

Additional Information on Merck KGaA in accordance with the German Commercial Code (HGB)

The management report of Merck KGaA has been combined with the Group management report. The Annual Financial Statements and the Combined Management Report of the Merck Group and Merck KGaA for 2021 are being filed with the electronic German Federal Gazette (elektronischer Bundesanzeiger) and are available on the website of the German company register.

Merck KGaA, headquartered in Darmstadt, Germany, is the parent company of the Merck Group. In addition to its function as a holding company, Merck KGaA generates sales in the Life Science, Healthcare, and Electronics business sectors. Merck KGaA employs the majority of the 11,000-plus workforce in Darmstadt.

The financial statements of Merck KGaA have been prepared in accordance with the provisions of the German Commercial Code (HGB), as amended by the German Accounting Directive Implementation Act (BilRUG), and the German Stock Corporation Act (AktG). The full version of the Annual Financial Statements of Merck KGaA together with the unqualified auditor's opinion has been submitted to the operator of the electronic Federal Gazette (elektronischer Bundesanzeiger), where they are published and forwarded to the company register.

Statement on Corporate Governance

For fiscal 2021, Merck exercises the option to publish the corporate governance statement on the Merck Group website in accordance with section 315d HGB in conjunction with section 289f (1) sentence 2 of the HGB. The corporate governance declaration is available on the company's website at <https://www.merckgroup.com/en/investors/corporate-governance/reports.html>.

Effects of material company agreements on the net assets, financial position, and results of operations

End of the temporary business lease of the Healthcare and Electronics business sectors

As part of the strategic development of Merck KGaA, the existing operating activities of the Life Science, Healthcare, and Electronics business sectors within Merck KGaA, together with the relevant assets and liabilities (hereinafter: "operating sectors"), were spun off at their carrying amounts into three separate companies (hereinafter: "OpCo" or plural "OpCos") with the legal form of a GmbH or German limited liability corporation (operating spin-off). This operating spin-off is based on the spin-off and takeover agreement concluded between Merck KGaA and the OpCos in notarized form on March 2, 2018. Following approval by the 2018 Annual General Meeting, the operating spin-off took place with economic effect as of 0:00 on January 1, 2018.

Immediately after the spin-off took effect, all shares held by Merck KGaA in the respective OpCos were transferred to holding companies via a further spin-off (holding company spin-off), as a result of which the OpCos are each indirectly held by Merck KGaA via an intermediate holding company. The acquiring legal entities within the scope of the holding company spin-off were Merck Life Science Holding GmbH for the business shares of Life Science OpCo, Merck Healthcare Holding GmbH for the business shares of Healthcare OpCo, and Merck Performance Materials Holding GmbH for the business shares of Electronics OpCo (referred to individually as "HoldCo", independently of the sector, and jointly as "HoldCos"). To this end, Merck KGaA and the HoldCos signed a notarized spin-off and takeover agreement on March 2, 2018. The holding company spin-off took place with economic effect as of 0:00 on January 1, 2018.

Since the technical system requirements for the introduction of the sector-specific enterprise resource planning systems (hereinafter “ERP”) as regards the OpCos were not in place at the time of the spin-off, the business activities spun off to the OpCos have been temporarily leased back by the relevant OpCos to Merck KGaA until sector-specific ERP systems have been introduced. For this purpose, also on March 2, 2018, Merck KGaA entered into a business leasing contract with each respective OpCo with economic effect as of 0:00 on January 1, 2018, to lease back all the operating business previously spun off to the OpCo. Under the terms of the respective business leasing contract, Merck KGaA leases the entire operation from the respective OpCo, as well as all fixed assets in this context; it acquires the current assets as well as certain liabilities and provisions at their carrying amounts under German commercial law. The business lease allowed the spin-off measures to be implemented for all OpCos with economic effect at a uniform time, 0:00 on January 1, 2018, while retaining the flexibility of transitioning the management of the relevant operating business in accordance with the sector-specific ERP introduction at an individual time to the OpCo in question in a targeted manner. On the basis of the business leasing contract, Merck KGaA will temporarily continue to operate the spun-off business as a leaseholder in its own name and for its own account. Once the relevant ERP systems have been introduced for the respective OpCo, the business lease with this OpCo will be terminated and the business previously leased out will pass to the OpCo.

