any action or other legal proceedings (the "**Proceedings**") arising out of or in connection with the Notes.

(4) *Appointment of Service Agent.* For any Proceedings before German courts, the Issuer has appointed the Guarantor as agent for service of process in Germany.

(5) *Enforcement.* Any Noteholder of a Note held through a Clearing System may in any Proceedings against the Issuer, or to which such Noteholder and the Issuer are parties, protect and enforce in its own name its rights arising under such Notes on the basis of (i) a statement issued by the Custodian with whom such Noteholder maintains a securities account in respect of the Notes (a) stating the full name and address of the Noteholder, (b) specifying the aggregate principal amount of the Notes credited to such securities account on the date of such statement and (c) confirming that the Custodian has given written notice to the Clearing System containing the information pursuant to (a) and (b), and (ii) a copy of the Global Note representing the Notes certified as being a true copy by a duly authorised officer of the Clearing System or a depositary of the Clearing System, without the need for production in such Proceedings of the actual records or the Global Note representing the Notes. For purposes of the foregoing, "**Custodian**" means any bank or other financial institution of recognised standing authorised to engage in securities custody business with which the Noteholder maintains a securities account in respect of the Notes and includes the Clearing System. Each Noteholder may, without prejudice to the foregoing, protect and enforce its rights under these Notes also in any other way which is admitted in the country in which the Proceedings are conducted.

Wertpapierdepot für die Schuldverschreibungen unterhält, einschließlich des Clearingsystems. Unbeschadet des Vorstehenden kann jeder Anleihegläubiger seine Rechte aus diesen Schuldverschreibungen auch auf jede andere Weise schützen oder geltend machen, die im Land, in dem die Rechtsstreitigkeit geführt wird, prozessual zulässig ist.

§ 15
SPRACHE

Diese Emissionsbedingungen sind in deutscher Sprache abgefasst. Eine Übersetzung in die englische Sprache ist beigefügt. Der deutsche Text ist bindend und maßgeblich. Die Übersetzung in die englische Sprache ist unverbindlich.

§ 15
LANGUAGE

These Terms and Conditions are written in the German language and provided with an English language translation. The German text shall be prevailing and binding. The English language translation is non-binding.

THE GUARANTEE

Diese Garantie ist in deutscher Sprache abgefasst. Eine Übersetzung in die englische Sprache ist beigefügt. Der deutsche Text ist bindend und maßgeblich. Die Übersetzung in die englische Sprache ist unverbindlich.

GARANTIE

der

Heraeus Holding GmbH
(die "**Garantin**")

zugunsten der Anleihegläubiger der € 500.000.000 2,625 % garantierten Schuldverschreibungen fällig 2027 (die "**Schuldverschreibungen**"), die von der

Heraeus Finance GmbH
(die "**Emittentin**")

begeben worden sind, ISIN DE000A30VGD9.

VORBEMERKUNG:

- (A) Die Garantin möchte die ordnungsgemäße Zahlung von allen Beträgen, die nach Maßgabe der Emissionsbedingungen (die "**Emissionsbedingungen**") der von der Emittentin begebenen Schuldverschreibungen zu zahlen sind, garantieren.
- (B) Es ist Sinn und Zweck dieser Garantie, vorbehaltlich der nachstehenden Garantiebedingungen sicherzustellen, dass die Anleihegläubiger unter allen tatsächlichen und rechtlichen Umständen und unabhängig von der Rechtmäßigkeit, Wirksamkeit, Verbindlichkeit und Durchsetzbarkeit der Verpflichtungen der Emittentin aus den Schuldverschreibungen und unabhängig von sonstigen Gründen, aufgrund derer die Emittentin ihre Verpflichtungen nicht erfüllt, alle nach Maßgabe der Emissionsbedingungen zu zahlenden Beträge bei Eintritt der Fälligkeit erhalten.

ES WIRD FOLGENDES VEREINBART:

1 Definitionen

Die in dieser Garantie verwendeten und nicht anders definierten Begriffe haben die ihnen in den Emissionsbedingungen zugewiesene Bedeutung.

2 Garantie

- (a) Die Garantin übernimmt gegenüber der Deutsche Bank Aktiengesellschaft (die "**Hauptzahlstelle**") zugunsten jedes Anleihegläubigers jeder Schuldverschreibungen (wobei dieser Begriff die

This Guarantee are written in the German language and provided with an English language translation. The German text shall be prevailing and binding. The English language translation is non-binding.

GUARANTEE

of

Heraeus Holding GmbH
(the "**Guarantor**")

for the benefit of the Noteholders of the € 500,000,000 2.625 per cent. Guaranteed Notes due 2027 (the "**Notes**"), issued by

Heraeus Finance GmbH
(the "**Issuer**")

ISIN DE000A30VGD9.

WHEREAS:

- (A) The Guarantor intends to guarantee the due and punctual payment of any amounts payable by the Issuer in accordance with the terms and conditions of the Notes (the "**Terms and Conditions**").
- (B) The intent and purpose of this Guarantee is to ensure, subject to the terms and conditions of this Guarantee, that the Noteholders under any and all circumstances, whether factual or legal, and irrespective of the legality, validity and binding effect or enforceability of the obligations of the Issuer under the Notes, or any other reasons on the basis of which the Issuer may fail to fulfil its obligations, receive any and all sums as and when due in accordance with the Terms and Conditions.

IT IS AGREED AS FOLLOWS:

1 Definitions

Terms used in this Guarantee and not otherwise defined herein will have the meaning attributed to them in the Terms and Conditions.

2 Guarantee

- (a) The Guarantor unconditionally and irrevocably guarantees towards Deutsche Bank Aktiengesellschaft (the "**Principal Paying Agent**") for the benefit of each holder of each Note (which

Globalurkunden, welche die Schuldverschreibungen verbrieft, einschließt) (jeweils ein "**Anleihegläubiger**") die unbedingte und unwiderrufliche Garantie für die ordnungsgemäße und pünktliche Zahlung aller von der Emittentin auf die Schuldverschreibungen zu zahlenden Beträge, sobald diese gemäß den Emissionsbedingungen fällig werden (die "**Garantie**").

(b) Die Garantie begründet eine unmittelbare, nicht nachrangige und unbesicherte Verpflichtung der Garantin, die mit allen anderen gegenwärtigen und zukünftigen nicht besicherten und nicht nachrangigen Verbindlichkeiten der Garantin zumindest im gleichen Rang steht, mit Ausnahme von Verbindlichkeiten, die nach geltenden Rechtsvorschriften vorrangig sind.

(c) Die Garantin verpflichtet sich, solange noch Kapital- oder Zinsbeträge aus den Schuldverschreibungen ausstehen, jedoch nur bis zu dem Zeitpunkt, an dem alle auf die Schuldverschreibungen gemäß den Emissionsbedingungen zu zahlenden Beträge dem Clearingsystem zur Verfügung gestellt worden sind, (i) kein Grundpfandrecht, Mobiliarpfandrecht, Pfandrecht oder sonstiges dingliches Sicherungsrecht (jedes ein "**Sicherungsrecht**") an ihren gesamten gegenwärtigen oder zukünftigen Vermögenswerten oder Einkünften oder Teilen davon zur Besicherung einer anderen gegenwärtigen oder zukünftigen Kapitalmarktverbindlichkeit zu gewähren oder bestehen zu lassen, und (ii) soweit rechtlich möglich, zu veranlassen, dass keine ihrer Tochtergesellschaften Sicherungsrechte an gegenwärtigen oder zukünftigen Teilen ihres Vermögens oder ihres Vermögens insgesamt zur Sicherung gegenwärtiger oder zukünftiger Kapitalmarktverbindlichkeiten bestellt oder fortbestehen lässt, ohne zuvor oder gleichzeitig entweder die Anleihegläubiger gleichrangig und anteilig an einem solchen Sicherungsrecht zu beteiligen oder zu Gunsten der Anleihegläubiger ein anderes, gleichwertiges Sicherungsrecht zu bestellen, welches von einem unabhängigen Sachverständigen als gleichwertige Sicherheit beurteilt wird.

Die vorgenannte Verpflichtung findet keine Anwendung auf ein Sicherungsrecht, das:

- (i) nach dem anzuwendenden Recht zwingend notwendig ist; oder
- (ii) als Voraussetzung einer staatlichen Genehmigung erforderlich ist; oder

expression will include the Global Notes representing the Notes) (each a "**Noteholder**") the due and punctual payment of any amounts to be paid by the Issuer under the Notes, as and when the same will become due in accordance with the Terms and Conditions (the "**Guarantee**").

(b) The Guarantee constitutes a direct, unsubordinated and unsecured obligation of the Guarantor, ranking at least *pari passu* with all other present and future unsecured and unsubordinated obligations of the Guarantor, save for such obligations which may be preferred by applicable law.

(c) The Guarantor undertakes, so long as any amounts of interest or principal remain outstanding under the Notes, but only up to the time all amounts payable to Noteholders under the Notes in accordance with the Terms and Conditions have been placed at the disposal of the Clearing System, (i) not to create or permit to subsist any mortgage, charge, pledge or other form of encumbrance *in rem* (each a "**Security Interest**") over the whole or any part of its present or future assets or revenues to secure any Capital Markets Indebtedness, and (ii) to procure, to the extent legally possible, that none of its Subsidiaries will grant or permit to subsist any Security Interest over any or all of its present or future assets, as security for any present or future Capital Markets Indebtedness, without prior thereto or at the same time letting the Noteholders either share equally and rateably in such Security Interest or benefit from an equivalent other Security Interest which will be approved by an independent expert as being equivalent security.

