

Business sectors

The Chemicals business sector was reorganized last year after the July 14 acquisition of the U.S.-based life-science company Millipore. Millipore was combined with most of the Performance & Life Science Chemicals division to form the Merck Millipore division. This division has three business units – Bioscience, Lab Solutions, and Process Solutions. The second Chemicals division is Performance Materials. It consists of two business units – Liquid Crystals and Pigments & Cosmetics.

The Chemicals business sector accounted for 37% of the Group's total revenues in the second quarter.

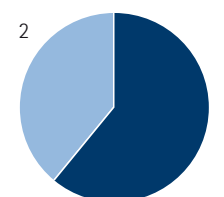
This business sector's total revenues rose by 49% to € 957 million in the second quarter and by 61% to € 1,977 million in the first half of 2011. This was largely due to the inclusion of Millipore sales as well as a solid performance by the Performance Materials division. The Merck Millipore division booked € 46 million for amortization of intangible assets from the Millipore acquisition and the Performance Materials division had inventory adjustments of € –39 million plus impairments of € –8.6 million on the value of various patents. Therefore, the Chemicals business sector's operating result declined 9.3% to € 151 million in the second quarter but rose 18% to € 391 million in the first half of 2011.

The German Chemical Industry Association (VCI) forecast on July 14 that German chemical sales would increase by 10% in 2011 while prices would increase by 5%.

Chemicals | Total revenues by division – Q2

€ million / % of total revenues of business sector

1 Merck Millipore	584	61%
2 Performance Materials	373	39%



MERCK MILLIPORE

The Merck Millipore division comprises the activities of the former Millipore Corporation, a leading U.S.-based life science company acquired in July 2010, and the majority of Merck's former Performance & Life Science Chemicals division. As the businesses are now fully integrated, it is not possible to provide comparable year-ago figures. Total revenues for the new division amounted to € 584 million in the second quarter and € 1,195 million in the first half of 2011.

Merck Millipore | Key figures

€ million	Q2 – 2011	Change in %	Jan.–June 2011	Change in %
Total revenues	583.7	138.9	1,195.0	152.1
Gross margin	329.8	158.5	686.0	169.6
Research and development	–31.9	–	–64.5	–
Operating result	46.3	–	118.2	–
Exceptional items	–	–	–	–
Free cash flow	59.1	179.2	110.5	171.4
Underlying free cash flow	69.1	226.8	126.9	211.7
ROS in %	7.9		9.9	

The division has three business units – Bioscience representing 17% of second-quarter total revenues; Lab Solutions representing 42%; and Process Solutions representing 41%.

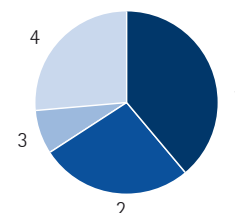
The Bioscience business unit focuses on helping customers in the pharmaceutical and biotechnology industries, as well as academia, understand complete biological systems and identify new therapeutic targets. It provides tools and services to support researchers in a wide variety of areas ranging from neuroscience, infectious disease, oncology, and metabolic disorders to stem cells, cell signaling, nuclear function, and chromatin biology. Bioscience products and services simplify the work flow for researchers.

Sales of the Bioscience business unit slowed in the second quarter compared to the first due to reduced orders from key academic and life science customers.

Merck Millipore | Sales by region – Q2

€ million / % of divisional sales

1 Europe	227	39%
2 North America	157	27%
3 Latin America	46	8%
4 Asia, Africa, Australasia	153	26%



Merck Millipore

The Lab Solutions business unit is a leading supplier to laboratories with lab water equipment, consumables and services, microbiology and biomonitoring, test assays, organic and analytical reagents and solvents. Both Merck and Millipore had substantial expertise in this field. The Lab Solutions business unit has started to establish a global footprint to target considerable cross-selling synergies. One of its well-known products is the Duopath® Verotoxin, a simple quick test to detect EHEC (enterohemorrhagic Escherichia coli) in food, which infected hundreds of Europeans in the spring of this year.

Lab Solutions sales were nearly identical in the first and second quarters.

The Process Solutions business unit supplies products used by pharmaceutical and biotechnology companies to develop and manufacture biopharmaceutical drugs safely and efficiently. It provides fully integrated solutions to biopharmaceutical customers and an attractive range of development and regulatory services to biopharmaceutical manufacturers.

Second-quarter Process Solutions sales declined slightly from the first quarter due to the timing of key customers' manufacturing campaigns. The business unit also saw growth reduced due to the cancellation of a contract to sell insulin for use in industrial biopharmaceutical applications.