The aforementioned spin-off and business leasing contracts form part of an overall entrepreneurial concept. They were submitted to the Annual General Meeting of Merck KGaA on April 27, 2018, (Annual General Meeting 2018) for approval as a coherent restructuring measure and were approved. In 2018, the Healthcare OpCo changed its legal form to that of a German corporation with general partners (Kommanditgesellschaft auf Aktien) and has since been trading under the name of Merck Healthcare KGaA, Darmstadt.

The business leasing contract under which the Healthcare business sector was leased back to Merck KGaA was terminated on January 11, 2019, with economic effect as of 24:00 on March 31, 2019. As a result of the end of the business leasing contract, the leased objects allocated to the Healthcare business sector at the end of the lease – comprising current assets as well as certain liabilities and provisions – were transferred to Merck Healthcare KGaA at their carrying amounts under German commercial law.

As planned, the business leasing contract between Merck Performance Materials Germany GmbH and Merck KGaA for the distribution and sales function of the Electronics business sector was terminated on November 18, 2019, with economic effect as of 24:00 on December 31, 2019. By way of an agreement dated November 18, 2019, the business leasing contract for the other functions of the Electronics business sector remains in place. Accordingly, the distribution and sales function of the Electronics business sector moved to Merck Performance Materials Germany GmbH with economic effect as of 0:00 on January 1, 2020. The sector-specific ERP system for the distribution and sales function of the Electronics business sector was introduced at Merck Performance Materials Germany GmbH as planned on January 1, 2020. As a result of the partial termination of the business leasing contract, the leased objects allocated to the distribution and sales function of the Electronics business sector at the end of the lease – comprising current assets as well as certain liabilities and provisions – were transferred to Merck Performance Materials Germany GmbH at their carrying amounts under German commercial law. The contractual, process, procedural, and working relationships allocated to the function were also transferred to Merck Performance Materials Germany GmbH.

As the carrying amounts of the assets exceeded the carrying amounts of the liabilities, Merck Performance Materials Germany GmbH made a settlement payment to Merck KGaA. In addition, the licenses for the intangible assets and know-how of the distribution and sales function leased to Merck KGaA came to an end.

As a result of the aforementioned spin-off and restructuring measures and the business leasing contract that remains in place, Merck KGaA still continues to manage the operating business of the Electronics business sector with the exception of part of the distribution and sales function. Furthermore, as a result of the business leasing contract, Merck KGaA also runs the operating business of the Life Science business sector.

Construction of the Gernsheim Science and Technology Park (“Fluxum Gernsheim”)

As part of the strategic development of the Gernsheim site into a science and technology park, various operations at the Gernsheim site have been bundled and transferred to separate subsidiaries domiciled in Gernsheim.

Merck Site Management GmbH

Firstly, this relates to the transfer of site management functions based in Gernsheim (hereinafter referred to as “SM Gernsheim”) from Merck KGaA to Merck Site Management GmbH, which will act as an infrastructure service provider at the site in the future, by way of contribution. The transfer was based on the contribution agreement concluded between Merck KGaA and Merck Site Management GmbH in notarized form on September 21/22, 2021, which took effect from the end of September 30, 2021. The agreement provided for the transfer of the assets and liabilities attributable to SM Gernsheim to Merck Site Management GmbH at their current carrying amounts. This primarily related to the balance sheet items of fixed assets, inventories, other receivables, and pension provisions, including the plan assets offset in accordance with section 246 (2) sentence 2 HGB, as well as the transfer of 96 employees together with the corresponding personnel provisions.

Merck Surface Solutions GmbH

Secondly, this relates to the transfer of the Gernsheim-based production operations of the Surface Solutions business unit within the Electronics business sector, including the Gernsheim-specific Electronics shared functions and the Gernsheim logistics operation (hereinafter referred to collectively as “SSG Production”), by way of their separation and transfer to Merck Gernsheim Holding GmbH under transformation law and their subsequent spin-off to Merck Surface Solutions GmbH.

The separation relating to SSG Production was based on the separation and transfer agreement concluded between Merck Performance Materials Germany GmbH and Merck Gernsheim Holding GmbH in notarized form on August 10, 2021. The separation took place with economic effect as of 0:00 on July 1, 2021. As Merck Performance Materials Germany GmbH was leasing SSG Production to Merck KGaA under a business leasing contract at this time, the separation involved not only the transfer of the assets and liabilities of SSG Production held by Merck Performance Materials Germany GmbH to Merck Gernsheim Holding GmbH at their current carrying amount, but also, with the approval of Merck KGaA, the transfer of the rights and obligations of Merck Performance Materials Germany GmbH relating to SSG Production under the aforementioned business leasing contract (the separated portion of the business leasing contract relating to SSG Production being hereinafter referred to as the “SSG business leasing contract”).