The undertaking set out above will not apply to a Security Interest which:

- (i) is mandatory according to applicable laws; or
- (ii) is required as a prerequisite for governmental approvals; or

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|---|---|
| <p>(iii) zur Besicherung einer in Bezug auf oder im Zusammenhang mit einer Verbriefung oder vergleichbaren Finanzierungsvereinbarung in Bezug auf Vermögenswerte der Garantin oder Tochtergesellschaft eingegangenen Kapitalmarktverbindlichkeit gestellt wird, bei der die Rückgriffsrechte der Gläubiger der betreffenden Kapitalmarktverbindlichkeit ausschließlich auf die betreffenden Vermögenswerte oder die daraus erzielten Erträge beschränkt sind, oder</p> | <p>(iii) is provided to secure any Capital Markets Indebtedness incurred in respect of or in connection with any securitisation or similar financing arrangement relating to assets owned by the Guarantor or any Subsidiary and where the recourse of the holders of such Capital Markets Indebtedness is limited solely to such assets or any income generated therefrom; or</p> |
| <p>(iv) am Vermögen einer von der Garantin oder einer Tochtergesellschaft erst nach dem Tag der Begebung der Schuldverschreibungen erworbenen Person bestellt wurde, die mit dem Erwerb zu einer Tochtergesellschaft wird, sofern das betreffende Sicherungsrecht bereits im Zeitpunkt des Erwerbs durch die Garantin oder die Tochtergesellschaft bestand, es sei denn, das betreffende Sicherungsrecht war im Hinblick auf den bevorstehenden Erwerb dieser Person durch die Garantin oder die Tochtergesellschaft begründet worden; oder</p> | <p>(iv) was granted over assets of a person acquired by the Guarantor or a Subsidiary only after the issue date of the Notes which becomes a Subsidiary upon such acquisition, provided that the Security Interest had been in existence at the time of the acquisition by the Guarantor or the Subsidiary, unless such Security Interest was granted in respect of the impending acquisition of that person by the Guarantor or the Subsidiary; or</p> |
| <p>(v) an einem Vermögensgegenstand bestellt wurde, der von der Garantin oder einer Tochtergesellschaft erst nach dem Tag der Begebung der Schuldverschreibungen erworben wurde, sofern das betreffende Sicherungsrecht bereits im Zeitpunkt des Erwerbs durch die Garantin oder die Tochtergesellschaft bestand, es sei denn, das betreffende Sicherungsrecht war im Hinblick auf den bevorstehenden Erwerb dieses Vermögensgegenstands durch die Garantin oder die Tochtergesellschaft begründet worden; oder</p> | <p>(v) was granted over assets acquired by the Guarantor or a Subsidiary only after the issue date of the Notes, provided that the Security Interest had been in existence at the time of the acquisition by the Guarantor or the Subsidiary, unless such Security Interest was granted in respect of the impending acquisition of that asset by the Guarantor or the Subsidiary; or</p> |
| <p>(vi) an dem Tag der Begebung der Schuldverschreibungen bereits besteht; oder</p> | <p>(vi) is already existing on the issue date of the Notes; or</p> |
| <p>(vii) der Erneuerung, Verlängerung oder dem Austausch irgendeines Sicherungsrechts gemäß den vorstehenden Ziffern (i) bis (vi) dient.</p> | <p>(vii) is provided in connection with the renewal, extension or replacement of any security pursuant to the foregoing clauses (i) through (vi).</p> |

Ein nach der Garantie zu leistendes Sicherungsrecht kann auch zu Gunsten eines Treuhänders der Anleihegläubiger bestellt werden.

"**Kapitalmarktverbindlichkeit**" ist jede gegenwärtige oder zukünftige Verbindlichkeit zur

Any Security Interest which is to be provided pursuant to the Guarantee may also be provided to a person acting as trustee for the Noteholders.

"**Capital Markets Indebtedness**" means any present or future obligation for the payment or repayment of

Zahlung oder Rückzahlung aufgenommener Gelder (einschließlich Verpflichtungen aus Garantien oder anderen Haftungsübernahmen für eine solche Verbindlichkeit eines Dritten) aus Schuldverschreibungen oder sonstigen Wertpapieren mit einer ursprünglichen Laufzeit von mehr als einem Jahr, die an einer Börse, einem Over-the-Counter-Markt oder an einem anderen anerkannten Wertpapiermarkt notiert oder gehandelt werden oder werden können, oder aus Schuldscheindarlehen oder Namensschuldverschreibungen.

"Tochtergesellschaft" ist jede Gesellschaft, Personengesellschaft oder jedes sonstige Unternehmen, an der bzw. dem die Garantin direkt oder indirekt insgesamt mehr als 50 % des Kapitals oder der Stimmrechte hält und die bzw. das die Garantin vollständig in ihren Konzernabschluss einzubeziehen hat.

- (d) Die Verpflichtungen der Garantin aus dieser Garantie (i) sind selbständig und unabhängig von den Verpflichtungen der Emittentin aus den Schuldverschreibungen, (ii) bestehen unabhängig von der Rechtmäßigkeit, Wirksamkeit, Verbindlichkeit und Durchsetzbarkeit der Verpflichtungen der Emittentin aus den Schuldverschreibungen und (iii) werden nicht durch Ereignisse, Bedingungen oder Umstände tatsächlicher oder rechtlicher Art berührt.

Zahlungen auf diese Garantie erfolgen ausschließlich gemäß den Emissionsbedingungen.

Wenn die Emittentin oder die Garantin eine gegenüber einem Anleihegläubiger aus den Schuldverschreibungen bestehende Verpflichtung der Emittentin erfüllt, erlischt zugleich das betreffende garantierte Recht dieses Anleihegläubigers aus der Garantie.

Zugleich mit der Erfüllung einer Verpflichtung der Garantin zugunsten eines Anleihegläubigers aus der Garantie erlischt das jeweilige garantierte Recht eines Anleihegläubigers aus den Schuldverschreibungen.

Die Verpflichtungen der Garantin aus dieser Garantie erlöschen im Zeitpunkt der vollständigen, endgültigen und unwiderruflichen Erfüllung sämtlicher in den Schuldverschreibungen eingegangenen Zahlungsverpflichtungen.

- (e) Im Falle einer Ersetzung der Emittentin durch eine Nachfolgeschuldnerin gemäß § 10 der

borrowed monies (including obligations by reason of any guarantee or other assumption of liability for any such obligation of a third-party) under any bonds, notes or other securities with an original maturity of more than one year which are or are capable of being quoted, listed, dealt in or traded on a stock exchange, an over-the-counter-market or other recognised securities market, or under Schuldschein loans or registered Notes (*Namensschuldverschreibungen*).

"Subsidiary" means any corporation, partnership or other enterprise in which the Guarantor directly or indirectly holds in the aggregate more than 50 per cent. of the capital or the voting rights and which is required to be fully consolidated in the consolidated accounts of the Guarantor.

- (d) The obligations of the Guarantor under this guarantee (i) will be separate and independent from the obligations of the Issuer under the Notes, (ii) will exist irrespective of the legality, validity, binding effect and enforceability of the obligations of the Issuer under Notes, and (iii) will not be affected by any event, condition or circumstance of whatever nature, whether factual or legal.

Payments under this Guarantee are subject to (without limitation) the Terms and Conditions.

If the Issuer or the Guarantor discharges any obligation of the Issuer under the Notes in favour of any Noteholder, the relevant guaranteed right of such Noteholder under the Guarantee will cease to exist at the same time.

Upon discharge of any obligation of the Guarantor subsisting under the Guarantee in favour of any Noteholder, the relevant guaranteed right of such Noteholder under the Notes will cease to exist.

The obligations of the Guarantor under this guarantee will cease upon the full, definitive and irrevocable satisfaction of any and all payment obligations expressed to be assumed under the Notes.

- (e) In the event of a substitution of the Issuer by a Substitute Debtor in accordance with § 10 of the

Emissionsbedingungen erstreckt sich diese Garantie auf sämtliche von der Nachfolgeschuldnerin gemäß den Emissionsbedingungen zu zahlenden Beträge. Dies gilt auch dann, wenn die Nachfolgeschuldnerin die Verpflichtungen aus den Schuldverschreibungen unmittelbar von der Garantin übernommen hat.

- (f) Sämtliche auf die Garantie zu zahlenden Beträge werden ohne Einbehalt oder Abzug von Steuern, Abgaben, Festsetzungen oder behördlicher Gebühren jedweder Art geleistet ("**Steuern**"), die von dem Staat, in dem die Garantin steuerlich ansässig ist oder einer deren jeweiligen Gebietskörperschaften oder einer deren jeweiligen zur Erhebung von Steuern berechtigten Behörden oder sonstigen Stellen auferlegt, erhoben, eingezogen, einbehalten oder festgesetzt werden, sofern nicht die Garantin kraft Gesetzes oder einer sonstigen Rechtsvorschrift zu einem solchen Einbehalt oder Abzug verpflichtet ist. Sofern die Garantin zu einem solchen Einbehalt oder Abzug verpflichtet ist, wird die Garantin zusätzliche Beträge (die "**Zusätzlichen Beträge**") an die Anleihegläubiger zahlen, so dass die Anleihegläubiger die Beträge erhalten, die sie ohne den betreffenden Einbehalt oder Abzug erhalten hätten. Solche Zusätzlichen Beträge sind jedoch nicht zahlbar wegen solcher Steuern in Bezug auf die Schuldverschreibungen oder Garantie,
- (i) die wegen einer Verbindung des betreffenden Anleihegläubigers zu dem Staat, in dem die Emittentin steuerlich ansässig ist bzw. zu dem Staat, in dem die Garantin steuerlich ansässig ist, die nicht nur aus der bloßen Inhaberschaft der Schuldverschreibungen besteht, einzubehalten oder abzuziehen sind; oder
- (ii) deren Einbehalt oder Abzug ein Anleihegläubiger durch Vorlage eines Formulars oder einer Bescheinigung und/oder durch Abgabe einer Nichtansässigkeitserklärung oder Inanspruchnahme einer vergleichbaren Ausnahme oder Geltendmachung eines Erstattungsanspruches hätte vermeiden können, aber nicht vermieden hat; oder
- (iii) die aufgrund (A) einer Richtlinie oder Verordnung der Europäischen Union betreffend die Besteuerung von Zinserträgen oder (B) einer zwischenstaatlichen Vereinbarung, eines zwischenstaatlichen Abkommens oder einer zwischenstaatlichen

Terms and Conditions, this Guarantee will extend to any and all amounts payable by the Substitute Debtor in accordance with the Terms and Conditions. The foregoing will also apply if the Substitute Debtor will have assumed the obligations arising under the Notes directly from the Guarantor.

- (f) All amounts to be paid in respect of the Guarantee will be paid free and clear of, and without withholding or deduction for, any taxes, duties, assessments or governmental charges of whatever nature ("**Taxes**") imposed, levied, collected, withheld or assessed by the Guarantor's country of domicile for tax purposes or any of their respective political subdivisions or any authority or any other agency of or in any such country having power to tax, unless the Guarantor is compelled by law to make such withholding or deduction. If the Guarantor is required to make such withholding or deduction, the Guarantor will pay such additional amounts (the "**Additional Amounts**") to the Noteholders as the Noteholders would have received if no such withholding or deduction had been required, except that no such Additional Amounts will be payable for any such Taxes in respect of Notes or the Guarantee:
- (i) which are to be withheld or deducted by reason of the relevant Noteholder having some connection with the Guarantor's country of domicile for tax purposes other than the mere holding of that Note; or
- (ii) the withholding or deduction of which a Noteholder would be able to avoid by presenting any form or certificate and/or making a declaration of non-residence or similar claim for exemption or refund but fails to do so; or
- (iii) which are to be withheld or deducted pursuant to (A) any European Union Directive or Regulation concerning the taxation of interest income, or (B) any international treaty, agreement or understanding relating to such taxation and to

Verständigung über deren Besteuerung, an der der Staat, in dem die Garantin steuerlich ansässig ist oder die Europäische Union beteiligt ist, oder (C) einer gesetzlichen Vorschrift, die diese Richtlinie, Verordnung, Vereinbarung, Verständigung oder dieses Abkommen umsetzt oder befolgt, abzuziehen oder einzubehalten sind; oder

- (iv) von einer Zahlung an einen Anleihegläubiger abzuziehen oder einzubehalten sind, der in einem nicht kooperativen Steuerhoheitsgebiet im Sinne des Gesetzes zur Abwehr von Steuervermeidung und unfäurem Steuerwettbewerb (Steueroasen-Abwehrgesetz) wie jeweils geändert oder ersetzt (einschließlich der aufgrund von diesem Gesetz ergangenen Verordnungen)) ansässig ist; oder
- (v) im Falle einer Kombination der vorgenannten Varianten.