The division booked € 46 million in the second quarter for amortization of intangible assets in connection with the purchase price allocation for Millipore. Similar amounts will be recorded every quarter for several years.

This led to a second-quarter operating result of € 46 million with an ROS (operating result/total revenues) of 7.9%. The core operating result, which excludes Merck Millipore-related amortization of intangible assets and integration costs, was € 101 million, resulting in a core ROS of 17.3%.

For the first half of the year, the core operating result was € 232 million, resulting in a core ROS of 19.5%.

PERFORMANCE MATERIALS

The Performance Materials division comprises Merck's materials businesses and activities, i.e. Liquid Crystals, Pigments & Cosmetics, as well as Advanced Technologies, which offers innovative materials for lighting, photovoltaics, energy-storage solutions and other high-tech applications.

Performance Materials | Key figures

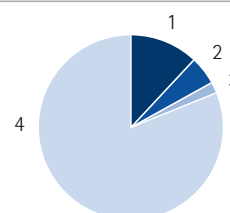
€ million	Q2 – 2011	Change in %	Jan.–June 2011	Change in %
Total revenues	373.5	–6.5	782.2	3.7
Gross margin	198.7	–25.3	462.9	–5.9
Research and development	–30.1	0.4	–66.5	8.6
Operating result	104.3	–37.7	273.1	–8.6
Exceptional items	0.4	–	157.4	–
Free cash flow	153.9	0.7	452.5	74.3
Underlying free cash flow	154.0	0.7	251.6	–3.1
ROS in %	27.9		34.9	

On an organic basis, second-quarter total revenues of the division rose 1.4% year-over-year. However, total revenues declined nominally by 6.5% to € 373 million due to negative currency effects of 4.9% stemming from the Taiwan dollar and the U.S. dollar and a negative 3.0% impact due to the absence of sales from the Crop BioScience business that was divested in the first quarter of 2011. For the first half of 2011, total revenues rose 3.7% to € 782 million from € 754 million in the year-ago period.

Performance Materials | Sales by region – Q2

€ million / % of divisional sales

1 Europe	45	12%
2 North America	19	5%
3 Latin America	7	2%
4 Asia, Africa, Australasia	302	81%



The Liquid Crystals business unit, which accounts for the largest share of the division's revenues, delivered a solid performance with organic growth of 1.8% during the second quarter of 2011 in comparison to a very strong year-ago quarter. A moderately softer pricing environment, negative effects from changes in foreign exchange rates and a negative product mix was more than offset by strong volumes. This is due to the continued high demand for Merck's broad range of innovative liquid crystal materials, which are used in flat panel displays for televisions and computer monitors as well as touch screens for the very popular smart phones and electronic tablets. Merck expanded its overall market share in liquid crystals during the first six months of 2011.

Performance Materials

While the March 11 earthquake in Japan disrupted power supplies and damaged roads and other infrastructure in the northeastern part of the country, it did not affect the division's production site for liquid crystals at Atsugi. However, Merck's pigments production plant at Onahama was damaged and negatively affected production of the popular Xirallic® pigments for automotive coatings for most of April. The resulting volume loss was somewhat offset by reducing existing inventories of Xirallic® and increasing prices for pigments in the second quarter. Besides Japan, Merck produces effect pigments in Germany, China and the United States.

The Advanced Technologies unit is beginning to make an increasing contribution to the division's revenue stream thanks to reactive mesogens and other optic materials. Reactive mesogens are liquid crystalline materials that can either be coated onto flexible plastic foils to form compensation films or be used inside a display to form in-cell optical elements. Their main application at this time is in 3D displays, such as in flat-panel televisions.

Inventory adjustments amounting to € 39 million substantially burdened the Performance Materials division's cost of sales in the second quarter. As a result, cost of sales increased 31% to € 175 million from € 133 million in the year-ago quarter. If adjusted for these items, the underlying profitability of the division was comparable to the previous year.

Research and development costs were unchanged at € 30 million, or 8.1% of total revenues.

With headwinds from currency effects, the absence of profits from the divested Crop BioScience business, adverse changes in product mix as well as one-off charges for inventory adjustments and an impairment loss for various patents, the operating result of the Performance Materials division declined by 38% to € 104 million in the second quarter. This resulted in an ROS for the division of 27.9% in the second quarter of 2011 compared to 41.9% in the year-ago quarter. For the first half of 2011, the operating result was down 8.6% to € 273 million, resulting in a half-year ROS of 34.9% in 2011 compared to 39.6% in 2010.