Immediately after the separation took economic effect, all the assets and liabilities transferred to Merck Gernsheim Holding GmbH and the rights and obligations arising from the separated SSG business leasing contract were spun off to Merck Surface Solutions GmbH. Merck Gernsheim Holding GmbH and Merck Surface Solutions GmbH entered into a notarized spin-off and takeover agreement to this effect on August 10, 2021. The spin-off and the separation took place with economic effect as of 0:00 on July 1, 2021.

As the technical system requirements for Merck Surface Solutions GmbH to commence operations were not yet fulfilled when the spin-off took place, the separated SSG business leasing contract between Merck Surface Solutions GmbH and Merck KGaA continued to be implemented as previously for a brief transitional period. The SSG business leasing contract was subsequently terminated on August 31, 2021, with effect from the end of September 30, 2021. Merck Surface Solutions GmbH commenced operations via SSG Production with effect from October 1, 2021. As a result of the termination of the SSG business leasing contract, the leased objects allocated to SSG Production within the Electronics business sector at the end of the lease – largely comprising inventories as well as certain liabilities and provisions – were transferred to Merck Surface Solutions GmbH at their carrying amounts under German commercial law. The contractual, process, procedural, and working relationships (603 employees) allocated to SSG Production were also transferred to Merck Surface Solutions GmbH. As the carrying amounts of the assets exceeded the carrying amounts of the liabilities, Merck Surface Solutions GmbH made a settlement payment to Merck KGaA.

The following table shows the impact of the transfers to the Merck Surface Solutions GmbH and the Merck Site Management GmbH on the net assets and financial position of Merck KGaA. The spin-off of the operations mainly resulted in lower sales, material, personnel and other operating expenses in fiscal year 2021.

€ million	Carrying amounts of the carved-out assets and liabilities
Assets	
<i>A. Fixed assets</i>	
Intangible assets	0.1
Tangible assets	2.1
Financial assets	-
	2.2
<i>B. Current assets</i>	
Inventories	66.3
Trade accounts receivable	0.1
Other receivables and other assets	18.6
Cash and cash equivalents	-
	85.0
<i>C. Prepaid expenses</i>	-
Total assets	87.2
Equity and liabilities	
<i>A. Provisions</i>	
Provisions for pensions and other post-employment benefits	7.8
Other provisions	9.5
	17.3
<i>B. Liabilities</i>	
Trade accounts payable	9.3
Other liabilities	-
	9.3
<i>C. Deferred income</i>	-
Total equity and liabilities	26.6
Net assets	60.6

Business development

Merck KGaA's net sales increased moderately in 2021. The upturn of € 257 million primarily resulted from the Life Science business sector. On the other hand, net sales declined in the Electronics business sector in particular. The net sales of the Healthcare business sector relate to Group services oncharged to other companies in the Healthcare business sector.

€ million	2021	2020	Change	
			€ million	%
Life Science	1,537	1,169	368	31.5
Healthcare	531	508	23	4.5
Electronics	1,037	1,176	-138	-11.8
Other sales	327	323	4	1.2
Total	3,433	3,176	257	8.1

Other sales mainly included the intragroup oncharging of IT services, rent, and the umbrella brand, as well as other administrative services.

The share of sales with other Group companies (Group sales) amounted to 91.9% in the year under review (2020: 92.5%).

€ million	2021	2020	Change	
			€ million	%
Group internal product sales	1,944	1,890	54	2.8
Third party product sales	278	238	40	16.8
Group internal services	1,211	1,048	163	15.5
	3,433	3,176	257	8.1

At 72.0% (2020: 66.2%), the share of exports in 2021 was higher than in the previous year.

€ million	2021	2020	Change	
			€ million	%
Outside Germany	2,472	2,103	369	17.6
Germany	961	1,073	-112	-10.5
Total	3,433	3,176	257	8.1

Net sales in the Life Science business sector increased strongly compared with the previous year, mainly as a result of the global business development of the Process Solutions business unit (+42.4%); further information can be found under "Course of Business and Economic Position". The Research Solutions (+3.4%) and Applied Solutions (+0.3%) business units also contributed to this development. Sales growth was recorded in all regions, with Europe, Asia-Pacific, and North America enjoying particularly pronounced upturns.