Die Garantin ist nicht verpflichtet, zusätzliche Beträge in Bezug auf einen Einbehalt oder Abzug von Beträgen zu zahlen, die gemäß Sections 1471 bis 1474 des U.S. Internal Revenue Code (in der jeweils geltenden Fassung oder gemäß Nachfolgebestimmungen), gemäß zwischenstaatlicher Abkommen, gemäß den in einer anderen Rechtsordnung in Zusammenhang mit diesen Bestimmungen erlassenen Durchführungsvorschriften oder gemäß mit dem U.S. Internal Revenue Service geschlossenen Verträgen von der Emittentin, der jeweiligen Zahlstelle oder einem anderen Beteiligten abgezogen oder einbehalten wurden ("**FATCA-Steuerabzug**") oder Anleihegläubiger in Bezug auf einen FATCA-Steuerabzug schadlos zu halten.

- 3** Diese Garantie und alle darin enthaltenen Vereinbarungen stellen einen Vertrag zugunsten der jeweiligen Anleihegläubiger als begünstigte Dritte gemäß § 328 Absatz 1 BGB dar. Sie begründen das Recht eines jeden Anleihegläubigers, die Erfüllung der hierin eingegangenen Verpflichtungen unmittelbar von der Garantin zu fordern und diese Verpflichtungen unmittelbar gegenüber der Garantin durchzusetzen.

which the Guarantor's country of domicile for tax purposes or the European Union is a party, or (C) any provision of law implementing, or complying with, or introduced to conform with, such Directive, Regulation, treaty, agreement or understanding; or

- (iv) are to be withheld or deducted from any payment to be made to a Noteholder being resident a non-cooperative country or territory (*nicht kooperatives Steuerhoheitsgebiet*) within the meaning of the act to prevent tax evasion and unfair tax competition (*Steueroasen-Abwehrgesetz*) as amended or replaced from time to time (including any ordinance (*Verordnung*) enacted based on this act); or
- (v) in the case of any combination of the above items.

In any event, the Guarantor will have no obligation to pay additional amounts deducted or withheld by the Guarantor, the relevant Paying Agent or any other party in relation to any withholding or deduction of any amounts required by the rules of U.S. Internal Revenue Code Sections 1471 through 1474 (or any amended or successor provisions), pursuant to any inter-governmental agreement, or implementing legislation adopted by another jurisdiction in connection with these provisions, or pursuant to any agreement with the U.S. Internal Revenue Service ("**FATCA Withholding**"), or to indemnify any Noteholder in relation to any FATCA Withholding.

- 3** This Guarantee and all undertakings contained herein constitute a contract for the benefit of the Noteholders from time to time as third-party beneficiaries pursuant to § 328(1) BGB¹. They give rise to the right of each such Noteholder to require performance of the obligations undertaken herein directly from the Guarantor, and to enforce such obligations directly against the Guarantor.

¹ In English language translation § 328(1) of the German Civil Code reads as follows: "A contract may stipulate performance for the benefit of a third party, to the effect that the third party acquires the right directly to demand performance."

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| <p>4 Die Hauptzahlstelle handelt nicht als Treuhänder oder in einer ähnlichen Eigenschaft für die Anleihegläubiger.</p> | <p>4 The Principal Paying Agent does not act in a fiduciary or in any other similar capacity for the Noteholders.</p> |
| <p>5 Verschiedene Bestimmungen</p> <p>(a) Diese Garantie unterliegt deutschem Recht.</p> <p>(b) Erfüllungsort ist Frankfurt am Main.</p> <p>(c) Nicht ausschließlich zuständig für sämtliche im Zusammenhang mit dieser Garantie entstehenden Klagen oder sonstige Verfahren ist das Landgericht Frankfurt am Main.</p> <p>(d) Jeder Anleihegläubiger kann in jedem Rechtsstreit gegen die Garantin und in jedem Rechtsstreit, in dem er und die Garantin Partei sind, seine Rechte aus dieser Garantie auf der Grundlage einer von einer vertretungsberechtigten Person der Hauptzahlstelle beglaubigten Kopie dieser Garantie ohne Vorlage des Originals dieser Garantie im eigenen Namen wahrnehmen und durchsetzen.</p> <p>(e) Die Hauptzahlstelle verpflichtet sich, das Original dieser Garantie bis zur Erfüllung sämtlicher Verpflichtungen aus den Schuldverschreibungen und dieser Garantie zu verwahren. Nach Erfüllung sämtlicher Verpflichtungen aus den Schuldverschreibungen hat die Hauptzahlstelle diese Garantie an die Garantin zurückzugeben.</p> | <p>5 Miscellaneous Provisions</p> <p>(a) This Guarantee will be governed by, and construed in accordance with, German law.</p> <p>(b) Place of performance will be Frankfurt am Main.</p> <p>(c) The District Court (<i>Landgericht</i>) in Frankfurt am Main will have non-exclusive jurisdiction for any action or other legal proceedings arising out of or in connection with this Guarantee.</p> <p>(d) On the basis of a copy of this Guarantee certified as being a true copy by a duly authorised officer of the Principal Paying Agent, each Noteholder may protect and enforce in its own name its rights arising under this Guarantee in any legal proceedings against the Guarantor or to which such Noteholder and the Guarantor are parties, without the need for presentation of the original of this Guarantee in such proceedings.</p> <p>(e) The Principal Paying Agent agrees to hold the original of this Guarantee in custody until all obligations under the Notes and this Guarantee have been fulfilled. Upon all obligations under the Notes having been fulfilled the Principal Paying Agent will return this Guarantee to the Guarantor.</p> |
| <p>6 Für Änderungen der Bedingungen der Garantie durch Beschluss der Anleihegläubiger mit Zustimmung der Garantin gilt § 13 der Emissionsbedingungen entsprechend.</p> | <p>6 In relation to amendments of the terms of the Guarantee by resolution of the Noteholders with the consent of the Guarantor, § 13 of the Terms and Conditions applies <i>mutatis mutandis</i>.</p> |
| <p>7 Die deutsche Version dieser Garantie ist bindend. Die englische Übersetzung dient nur zu Informationszwecken.</p> | <p>7 The German text of this Guarantee is binding. The English translation is for information purposes only.</p> |

Hanau, Mai 2022

Heraeus Holding GmbH

Hanau, May 2022

Heraeus Holding GmbH

Die Garantin und die Deutsche Bank Aktiengesellschaft sind sich einig, dass die Deutsche Bank Aktiengesellschaft nicht als Treuhänderin oder in einer ähnlichen Funktion für die Anleihegläubiger tätig wird. Die Deutsche Bank Aktiengesellschaft verpflichtet sich, das Original dieser Garantie bis zur Erfüllung sämtlicher Verpflichtungen aus den Schuldverschreibungen und dieser Garantie zu verwahren.

Wir nehmen hiermit die oben genannte Erklärung ohne Obligo, Gewährleistung oder Haftung unsererseits an.

Frankfurt am Main, Juni 2022

Deutsche Bank Aktiengesellschaft

The Guarantor and Deutsche Bank Aktiengesellschaft agree that Deutsche Bank Aktiengesellschaft is not acting as trustee or in a similar capacity for the Noteholders. Deutsche Bank Aktiengesellschaft undertakes to hold the original of the Guarantee until all obligations under the Notes and the Guarantee have been fulfilled.

We hereby accept the above declaration without recourse, warranty or liability on us.

Frankfurt am Main, June 2022

Deutsche Bank Aktiengesellschaft

DESCRIPTION OF THE ISSUER

General Information on the Issuer

Incorporation, Corporate Seat, Duration

Heraeus Finance GmbH is a limited liability company (*Gesellschaft mit beschränkter Haftung*) incorporated under the laws of the Federal Republic of Germany, is registered in the commercial register of the local court (*Amtsgericht*) of Hanau under registration number HRB 93178 and maintains its registered seat (*Sitz*) in Hanau, Germany. The Issuer's business address is Heraeusstraße 12-14, 63450 Hanau, Federal Republic of Germany (phone number: +49 6181 35-0). The Legal Entity Identifier (LEI) of the Issuer is 529900SD9F0NFGBUK83.

The Issuer operates under the laws of the Federal Republic of Germany.

The website of the Group is <https://www.heraeus.com>. The information on such website does not form part of this Prospectus unless that information is incorporated by reference into this Prospectus.

The Issuer was incorporated on 19 March 2010 and is established for an unlimited period of time.

Corporate Objectives

The Issuer acts as vehicle for intra-group financing activities. The object of the Issuer, as stated in § 2 of its articles of association, is to carry out any type of financial transactions, in particular transactions which serve the purpose to finance the Heraeus Group. Such transactions include in particular issuing notes and raising loans, extending loans and providing any kind of support to companies of the Heraeus Group, coordinating and managing payments within the Heraeus Group and managing currency, interest rate and market price risks. Activities which would require a licence under the German Banking Act (*Kreditwesengesetz*) are not covered by the Issuer's objects.

Financial Year

The financial year of the Issuer is the calendar year.

Auditors

The Issuer is a small corporation in the meaning of § 267 para. 1 German Commercial Code (*Handelsgesetzbuch*). It is hence under no statutory duty to have its annual financial statements audited. Accordingly, no statutory auditor was appointed for the Issuer.

Organizational Structure, Share Capital and Shareholder

The Issuer is a wholly-owned subsidiary of the Guarantor and has no subsidiaries.

As of 31 December 2021, the share capital of the Issuer was EUR 25,000. All shares in the Issuer are fully paid up.

Business Overview

The Issuer is a funding vehicle for the Heraeus Group. As such, it raises funds for example through the issue of notes and on-lends it to the Guarantor or other group companies.

The business of the Issuer is directly related to the extent the Group utilises the Issuer for future funding needs. The extent future funding needs arise depends on the development of the operating business and investment projects of Heraeus Group.

Governmental, Legal, Tax and Arbitration Proceedings

The Issuer is not currently involved, and has not been involved in the past 12 months, in governmental, legal or arbitration proceedings (including pending or threatened proceedings) that could or recently had a significant impact on the financial position or profitability of the Issuer.

Material Contracts

Domination and Profit and Loss Transfer Agreement

The Issuer and the Guarantor entered into a domination and a profit and loss transfer agreement (*Beherrschungs- und Ergebnisabführungsvertrag*). Under this agreement, the Guarantor is able to issue legally binding instructions to the Board of Managing Directors of the Issuer. In return, the Guarantor has to compensate any annual loss of the Issuer that occurred during the term of the agreement.

Management Bodies of the Issuer

The management body of the Issuer is the Board of Managing Directors (*Geschäftsführung*).

The table below lists the members of the Board of Managing Directors as of the date of this Prospectus:

<u>Name</u>	<u>Position</u>	<u>Principal Outside Board Memberships</u>
Jan Rinnert	Managing Director	<ul style="list-style-type: none">Member of the Supervisory Board of Teufelberger AG, Austria
Rolf Wetzell	Managing Director	<ul style="list-style-type: none">Member of the Advisory Board of Krohne Messtechnik GmbH, Germany

The business address of the members of the Board of Managing Directors is the registered office of the Issuer at Heraeusstraße 12-14, 63450 Hanau, Germany. The members of the Board of Managing Directors of the Issuer are also members of the Board of Managing Directors of the Guarantor.

The Issuer has not been notified and has otherwise not been informed by any of the members of the Board of Managing Directors named above about any potential conflicts of interest between the obligations of the persons towards the Issuer and their own interests or other obligations.

Financial Information

As (i) the Issuer is a wholly-owned subsidiary of the Guarantor, (ii) the Issuer is included in the consolidated financial statements of the Guarantor and (iii) the Notes issued will unconditionally and irrevocably be guaranteed by the Guarantor, no stand-alone financial information of the Issuer have been included in this Prospectus. Non-disclosure of the Issuer's financial statements would not be likely to mislead investors with regard to facts and circumstances that are essential for assessing the securities included in this Prospectus.

The consolidated financial statements of the Guarantor as of and for the financial years ended 31 December 2021 and 2020 have been incorporated by reference into this Prospectus. Please refer to the section "*Documents Incorporated by Reference*" below.

Recent Developments

There have been no recent events which are to a material extent relevant to the evaluation of the Issuer's solvency.

Trend Information and Significant Changes

There has been no material adverse change in the prospects of the Issuer since 31 December 2021.

There has been no significant change in the financial performance of the Issuer since 31 December 2021.

There has been no significant change in the financial position the Issuer since 31 December 2021.

DESCRIPTION OF THE GUARANTOR AND THE GROUP

General Information on the Guarantor

Incorporation, Corporate Seat, Duration

Heraeus Holding GmbH is a limited liability company (*Gesellschaft mit beschränkter Haftung*) incorporated under the laws of the Federal Republic of Germany, is registered in the commercial register of the local court (*Amtsgericht*) of Hanau under registration number HRB 3364 and maintains its registered seat (*Sitz*) in Hanau, Germany. The Guarantor's business address is Heraeusstraße 12-14, 63450 Hanau, Federal Republic of Germany (phone number: +49 6181 35-0). The Legal Entity Identifier (LEI) of the Guarantor is 5493007EO7JOPWXHBJ27.

The Guarantor operates under the laws of the Federal Republic of Germany.

The website of the Guarantor is <https://www.heraeus.com>. The information on such website does not form part of this Prospectus unless that information is incorporated by reference into this Prospectus.

The Guarantor was incorporated on 28 January 2004 and is established for an unlimited period of time.

Corporate Objectives

The objects and purposes of the Guarantor, as stated in § 2 of its articles of association, are (i) the acquisition and the management of shareholdings of the Group, (ii) asset management for companies of the Group, (iii) the acquisition and the management of shares in other companies, (iv) the assumption of tasks in the area of research and development, production, distribution and management (including financing) within the Group, and (v) the provision of production facilities for companies of the Group.

Financial Year

The financial year of the Guarantor is the calendar year.

Auditors

The Guarantor's independent auditors are Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft, Stuttgart, office Eschborn/Frankfurt am Main, Mergenthaler Allee 3-5, 65760 Eschborn, Germany ("EY"). EY is a member of the Chamber of Public Accountants (*Wirtschaftsprüferkammer*).

EY has audited the German language consolidated financial statements of the Guarantor as of and for the financial years ended 31 December 2020 and 31 December 2021, prepared in accordance with International Financial Reporting Standards as adopted by the European Union ("IFRS") and the additional requirements of German commercial law pursuant to § 315e para. 1 German Commercial Code (*Handelsgesetzbuch*), in accordance with § 317 German Commercial Code (*Handelsgesetzbuch*) and the German generally accepted standards for financial statement audits promulgated by the Institute of Public Auditors in Germany (*Institut der Wirtschaftsprüfer in Deutschland e.V., IDW*) and issued in each case a German language unqualified independent auditor's report (*Bestätigungsvermerk des unabhängigen Abschlussprüfers*) thereon.

Organizational Structure, Share Capital and Shareholder

The Guarantor is the ultimate parent company of the Group and responsible for the Group's overall management.

The issued share capital of the Guarantor amounts to EUR 210,000,000. The share capital is fully paid up. The shares are divided in two classes of voting shares differing in its amount of voting rights. The shares are either directly or indirectly owned by persons who are descendants or the spouse of descendants of one of the founders of the Group or certain former chairmen or other members of the Board of Managing Directors of the Guarantor. In addition, the non-profit civil law foundation Wilhelm und Else Heraeus Stiftung holds shares in the Guarantor. The shares may only be transferred to persons, including intermediary legal entities, related to the founders or certain former chairmen or other members of the Board of Managing Directors which qualify as "eligible to succeed" (*nachfolgeberechtigt*) pursuant to § 17 of the articles of association of the Guarantor dated 7 June 2021; Wilhelm und

Else Heraeus Stiftung is also eligible to succeed. Dispositions over the shares may also only be made to such persons who are eligible to succeed. Any intended transfer or disposition requires approval of a shareholder committee or a qualified majority of the shareholders.

Ratings

The Guarantor received a long-term issuer rating by S&P Global Ratings Europe Limited ("**S&P**") of "BBB+".

The Guarantor received a long-term issuer rating by Moody's Deutschland GmbH ("**Moody's**") of "Baa1".

S&P and Moody's are established in the European Union and are registered under Regulation (EC) No 1060/2009 of the European Parliament and of the Council of 16 September 2009 on credit rating agencies, as amended (the "**CRA Regulation**")².

A credit rating is not a recommendation to buy, sell or hold securities and may be subject to revision, suspension or withdrawal at any time by the relevant rating agency.

History

The origins of the Heraeus family business can be traced back to its founding in 1660. The origins of the Guarantor date back to 1851, when Wilhelm Carl Heraeus (1827-1904) took over his father's pharmacy business in the town of Hanau in Germany. In 1856, he made his first scientific breakthrough when he succeeded in melting platinum by using an oxyhydrogen flame. This achievement had consequences for many diverse industries all over the world.

Today, Heraeus is a globally active precious metals and technology group with over 170 years of tradition. The Group is considered among the Top 10 family companies in Germany and is officially included in the Global Fortune 500 ranking of the largest corporations by revenue published by Fortune magazine.

Business Overview

Heraeus is a family-owned international technology Group headquartered in Hanau, Germany with more than 100 sites in over 40 countries. As of 31 December 2021, the Group had approximately 15 thousand employees and holds about 5,500 unique patents.

Heraeus business activities are conducted by twelve global business units ("**GBU**"), which can be allocated to four broad fields in which the Group is active:

- Environmental
- Health
- Industrials
- Electronics

In the financial year ended 31 December 2021, the Group recorded total revenue of EUR 29,506 million thereof EUR 27,234 million trading and precious metal related revenue ("**PM Revenue**") and EUR 2,272 million non-precious metal revenue ("**NPM Revenue**").

The following tables provide for an overview of the allocation of the NPM Revenue to the Group's fields of activity, customer industries and regions in the financial year ended 31 December 2021:

² The European Securities and Markets Authority publishes on its website (<https://www.esma.europa.eu/supervision/credit-rating-agencies/risk>) a list of credit rating agencies registered in accordance with the CRA Regulation. That list is updated within five working days following the adoption of a decision under Article 16, 17 or 20 CRA Regulation. The European Commission shall publish that updated list in the Official Journal of the European Union within 30 days following such update.

Field of Activity	NPM Revenue in EUR million	Share of NPM Revenue
	<i>(audited)</i>	<i>(unaudited)</i>
Environmental.....	592	26%
Health.....	458	20%
Industrials	690	30%
Electronics	531	23%
Corporate	1	0%
Total	2,272	100%

Customer Industries*	NPM Revenue in EUR million	Share of NPM Revenue
	<i>(unaudited unless otherwise specified)</i>	<i>(unaudited)</i>
Healthcare	529	23%
Automotive	209	9%
Semiconductor	358	16%
Industrial	246	11%
Renewable Energy	49	2%
Telecommunication.....	132	6%
Mining / Steel	535	24%
Other	214	9%
Total	2,272**	100%

* Indicative numbers based on Heraeus' controlling.

** audited

Region	NPM Revenue in EUR million	Share of NPM Revenue
	<i>(audited)</i>	<i>(unaudited)</i>
Germany	310	14%
Europe excluding Germany	451	20%
Americas	586	26%
Asia	875	38%
Rest of the World	50	2%
Total	2,272	100%

Fields of Activity and Global Business Units

Heraeus is active in the following fields:

Environmental

The Environmental field of activity encompasses the development of sustainable technologies for a clean environment, such as silver paste for photovoltaics products which contribute to resource-efficient power generation, specialty light sources which help to purify air and water as well as services throughout the precious metal cycle, from procurement, through processing, to recycling.

The following table provides for an overview of the regional allocation of the NPM Revenue in the Environmental field of activity in the financial year ended 31 December 2021:

Region	NPM Revenue in EUR million	Share of NPM Revenue
	<i>(unaudited unless otherwise specified)</i>	<i>(unaudited)</i>
Germany	89	15%
Europe excluding Germany	178	30%
Americas	95	16%
Asia	207	35%
Rest of the World	24	4%
Total	592*	100%

* audited

The following GBUs of the Group are operating in the Environmental field of activity:

Heraeus Photovoltaics

Heraeus Photovoltaics is a developer and manufacturer of silver metallization pastes for the photovoltaic industry.

The GBU is headquartered in Shanghai (China) and applies its innovative technology to offer metallization pastes for solar cell applications.

In the assessment of the Guarantor, Heraeus Photovoltaics is one of the Top 3 leading enterprises in its business field.

Heraeus Noblelight

Heraeus Noblelight manufactures lamps for analytical measurement technology and the printing industry, infrared emitters for industrial heating processes, LED solutions, arc and flash lamps.