In the Electronics business sector, sales in the Display Solutions business unit including OLED sales declined by -6.3% year-on-year. The Surface Solutions business unit also recorded a double-digit downturn in sales (-39.4%) including Cosmetics sales. A mid-eight-figure amount of the downturn in the Surface Solutions business unit was attributable to the transfer of the operations at the Gernsheim site to a separate company,

Merck Surface Solutions GmbH, effective October 1, 2021. Additionally, the sale of inventories in connection with the transfer of the distribution and sales functions to Merck Performance Materials Germany GmbH effective January 1, 2020 resulted in a one-off increase in net sales in the previous year. From a regional perspective, sales declined in Europe and Asia-Pacific in particular.

Results of operations

€ million	2021	2020	Change	
			€ million	%
Net sales	3,433	3,176	257	8.1
Other income	96	355	-259	-73.0
Cost of materials	-1,412	-1,265	-148	11.7
Personnel expenses	-1,195	-1,070	-124	11.6
Depreciation, amortization, and write-downs	-144	-131	-13	9.6
Other operating expenses	-946	-1,047	102	-9.7
Investment result	1,606	1,092	515	47.2
Financial result	-294	-345	51	-14.8
Profit before profit transfers and taxes	1,145	765	380	49.7
Profit transfers	-743	-520	-223	43.0
Taxes	-113	-64	-50	77.6
Profit after profit transfers and taxes	289	181	108	59.4

Profit after taxes and **profit transfers** increased on the back of higher net sales and investment income in particular, as well as lower other operating expenses. This was primarily offset by higher material and personnel expenses as well as the lower level of other income.

The higher **other income** in the previous year resulted mainly from the merger of AB Pensions GmbH & Co. KG, as well as higher reversals of provisions.

The **cost of materials** increased in line with net sales. The cost of materials in relation to sales remained largely unchanged at 41.1% (2020: 39.9%).

The higher level of **personnel expenses** was mainly attributable to the increase in pension provisions and provisions for bonuses, as well as salary increases for employees covered by and exempt from collective agreements. This was offset by a headcount reduction as a result of the employees transferred to Merck Site Management GmbH and Merck Surface Solutions GmbH in connection with the construction of the Gernsheim Science & Technology Park; see section "Effects of material company agreements on the net assets, financial position, and results of operations".

Depreciation, amortization and write-downs mainly increased as a result of the write-downs on software and property, plant and equipment in the previous year.

The decrease in **other operating expenses** was primarily due to lower expenses for other external services and procurements, fees, contributions and insurance premiums, and repairs and maintenance.

The **investment result** increased on the back of higher profit transfers and dividends from subsidiaries.

The lower level of interest expense in the **financial result** was due to lower interest expenses to the inhouse bank Merck Financial Services GmbH, as well as lower interest expenses in respect of third parties as a result of the repayment of bonds and external loans.

Net assets and financial position

Assets

€ million	Dec. 31, 2021	Dec. 31, 2020	Change	
			€ million	%
Fixed assets	23,872	23,883	-11	-0.0
Intangible assets	210	229	-18	-8.1
Tangible assets	857	862	-5	-0.5
Financial assets	22,805	22,793	12	0.1
Current assets	1,645	1,447	198	13.7
Inventories	454	470	-16	-3.4
Trade accounts receivable	122	133	-11	-8.6
Other receivables and other assets	1,069	843	226	26.8
Cash and cash equivalents	0	1	-0	-64.6
Prepaid expenses	53	52	1	1.1
	25,570	25,382	188	0.7

Equity and liabilities

€ million	Dec. 31, 2021	Dec. 31, 2020	Change	
			€ million	%
Net equity	5,576	5,351	225	4.2
Provisions	1,831	1,735	95	5.5
Provisions for pensions and other post-employment benefits	1,187	1,104	83	7.5
Other provisions	643	631	12	1.9
Liabilities	18,150	18,283	-133	-0.7
Financial liabilities	3,000	3,517	-517	-14.7
Trade accounts payable	319	263	56	21.2
Other liabilities	14,831	14,503	328	2.3
Deferred income	13	13	0	0.6
	25,570	25,382	188	0.7

Net assets increased slightly by 0.7%. The main increase on the asset side of the balance sheet related to current assets (€ 198 million), while net equity saw the biggest increase on the equity and liabilities side (€ 225 million). On the other hand, liabilities declined by € -133 million. The equity ratio increased slightly to 21.8% (2020: 21.1%).