Additionally, the GBU provides products for water disinfection and air treatment, as well as sun simulation and photochemistry with a high level of vertical integration.

In the assessment of the Guarantor, Heraeus Noblelight is among the market and technology leaders worldwide for special lamps with wavelengths from ultraviolet to infrared for industrial, scientific, and medical applications.

Heraeus Precious Metals

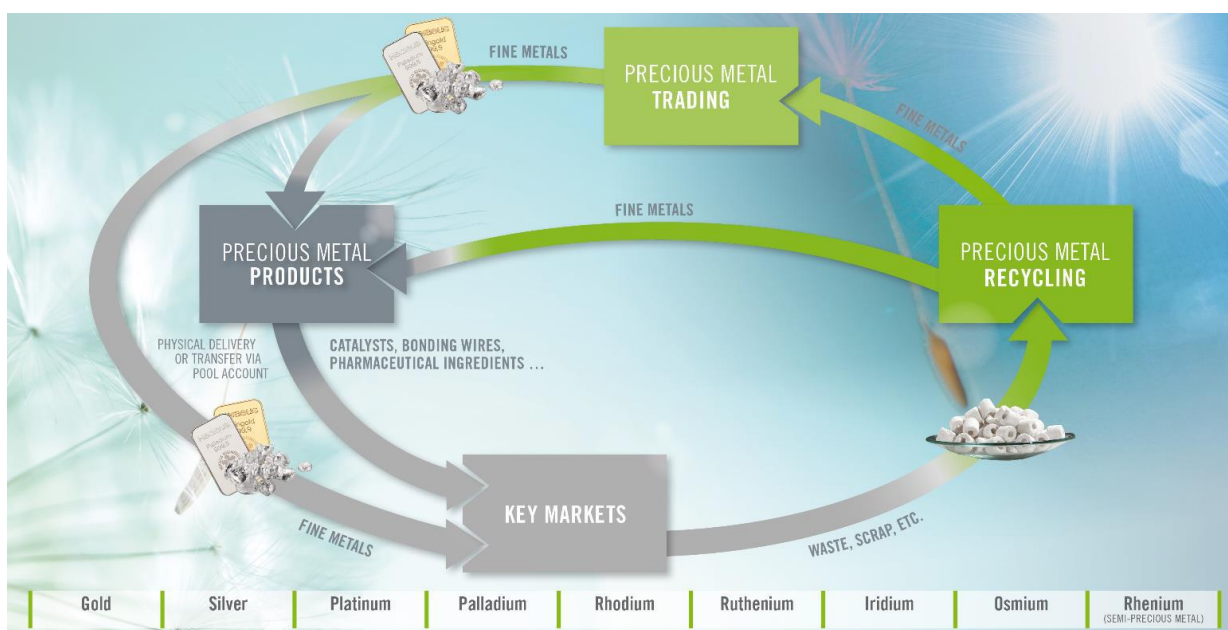
Heraeus Precious Metals is a provider of precious metals services and products. Heraeus Precious Metals is one of the world's largest refiners of platinum group metals (PGMs) and a leading name in industrial precious metals trading. Precious metals products of Heraeus are used in a wide variety of industries, including the chemical, pharmaceutical, glass, electronics and automotive industries.

Heraeus Precious Metals specializes in industrial precious metal trading for internal and external customers and has more than 40 years of experience in this field. The GBU is responsible for the central sourcing of precious metals in the Group and offers metals management services for gold, silver and all platinum group metals.

In its precious metals trading business, the Group serves more than 500 customers in the electronics, chemistry, automotive, jewellery, medical & pharmaceutical and financial services industries with 4 locations including Hanau (Germany), New York (United States), Shanghai and Hong Kong (China). With 50 employees worldwide the Group considers its precious metal trading to be positioned among the Top 3 of the branch.

In the assessment of the Guarantor, Heraeus Precious Metals is the market leader for precious metal trading, recycling and refining and has a top position for precious metal products in catalysators, functional materials and other applications.

The following graphic provides for an overview of the integrated solutions offered by Heraeus Precious Metals:



Health

The Health field of activity encompasses the development of cutting-edge materials and solutions in the medical sector, such as orthopaedic products and in particular biomaterials and components and solutions in the area of cardiology and minimal invasive surgery.

The following table provides for an overview of the regional allocation of the NPM Revenue in the Health field of activity in the financial year ended 31 December 2021:

Region	NPM Revenue in EUR million	Share of NPM Revenue
	<i>(unaudited unless otherwise specified)</i>	<i>(unaudited)</i>
Germany	55	12%
Europe excluding Germany	96	21%
Americas	229	50%
Asia	60	13%
Rest of the World	18	4%
Total	458*	100%

* audited

The following GBU's of the Group are operating in the Health field of activity:

Heraeus Medical

Heraeus Medical concentrates on medical products for orthopaedic surgery and traumatology. The key product of the GBU is the bone cement PALACOS® with a history of clinical efficacy spanning six decades.

In the field of biosurgery the focus is on innovative antibiotic coatings for medical implants, thereby helping to prevent infections.

In the assessment of the Guarantor, Heraeus Medical has a market leading position in its business field.

Heraeus Medical Components

Heraeus Medical Components operates as a device outsourcing partner to medical device original equipment manufacturers (OEMs). The GBU provides comprehensive medical component manufacturing services and in

specializes in metallurgical answers to device design challenges. The focus of the GBU is on products within applications in cardiac rhythm management, peripheral vascular and neurostimulation.

In the assessment of the Guarantor, Heraeus Medical Components has a market leading position in its business field.

Norwood Medical

Norwood Medical, which was acquired by the Group in December 2021, is a service provider of advanced medical manufacturing solutions for minimally invasive surgical ("MIS") instruments, robotic-assisted surgery and orthopaedic markets. The company manufactures high precision, mission critical components for a variety of customer product lines and offers a wide range of services including prototyping and tooling development, precision manufacturing, processing, assembly and project management.

In the assessment of the Guarantor, Norwood Medical is one of the key players in the highly fragmented MIS sector with a substantial market share.

Industrials

The Industrials field of activity encompasses the development of sensor solutions to reduce the CO₂ footprint of the Group's clients and electronic chemicals as a digital enabler, in particular high-end temperature sensors for the general and automotive industry, sensor solution for measuring in molten steel, iron, and aluminium, electronic chemicals for the electronics and semiconductor industry and start-up activities including additives for battery materials, amorphous metals and printed electronics.

The following table provides for an overview of the regional allocation of the NPM Revenue in the Industrials field of activity in the financial year ended 31 December 2021:

Region	NPM Revenue in EUR million	Share of NPM Revenue
	<i>(unaudited unless otherwise specified)</i>	<i>(unaudited)</i>
Germany	35	5%
Europe excluding Germany	138	20%
Americas	152	22%
Asia	324	47%
Rest of the World	41	6%
Total	690*	100%

* audited

The following GBUs of the Group are operating in the Industrials field of activity:

Heraeus Electro-Nite

Heraeus Electro-Nite develops technologies for measuring in molten metals like steel, iron and aluminium. The GBU produces integrated measurement systems consisting of a sensor, instrumentation, and associated hardware. Measurements include those for temperature, oxygen, hydrogen, and carbon.

In the assessment of the Guarantor, Heraeus Electro-Nite is the market leader in the liquid steel sensor market.

Heraeus Epurio

Heraeus Epurio produces ultra-pure specialty chemicals for the semiconductor, display, electronics and aerospace industries.

The GBU further specialises in conductive polymer solutions for advanced applications such as flexible displays, high performance electrolytic capacitors, antistatic and conductive protective and shielding layers.

In the assessment of the Guarantor, Heraeus Epurio has a leading position in the market for conductive polymers.

Heraeus Nexensos

Heraeus Nexensos produces high-precision temperature sensors based on the platinum thin film technology. The GBU offers a wide range of platinum temperature sensors with a variety of resistance values and temperature coefficients for industrial and automotive (exhaust gas temperature (EGT) as well as electric driving) applications.

In the assessment of the Guarantor, Heraeus Nexensos is the global leader for platinum thin film sensor elements.

Electronics

The Electronics field of activity encompasses the development of cutting-edge materials and solutions driving global digitalization and interconnectedness, in particular high-purity quartz glass which is the raw material for the production of optical fibre cables for the telecommunications industry, high-purity quartz and ceramics as key components for the production of ever smaller semiconductor chips and key materials like bonding wires assembly and thick film materials and substrates for semiconductor packaging and power electronics.

The following table provides for an overview of the regional allocation of the NPM Revenue in the Electronics field of activity in the financial year ended 31 December 2021:

Region	NPM Revenue in EUR million	Share of NPM Revenue
	<i>(unaudited unless otherwise specified)</i>	<i>(unaudited)</i>
Germany	96	18%
Europe excluding Germany	69	13%
Americas	96	18%
Asia	266	50%
Rest of the World	5	1%
Total	531*	100%

* audited

The following GBUs of the Group are operating in the Electronics field of activity:

Heraeus Comvance

Heraeus Comvance is a manufacturer of synthetic fused silica for use in the telecommunications industries. The product portfolio of the GBU includes high purity fused silica tubes for core rod manufacturing, large rod in cylinder ("RIC") cylinders as cladding for telecom fibres and preform manufacturing services.

In the assessment of the Guarantor, Heraeus Comvance is the largest manufacturer in its business area with a strong position in the tubes market and a unique position as the only outsourced manufacturer of RIC cladding.

Heraeus Conamic

Heraeus Conamic is a leading-edge material specialist for the manufacturing of highest purity fused silica and other high-end materials such as ceramics and composites. The activities of the GBU include key processes for producing natural fused quartz and synthetic fused silica for the semiconductor and photonics industry.

In the assessment of the Guarantor, Heraeus Conamic is the technology leader in high purity fused silica and high-end materials and among the Top 3 enterprises in its field of business globally.

Heraeus Electronics

Heraeus Electronics is a manufacturer of materials for the assembly and packaging of devices in the electronics industry. The GBU offers material solutions for the automotive, power electronics and advanced semiconductor packaging market.

In the assessment of the Guarantor, Heraeus Electronics is a leading manufacturer and among the Top 3 to Top 5 in each of its business fields.

Strategy

Heraeus and its shareholders are proud to be a family business. The shareholders support portfolio diversification to balance risk and return and prefer to reinvest back into the business. To safeguard the financial stability and independence of Heraeus, the shareholders have set a financial policy guideline for the Group, which *inter alia* contains provisions limiting the percentage of profit distributed to the shareholders.

The Group's strategy "Heraeus 2025" provides for a focus on the following three elements:

- *Strengthen the portfolio of diversified businesses:* Increased exposure to healthcare and North America through recent acquisitions. Future focus growth areas: Healthcare, precious metals, electronics.
- *Develop independence of individual businesses:* Transforming central functions to efficient service provider.
- *Improve competitiveness of each business through customer focus, innovation and excellence:* Develop specific value creation plans for each individual business.

Corporate Responsibility

It is the stated ambition of Heraeus to act responsibly in all areas of its business operations.

With regard to environment, health and safety ("EHS"), the Group has defined comprehensive standards. Heraeus has further set up an international training programme and implemented a global system to support EHS responsibility. The responsibility to evaluate EHS risks and implement relevant guidelines is with each GBU.

The Group adheres to strict compliance standards which are set out in a global code of conduct and has established a compliance management system with defined requirements and processes to ensure compliance with legal obligations. The responsibility to evaluate compliance risks and implement relevant standards is with each GBU.

Environmental and safety aspects are considered in all operational target, revenue and cost planning.

Sustainability

In 2020, the Group recorded carbon emissions from its production sites of 207,000 CO₂ tons. Of such emissions, approximately 45,000 CO₂ tons fall within Scope 1 (direct emissions) and 162,000 CO₂ tons fall within Scope 2 (indirect emissions from the generation of purchased energy) under the Greenhouse Gas Protocol Corporate Standard. 70% of the Group's Scope 1 and Scope 2 emissions are from three GBUs: Heraeus Conamic, Heraeus Comvance and Heraeus Precious Metals.

In its climate strategy, Heraeus defined decarbonisation as the overarching topic for all its operating companies. A strategic priority of the Group is the reduction of Scope 1 emissions based on specific GBU-relevant technologies. The Group is further considering whether Scope 2 emissions can be reduced by green energy purchases based on a regional approach (including own investments in solar and wind technologies and power purchase agreements).

Each GBU is responsible for the development of a specific climate strategy for its business which includes targets and improvement plans. As an example, the GBU Heraeus Precious Metals targets to use 100% green electricity by 2025, to avoid 20% of the Scope 1 and Scope 2 emissions by 2025 compared to the base year 2019 and to fully turn away from fossil fuels by 2033.

Each GBU is reporting on sustainability matters to the Board of Managing Directors of the Guarantor in the course of the ongoing performance dialogs. Central functions of the Group ensure the aggregability and auditability of the individual measures of the Group and support the GBUs for the example through the sharing of best practice know-how. Heraeus is further committed to build and roll-out an environmental, social and corporate governance ("ESG") management system.

Heraeus has published a sustainability report which provides for a comprehensive overview of the Group's profile, its commitments to sustainability and its initiatives in areas such as compliance, environment, diversity and social engagements.

Governmental, Legal, Tax and Arbitration Proceedings

In the context of the business activities of Heraeus and its group companies are regularly party to governmental, legal, tax and arbitration proceedings.

Legal proceedings considered by the Guarantor to be material as of the date of this Prospectus are outlined below.

In early 2022 Heraeus Medical GmbH settled its long lasting litigation with Zimmer Biomet Holdings Inc. Heraeus accused Zimmer Biomet of illegally making use of Heraeus' trade secrets. The settlement between the two companies includes the payment of a low three digit million Euro amount by Zimmer Biomet to Heraeus Group as well as the termination of all pending litigation cases.

In 2019, one of its customers has taken recourse to arbitration against Heraeus and claimed damages based on the delivery of defective products including consequential damages. The damages claimed amount to a medium two digit million Euro amount. The litigation was concluded in June 2022 and all claims against Heraeus were dismissed by the court of arbitration. The award can be appealed against – such appeal can, however, only be based on a severe violation of basic procedural rights and substantial other rights (right to be heard, equal treatment of parties and similar substantial rights). Heraeus terminated the relevant business in 2021.

Material Contracts

Financing Agreements

Bridge Loan

In 2021, the Guarantor and certain of its subsidiaries entered into a short-term bridge loan agreement (the "**Bridge Loan**") with a syndicate of banking institutions, some of them acting as Joint Bookrunners in connection with the issuance of the Notes, which provides for a total commitment of EUR 500 million. The Bridge Loan matures on 8 December 2022 with a unilateral extension option for Heraeus of six months. As of the date of this Prospectus, the Bridge Loan is drawn in full.

Syndicated Loan Facility

In 2018, the Guarantor and certain of its subsidiaries entered into a syndicated loan facility agreement (the "**Syndicated Loan Facility**") with a syndicate of banking institutions, some of them acting as Joint Bookrunners in connection with the issuance of the Notes, which provides for a total commitment of EUR 400 million. The Syndicated Loan Facility expires in 2025. As of the date of this Prospectus, the Syndicated Loan Facility is undrawn and is intended to act as a pure back-up facility.

Bilateral Bank Loans

In addition to the Bridge Loan and the Syndicated Loan Facility, entities of the Group have entered into smaller bilateral loan agreements. As of 31 December 2021, a total amount of EUR 73 million was outstanding under such loan agreements.

Commercial Paper Programme

The Guarantor has established a programme which allows for the issuance of commercial papers in an aggregate principal amount of up to EUR 500 million. As of the date of this Prospectus, commercial papers in an aggregate total amount of EUR 200 million are outstanding.

Registered Bonds

The Issuer has issued two series of registered bonds under German law (*Namensschuldverschreibungen*) with principal amounts of EUR 50 million each. Following the issuance, obligations under the registered bonds were transferred to the Guarantor by way of an issuer substitution. The registered bonds mature in 2032 and 2034, respectively.

Other Material Agreements

Domination and Profit and Loss Transfer Agreement

The Issuer and the Guarantor entered into a domination and a profit and loss transfer agreement (*Beherrschungs- und Ergebnisabführungsvertrag*). Under this agreement, the Guarantor is able to issue legally binding instructions to the Board of Managing Directors of the Issuer. In return, the Guarantor has to compensate any annual loss of the Issuer that occurred during the term of the agreement.

Maximum Amount Guarantees and Letters of Comfort

In connection with the business activities of the GBUs, the Guarantor has issued certain maximum amount guarantees and letters of comfort to a number of suppliers, lenders and business partners its subsidiaries. As of the date of this Prospectus, such guarantees and letters of comfort relate to an aggregate amount of approximately EUR 540 million.

Management Bodies of the Guarantor

The governing bodies of the Guarantor are the Board of Managing Directors (*Geschäftsführung*), the Supervisory Board (*Aufsichtsrat*) and the Shareholders' Committee (*Gesellschafterausschuss*).

The table below lists the members of the Board of Managing Directors as of the date of this Prospectus:

Name	Position	Principal Outside Board Memberships
Jan Rinnert	Chairman of the Board of Managing Directors and CEO	<ul style="list-style-type: none">Member of the Supervisory Board of Teufelberger AG, Austria
Dr. André Kobelt	Member of the Board of Managing Directors	<ul style="list-style-type: none">Member of the Executive Board of Ankasa Regenerative Therapeutics, Inc., United StatesMember of the Advisory Board of perPETual Technologies GmbH, Germany
Dr. Frank Stietz	Member of the Board of Managing Directors	<ul style="list-style-type: none">Member of the Executive Board of Forciot Oy, Finland
Rolf Wetzel	Member of the Board of Managing Directors	<ul style="list-style-type: none">Member of the Advisory Board of Krohne Messtechnik GmbH, Germany

The table below lists the members of the Supervisory Board as of the date of this Prospectus:

Name	Position	Principal Outside Board Memberships
Franz Haniel	Chairman	<ul style="list-style-type: none"> • Member of the Supervisory Board of Delton Technology AG, Germany • Member of the Advisory Board of Franz Haniel & Cie. GmbH, Germany • Member of the Board of Directors of TBG AG, Switzerland • Member of the Advisory Board of Zimmer & Rohde GmbH, Germany
Florian Pieroth	Vice Chairman	None
Dr. Simone Bagel-Trah	Member	<ul style="list-style-type: none"> • Chairwomen of the Supervisory Board and of the Shareholders'-Committee of Henkel AG & Co. KGaA, Germany • Chairwomen of the Supervisory Board of Henkel Management AG, Germany • Member of the Supervisory Board of Bayer AG, Germany
Dr. Markus Binder	Member	None
Dr. Hans-Tjabert Conring	Member	None
Dr. Martina Gieg	Member	None
Birgit Heraeus-Roggendorf	Member	None
Dr. Hubert Lienhard	Member	<ul style="list-style-type: none"> • Member of the Supervisory Board of EnBW Energie Baden-Württemberg AG, Germany • Vice-Chairman of the Supervisory Board of Siemens Energy AG, Germany • Vice-Chairman of the Supervisory Board of Siemens Energy Management GmbH, Germany • Member of the Supervisory Board of SMS GmbH, Germany • Member of the Supervisory Board of SMS Group GmbH, Germany • Member of the Supervisory Board of Voith GmbH & Co. KGaA, Germany • Member of the Shareholders'-Committee of Voith Management GmbH, Germany
Annette Lukas	Member	None
Uwe Raschke	Member	None
Peter Schuld	Member	<ul style="list-style-type: none"> • Member of the Supervisory Board of amedes Holding GmbH, Germany

Name	Position	Principal Outside Board Memberships
Christian Stübing	Member	None

The business address of the members of the Board of Managing Directors and of the members of the Supervisory Board is the registered office of the Guarantor at Heraeusstraße 12-14, 63450 Hanau, Germany.

The Guarantor has not been notified and has otherwise not been informed by any of the members of the Board of Managing Directors or by any of the members of the Supervisory Board named above about any potential conflicts of interest between the obligations of the persons towards the Guarantor and their own interests or other obligations.

Financial Information

The English language translations of the German language consolidated financial statements of the Guarantor as of and for the financial years ended 31 December 2021 and 31 December 2020 and English language translations of German language independent auditor's reports (*Bestätigungsvermerke des unabhängigen Abschlussprüfers*) thereon have been incorporated by reference into this Prospectus. Please refer to the section "*Documents Incorporated by Reference*" below.

The Guarantor does not publish interim financial statements.

Where financial information is labelled "audited" in tables in this Prospectus, this information has been taken from the Guarantor's audited consolidated financial statements mentioned above. The label "unaudited" is used in tables in this Prospectus to indicate financial information that has not been taken from the Guarantor's audited consolidated financial statements mentioned above but was taken or derived from the Guarantor's accounting records or management reporting systems, or has been calculated based on financial information from the abovementioned sources.