The transfer of the Surface Solutions and Site Management operations at the Gernsheim site to separate subsidiaries resulted in the derecognition of the assets and liabilities attributable to this function (see section "Effects of material company agreements on the net assets, financial position, and results of operations").

Other receivables and other assets increased mainly as a result of the higher level of investment income at subsidiaries.

The increase in provisions was caused by the rise in provisions for pensions and other provisions.

The decline in financial liabilities was attributable to the repayment of bonds and external loans.

Other liabilities largely rose as a result of the higher level of liabilities to affiliated companies at year-end, and in particular to the inhouse bank Merck Financial Services GmbH.

Research and development

In fiscal 2021, research and development expenditure increased by € 24 million (10.7%) year-on-year to € 253 million (2020: € 229 million). A large portion was also incurred by companies outside the Merck Group.

Research and development expenses

€ million	2021	2020	Change	
			€ million	%
Life Science	66	57	8	14.7
Healthcare	6	0	6	0.0
Electronics	165	159	6	4.0
Other R&D spending that cannot be allocated to individual business sectors	17	13	4	28.2
Total	253	229	24	10.7

The ratio of research and development spending to sales was 7.4% (2020: 7.2%). Overall, the average number of employees working in research and development was 1,098.

Dividend

For fiscal 2021, we are proposing to the Annual General Meeting the payment of a dividend of € 1.85 per share.

Personnel

As of December 31, 2021, Merck KGaA had 8,081 employees, representing a decrease as against the previous year (2020: 8,578). The reduction was primarily due to the employees transferred to Merck Site Management GmbH and Merck Surface Solutions GmbH in connection with the construction of the Gernsheim Science & Technology Park; see "Effects of material company agreements on the net assets, financial position, and results of operations".

The average number of employees by functional area:

Personnel

Average number of employees during the year	2021	2020
Production	3,109	3,222
Administration	3,102	3,119
Research	1,098	1,076
Logistics	628	633
Marketing and sales	495	470
Other	36	16
Total	8,468	8,536

Risks and opportunities

Merck KGaA is largely subject to the same opportunities and risks as the Merck Group. More information can be found in the Report on Risks and Opportunities.

Forecast for Merck KGaA

Deviations of actual business development in fiscal 2021 from the previously reported guidance

The Combined Management Report for 2020 initially stated that net sales in fiscal 2021 were expected to be at a similar level to fiscal 2020. Net income was also expected to be the same as in the previous year.

Net sales in the Life Science business sector increased strongly compared with the previous year, mainly as a result of the Process Solutions business unit (+42.4%). The Research Solutions (+3.4%) and Applied Solutions (+0.3%) business units also contributed to this development. Year-on-year sales growth was recorded in all regions, especially Europe, Asia-Pacific, and North America.

As expected, net sales in the Healthcare business sector were at the same level as in the previous year.

In the Electronics business sector, sales in the Display Solutions business unit including OLED sales declined by -6.3% year-on-year. The Surface Solutions business unit also recorded a double-digit downturn in sales (-39.4%) including Cosmetics sales. The downturn in the Surface Solutions business unit was attributable in part to the transfer of the operations at the Gernsheim site to a separate company, Merck Surface Solutions GmbH, effective October 1, 2021. Additionally, the sale of inventories in connection with the transfer of the distribution and sales functions to Merck Performance Materials Germany GmbH effective January 1, 2020, resulted in a one-off increase in net sales in the previous year. From a regional perspective, sales declined in Europe and Asia-Pacific in particular.

Thanks to higher profit transfers and dividends from subsidiaries in particular, net income was above the forecast level despite lower income from the merger of AB Pensions GmbH & Co. KG and from the reversal of provisions.

Forecast 2022

Electronics is expected to see a low nine-figure downturn in sales as a result of the transfer of the Surface Solutions business unit to Merck Surface Solutions GmbH. The other business sectors are expected to see a similar level of sales to 2021.

As in the previous year, the financing costs of the Sigma-Aldrich acquisition and the Versum Materials acquisition will continue to adversely affect net income. Nevertheless, net income for 2022 is expected to see a similar level as in 2021 due to the positive investment income and dividends from the subsidiaries.

Merck Financial Services GmbH, Darmstadt, will provide the company with sufficient financial resources and thus ensure liquidity.

No risks that could jeopardize the continued existence of the company have been identified.