The following table provides for an overview of selected key financial information for the financial years ended 31 December 2021 and 2020, respectively:

	Financial year ended 31 December	
	2021	2020
<i>(in EUR million unless otherwise specified)</i>	<i>(unaudited, unless otherwise specified)</i>	
Revenue*	29,506.4	31,531.8
NPM Revenue.....	2,272.5	2,052.0
Earnings before interest and tax (EBIT)*	523.5	302.4
EBIT Margin.....	23%	15%
EBITDA.....	714.2	502.3
EBITDA Margin	31%	24%
Profit after taxes*	369.3	190.7
Payments for investments in non-current assets (CAPEX)*	-248.4	-197.2
Net cash provided by operating activities *	607.9	344.9
Free Cash Flow	361.3	156.5
Research and development costs*	138.4	142.6

* audited

The following table provides for an overview of selected key financial information as of 31 December 2021 and 2020, respectively.

	As of 31 December	
	2021	2020
<i>(in EUR million unless otherwise specified)</i>	<i>(unaudited, unless otherwise specified)</i>	
Assets*	6,993.5	5,914.5
Shareholders' equity*	3,801.4	3,280.2
Cash and cash equivalents*	649.9	853.6
Financial Debt*	780.2	268.2
Net Debt	130.3	-585.4
Net Working Capital	2,272.2	2,118.4

* audited

The following table provides for an overview of selected key financing ratios as of 31 December 2021 and 2020:

	As of 31 December	
	2021	2020
	<i>(unaudited)</i>	
Equity Ratio	54,36%	55,46%
Net Leverage Ratio	0.18x	-1.17x
Interest Coverage Ratio	13.9x	8.3x

Alternative Performance Measures

Alternative performance measures ("**APMs**") are intended to supplement investors' understanding of the Group's financial information by providing financial measures which investors, financial analysts and management use to help evaluate the company's operating performance and liquidity. Please also refer to the information in the section "*Notice – Alternative Performance Measures*" above.

The following provides for a summary explanation of the APMs set out in the tables above.

EBIT Margin

The "**EBIT Margin**" is calculated as the Group's earnings before interest and tax (EBIT) divided by the Group's NPM Revenue for the relevant period.

EBITDA and EBITDA Margin

"**EBITDA**" is defined as earnings before interest, tax, depreciation and amortisation and is calculated as the Group's earnings before interest and tax (EBIT) before amortisation, depreciation and impairment. The following table provides for a reconciliation of EBITDA:

	Financial year ended 31 December	
	2021	2020
<i>(in EUR million)</i>	<i>(unaudited, unless otherwise specified)</i>	
Earnings before interest and tax (EBIT)*	523.5	302.4
plus: Amortization, depreciation and impairment *	190.7	199.9
EBITDA	714.2	502.3

* audited

The "**EBITDA Margin**" is calculated as the Group's EBITDA divided by the Group's NPM Revenue for the relevant period.

Net Working Capital

The Group's "**Net Working Capital**" is calculated as the Group's inventory including precious metals plus trade receivables minus trade payables. The following table provides for a reconciliation of Net Working Capital:

	As of 31 December	
	2021	2020
<i>(in EUR million)</i>	<i>(unaudited, unless otherwise specified)</i>	
Precious metals*	1,256.0	1,321.2
plus: Inventory – excluding precious metals*	566.1	417.2
plus: Trade receivables*	850.6	833.5
less: Trade payables*	-400.5	-453.5
Net Working Capital	2,272.2	2,118.4

* audited

Free Cash Flow

The Group's "**Free Cash Flow**" is calculated as the Group's net cash provided by operating activities less payments for investments in non-current assets plus proceeds from the disposal of non-current assets. The following table provides for a reconciliation of Free Cash Flow:

	Financial year ended 31 December	
	2021	2020
<i>(in EUR million)</i>	<i>(unaudited, unless otherwise specified)</i>	
Cash provided by operating activities*	607.9	344.9
less: Payments for investments in non-current assets*	-248.4	-197.2
plus: Proceeds from the disposal of non-current assets*	1.8	8.8
Free Cash Flow	361.3	156.5

* audited

Equity Ratio

The Group's "**Equity Ratio**" is calculated as the Group's shareholders' equity divided by the Group's assets as of the relevant reporting date. The following table provides for a reconciliation of the Equity Ratio:

	As of 31 December	
	2021	2020
<i>(in EUR million unless otherwise specified)</i>	<i>(unaudited, unless otherwise specified)</i>	
Shareholders' equity.....	3,801.4	3,280.2
divided by: Assets	6,993.5	5,914.5
Equity Ratio	54,4%	55,5%

* audited

Net Debt and Net Leverage Ratio

"**Net Debt**" is defined as the Group's Financial debt less cash and cash equivalents.

The Group's "**Net Leverage Ratio**" is calculated as the Group's Net Debt divided by the Group's EBITDA for the trailing twelve months. The following table provides for a reconciliation of Net Debt and the Net Leverage Ratio:

	As of and for the financial year ended 31 December	
	2021	2020
<i>(in EUR million unless otherwise specified)</i>	<i>(unaudited, unless otherwise specified)</i>	
Financial Debt*.....	780.2	268.2
less: Cash and cash equivalents*	649.9	853.6
Net Debt	130.3	-585.4
divided by: EBITDA for the trailing twelve months.....	714.2	502.3
Net Leverage Ratio	0.2x	-1.2x

* audited

Interest Coverage Ratio

The Group's "**Interest Coverage Ratio**" is calculated as the Group's EBITDA divided by finance costs without considering finance income for the relevant period. The following table provides for a reconciliation of the Interest Coverage Ratio:

	For the financial year ended 31 December	
	2021	2020
<i>(in EUR million unless otherwise specified)</i>	<i>(unaudited, unless otherwise specified)</i>	
EBITDA.....	714.2	502.3
divided by: Finance costs*	51.4	60.4
Interest Coverage Ratio.....	13.9x	8.3x

* audited

Recent Developments

In December 2021, Heraeus announced that it had acquired Norwood Medical LLC, a full-service provider of advanced outsourced medical manufacturing solutions in three key markets: minimally-invasive surgery, orthopaedics and robotic-assisted surgery. Heraeus also announced that Norwood Medical will continue to operate as a standalone business and retain its company name and management team. For further information, please refer to "*Fields of Activity and Global Business Units - Health - Norwood Medical*" above.

As of the date of this Prospectus, Heraeus is in advanced negotiations to sell its GBU Heraeus Nexensos. The sale of the GBU would have minor impact on the Group's income statement with Nexensos' NPM Revenue below EUR 100 million (roughly 3% of Heraeus Group's NPM Revenue) and EBIT contribution of less than 1.5% of Heraeus Group's earnings before interest and tax (EBIT).

Trend Information and Significant Changes

There has been no material adverse change in the prospects of the Guarantor since 31 December 2021.

There has been no significant change in the financial performance of the Guarantor since 31 December 2021.

There has been no significant change in the financial position the Guarantor since 31 December 2021.

TAXATION WARNING

The tax legislation of the state of residence of a prospective purchaser of Notes and of the Issuer's and the Guarantor's countries of incorporation may have an impact on the income received from the Notes and/or the Guarantee.

Prospective purchasers of Notes are advised to consult their own tax advisors as to the tax consequences of the purchase, ownership and disposition of the Notes.

SUBSCRIPTION AND SALE OF THE NOTES

Subscription by the Joint Bookrunners

Commerzbank Aktiengesellschaft, Deutsche Bank Aktiengesellschaft, ING Bank N.V. and UniCredit Bank AG (the "**Joint Bookrunners**") will enter into a subscription agreement with the Issuer and the Guarantor on or about 9 June 2022 (the "**Subscription Agreement**") in which they agree to subscribe for the Notes on a firm commitment basis. The Joint Bookrunners will be entitled, under certain circumstances, to terminate the Subscription Agreement. In such event, no Notes will be delivered to investors.

The Issuer and the Guarantor will agree in the Subscription Agreement to indemnify the Joint Bookrunners against certain liabilities in connection with the offer and sale of the Notes. The Issuer has furthermore agreed to pay certain fees to the Joint Bookrunners in connection with the offering, placement and subscription of the Notes and to reimburse the Joint Bookrunners for certain expenses incurred in connection with the issue of the Notes.

The Joint Bookrunners or their respective affiliates have provided from time to time, and expect to provide in the future, investment services to the Issuer, the Guarantor and their affiliates, for which the Joint Bookrunners or their respective affiliates have received or will receive customary fees and commissions. In addition, the Joint Bookrunners or their respective affiliates may be involved in financing initiatives relating to the Issuer, the Guarantor or their affiliates. Furthermore, in the ordinary course of their business activities, the Joint Bookrunners and their respective affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (including bank loans) for their own account and for the accounts of their customers. Such investments and securities activities may involve securities and/or instruments of the Issuer, the Guarantor or their affiliates. Certain of the Joint Bookrunners or their respective affiliates that have a lending relationship with the Issuer, the Guarantor and/or their affiliates, routinely hedge their credit exposure to the Issuer, the Guarantor and their affiliates consistent with their customary risk management policies. Typically, such Joint Bookrunners and their respective affiliates would hedge such exposure by entering into transactions which consist of either the purchase of credit default swaps or the creation of short positions in the Issuer's, the Guarantor's or their affiliates' securities, including potentially the Notes offered hereby. Any such short positions could adversely affect future trading prices of the Notes offered hereby. The Joint Bookrunners and their respective affiliates may also make investment recommendations and/or publish or express independent research views in respect of such securities or financial instruments and may hold, or recommend to clients that they acquire, long and/or short positions in such securities and instruments.

Selling Restrictions

General

Neither the Issuer, the Guarantor nor any Joint Bookrunner has made any representation that any action has been taken in any jurisdiction that would permit a public offering of any of the Notes, or possession or distribution of this Prospectus or any other offering material, in any country or jurisdiction where action for that purpose is required.

Each Joint Bookrunner has represented and agreed that it will comply with all applicable laws and regulations in each jurisdiction in which it purchases, offers, sells or delivers Notes or has in its possession or distributes any offering material relating to them.

United States of America

The Notes and the Guarantee have not been and will not be registered under the Securities Act and may not be offered or sold within the United States or to, or for the account or benefit of, U.S. persons except in certain transactions exempt from the registration requirements of the Securities Act. Terms used in this paragraph have the meanings given to them by Regulation S under the Securities Act ("**Regulation S**").

The Notes and the Guarantee are subject to U.S. tax law requirements and may not be offered, sold or delivered within the United States or its possessions or to a United States person, except in certain transactions permitted by

the U.S. tax regulations. Terms used in this paragraph have the meanings given to them by the U.S. Internal Revenue Code of 1986 and regulations thereunder.

Each Joint Bookrunner has represented and agreed that, except as permitted by the Subscription Agreement, it has not offered, sold or delivered and will not offer, sell or deliver the Notes (i) as part of their distribution at any time or (ii) otherwise until 40 days after the later of the commencement of the offering and the Issue Date, within the United States or to, or for the account or benefit of, U.S. persons, and it will have sent to each dealer to which it sells Notes during the distribution compliance period a confirmation or other notice setting forth the restrictions on offers and sales of the Notes within the United States or to, or for the account or benefit of, U.S. persons. Terms used in this paragraph have the meanings given to them by Regulation S.

In addition, until 40 days after the commencement of the offering of the Notes, an offer or sale of Notes within the United States by a dealer that is not participating in the offering may violate the registration requirements of the Securities Act.

Prohibition of Sales to EEA Retail Investors

Each Joint Bookrunner has represented, warranted and agreed that it has not offered, sold or otherwise made available and will not offer, sell or otherwise make available any Notes to any retail investor in the EEA. For the purposes of this provision the expression retail investor means a person who is one (or more) of the following:

- (a) a retail client as defined in point (11) of Article 4(1) of MiFID II (as amended); or
- (b) a customer within the meaning of Directive 2016/97/EU, where that customer would not qualify as a professional client as defined in point (10) of Article 4(1) of MiFID II.

United Kingdom

Prohibition of Sales to UK Retail Investors

Each Joint Bookrunner has represented and agreed that it has not offered, sold or otherwise made available and will not offer, sell or otherwise make available any Notes which are the subject of the offering contemplated by this Prospectus in relation thereto to any retail investor in the UK. For the purposes of this provision, the expression "retail investor" means a person who is one (or more) of the following:

- (a) a retail client, as defined in point (8) of Article 2 EUWA; or
- (b) a customer within the meaning of the provisions of the FSMA and any rules or regulations made under the FSMA to implement Directive (EU) 2016/97, where that customer would not qualify as a professional client, as defined in point (8) of Article 2(1) of Regulation (EU) No 600/2014 as it forms part of domestic law by virtue of the EUWA.

Other regulatory restrictions

Each Joint Bookrunner has represented, warranted and agreed that:

- (a) it has only communicated or caused to be communicated and will only communicate or cause to be communicated any invitation or inducement to engage in investment activity (within the meaning of Section 21 of the FSMA) received by it in connection with the issue or sale of any Notes in circumstances in which Section 21(1) of the FSMA does not apply to the Issuer, and
- (b) it has complied and will comply with all applicable provisions of the FSMA with respect to anything done by it in relation to the Notes in, from or otherwise involving the UK.

Singapore

Each Joint Bookrunner has acknowledged that this Prospectus has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, each Joint Bookrunner has represented and agreed that it has not offered or sold any Notes or caused the Notes to be made the subject of an invitation for subscription or purchase and will not offer or sell any Notes or cause the Notes to be made the subject of an invitation for subscription or

purchase, and has not circulated or distributed, nor will it circulate or distribute, this Prospectus or any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the Notes, whether directly or indirectly, to any person in Singapore other than (i) to an institutional investor (as defined in Section 4A of the Securities and Futures Act 2001, as modified or amended from time to time (the "SFA")) pursuant to Section 274 of the SFA, (ii) to a relevant person (as defined in Section 275(2) of the SFA) pursuant to Section 275(1) of the SFA, or any person pursuant to Section 275(1A) of the SFA, and in accordance with the conditions specified in Section 275 of the SFA, or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

Where Notes are subscribed or purchased under Section 275 of the SFA by a relevant person which is:

- (a) a corporation (which is not an accredited investor (as defined in Section 4A of the SFA)) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or
- (b) a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary of the trust is an individual who is an accredited investor,

securities or securities-based derivatives contracts (each term as defined in Section 2(1) of the SFA) of that corporation or the beneficiaries' rights and interest (howsoever described) in that trust shall not be transferred within six months after that corporation or that trust has acquired the Notes pursuant to an offer made under Section 275 of the SFA except:

- (i) to an institutional investor or to a relevant person, or to any person arising from an offer referred to in Section 275(1A) or Section 276(4)(i)(B) of the SFA;
- (ii) where no consideration is or will be given for the transfer;
- (iii) where the transfer is by operation of law;
- (iv) as specified in Section 276(7) of the SFA; or
- (v) as specified in Regulation 37A of the Securities and Futures (Offers of Investments) (Securities and Securities-based Derivatives Contracts) Regulations 2018.

GENERAL INFORMATION

1. Interest of Natural and Legal Persons involved in the Issue/Offer: Certain of the Joint Bookrunners and their affiliates may be customers of, borrowers from or creditors of the Issuer, the Guarantor and/or their affiliates. In addition, certain Joint Bookrunners and their affiliates have engaged, and may in the future engage, in investment banking and/or commercial banking transactions with, and may perform services for the Issuer, the Guarantor and/or their affiliates in the ordinary course of business.

2. Authorisations: The issue of Notes by the Issuer has been authorised by a resolution by the Management Board of the Issuer dated 20 May 2022.

The giving of the Guarantee has been authorised by framework resolutions of the Shareholders' Committee and the Supervisory Board of the Guarantor dated 15 December 2021 and 16 December 2021, respectively, and by a resolution of the Board of Managing Directors of the Guarantor dated 20 May 2022.

3. Clearing Systems: The Notes have been accepted for clearance and settlement through Clearstream Frankfurt.

The Notes have the following securities codes:

ISIN: DE000A30VGD9

Common Code: 247550437

German Securities Code (WKN): A30VGD

Following the issuance, transactions in the Notes will also be cleared and settled via Clearstream Banking S.A., Luxembourg and Euroclear Bank SA/NV, Brussels (together, the "ICSDs").

4. Listing and Admission to Trading: Application has been made for the Notes to be admitted to the Official List of the Luxembourg Stock Exchange and to be admitted to trading on the Euro MTF market of the Luxembourg Stock Exchange. The Euro MTF market of the Luxembourg Stock Exchange is not a regulated market for the purposes of MIFID II.

5. Expenses for admission to trading: The total expenses relating to admission to trading of the Notes are expected to amount to approximately EUR 8,000.

6. Documents on Display: This Prospectus and the documents incorporated by reference will be published in electronic form on the website of the Luxembourg Stock Exchange (www.bourse.lu).

The following documents will be provided (free of charge) by the Principal Paying Agent in electronic or, if required, in physical form, to any Noteholder upon request:

- (i) a certified copy of the signed Guarantee;
- (ii) a copy of the articles of association of the Issuer and the Guarantor in force as of the date of this Prospectus.

The address of the Principal Paying Agent is: Deutsche Bank Aktiengesellschaft, Taunusanlage 12, 60325 Frankfurt am Main, Germany.

7. Third Party Information: With respect to any information included herein and specified to be sourced from a third party (i) the Issuer and the Guarantor confirm that any such information has been accurately reproduced and as far as the Issuer and the Guarantor are aware and are able to ascertain from information available to it from such third party, no facts have been omitted the omission of which would render the reproduced information inaccurate or misleading and (ii) neither the Issuer, the Guarantor nor any Joint Bookrunner has independently verified any such information and neither the Issuer, the Guarantor nor any Joint Bookrunner accepts any responsibility for the accuracy thereof.

8. Yield: For the investors, the yield of the Notes is 2.684 per cent. *per annum*, calculated on the basis of the issue price.

The yield is calculated in accordance with the ICMA (International Capital Market Association) Method.

9. Ratings: The Notes have been rated "BBB+" by S&P and "Baa1" by Moody's.

A credit rating is not a recommendation to buy, sell or hold securities and may be revised or withdrawn by the respective rating agency at any time.

DOCUMENTS INCORPORATED BY REFERENCE

The pages specified below of the following documents, which have previously been published or are published simultaneously with this Prospectus and which have been filed with the Luxembourg Stock Exchange, are incorporated by reference into, and form part of, this Prospectus:

- (i) the audited consolidated financial statements of the Guarantor as of and for the financial year ended 31 December 2021 (the "**Audited Consolidated Financial Statements 2021**") and the independent auditor's report thereon as included in the Heraeus Financial report 2021;
- (ii) the audited consolidated financial statements of the Guarantor as of and for the financial year ended 31 December 2020 (the "**Audited Consolidated Financial Statements 2020**") and the independent auditor's report thereon as included in the Heraeus Financial report 2020.

Any information not incorporated by reference into this Prospectus but contained in one of the documents mentioned as source documents in the cross-reference list below is either not relevant for the investor or covered in another part of this Prospectus.

(i) English language translations of the German language Audited Consolidated Financial Statements 2021 and the independent auditor's report thereon as included in the Heraeus Financial report 2021

Consolidated balance sheet	Page 36-37
Consolidated income statement	Page 38
Consolidated statement of comprehensive income	Page 39
Consolidated cash flow statement	Page 40
Consolidated statement of changes in shareholders' equity	Page 41
Notes to the consolidated financial statements	Pages 42-93
Independent auditor's report*	Pages 94-97

(ii) English language translations of the German language Audited Consolidated Financial Statements 2020 and the independent auditor's report thereon as included in the Heraeus Financial report 2020

Consolidated balance sheet	Pages 34-35
Consolidated income statement	Page 36
Consolidated statement of comprehensive income	Page 37
Consolidated cash flow statement	Page 38
Consolidated statement of changes in shareholders' equity	Page 39
Notes to the consolidated financial statements	Pages 40-87
Independent auditor's report*	Pages 88-91

* The independent auditor's report is an English language translation of the German language independent auditor's report (*Bestätigungsvermerk des unabhängigen Abschlussprüfers*) and refers to the respective consolidated financial statements as well as the respective group management report of the Guarantor as a whole and not solely to the consolidated financial statements incorporated by reference into this Prospectus.

Electronic copies of documents incorporated by reference in this Prospectus may be obtained (without charge) from the website of the Luxembourg Stock Exchange (www.bourse.lu).

ISSUER

Heraeus Finance GmbH

Heraeusstraße 12-14
63450 Hanau
Germany

GUARANTOR

Heraeus Holding GmbH

Heraeusstraße 12-14
63450 Hanau
Germany

PRINCIPAL PAYING AGENT

Deutsche Bank Aktiengesellschaft

Taunusanlage 12
60325 Frankfurt am Main
Germany

JOINT BOOKRUNNERS

Commerzbank Aktiengesellschaft

Kaiserstraße 16 (Kaiserplatz)
60311 Frankfurt am Main
Germany

Deutsche Bank Aktiengesellschaft

Taunusanlage 12
60325 Frankfurt am Main
Germany

ING Bank N.V.

Foppingadreef 7
1102 BD Amsterdam
The Netherlands

UniCredit Bank AG

Arabellastrasse 12
81925 Munich
Germany

AUDITORS TO THE GUARANTOR

Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft

Stuttgart, office Eschborn/Frankfurt am Main
Mergenthaler Allee 3-5
65760 Eschborn
Germany

LEGAL ADVISERS

To the Issuer and the Guarantor

Linklaters LLP

Taunusanlage 8
60329 Frankfurt am Main
Germany

To the Joint Bookrunners

Clifford Chance Partnerschaft mbB

Junghofstraße 14
60311 Frankfurt am Main
Germany