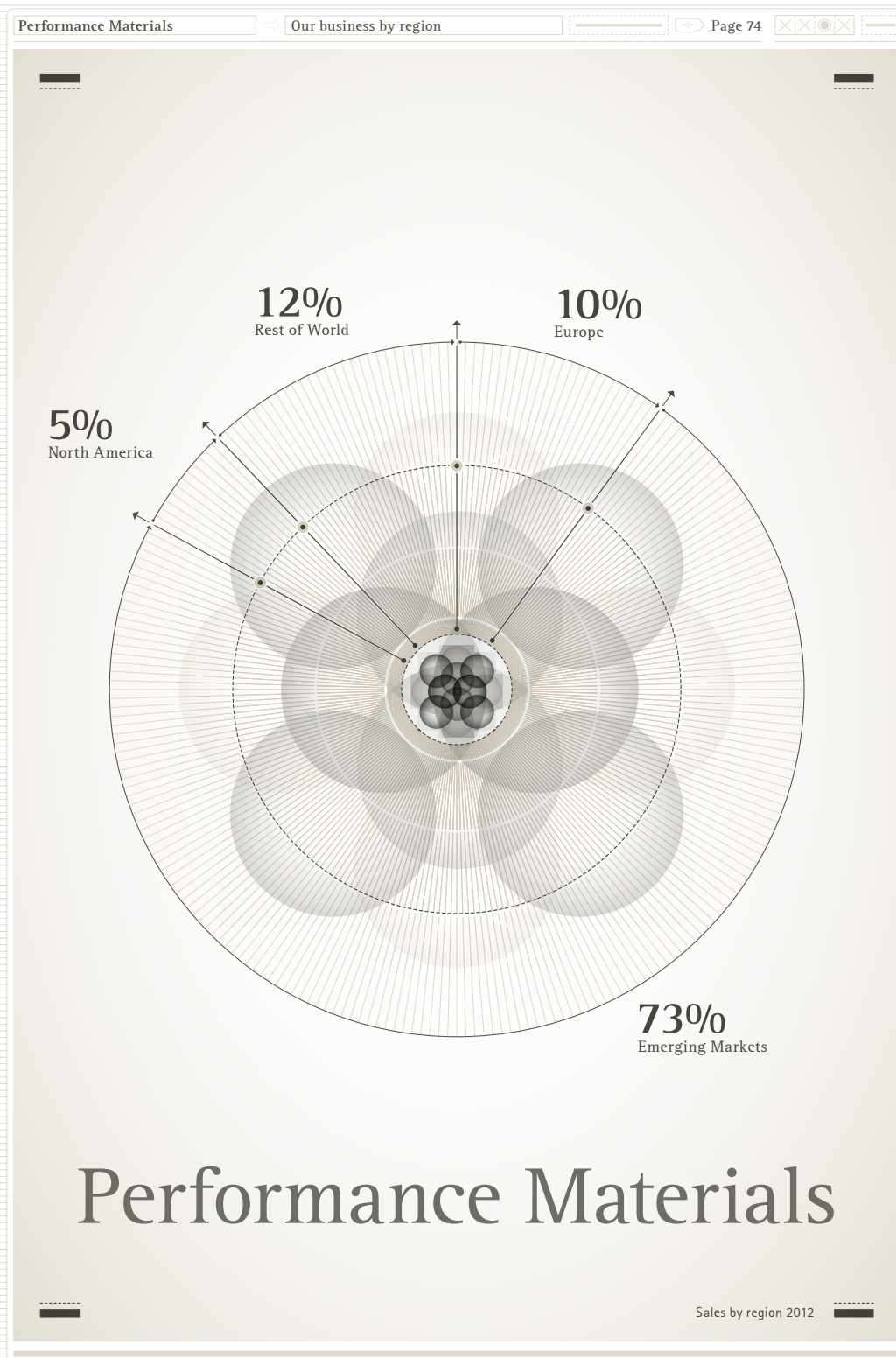




Performance Materials 3/4

Exceptionally strong year due to high demand for liquid crystal materials and positive foreign exchange rate effects

Higher volumes of LC materials driven by unabated consumer demand and market share gains

Pigments sales improve over weak prior year, outlook remains cautious

Performance Materials performed strongly in 2012, generating record sales of € 1,674 million (2011: € 1,465 million), an outstanding increase of 14.3%. The division benefited significantly from the stronger U.S. dollar as a dominant portion of its sales are booked in this currency. As a result, changes in foreign exchange rates added 7.0%. Organically, the division grew by 7.4% as robust growth trends in the flat panel display industry stimulated strong demand for liquid crystal materials, which contribute more than 70% to divisional sales. Increasing sales of TV sets and especially growing screen sizes led to high demand for liquid crystals materials with VA (vertical alignment), PS-VA (polymer stabilized vertical alignment) and IPS (in-plane switching) technologies. Sales volumes of IPS liquid crystals additionally benefited from growing sales of mobile devices with touch-screen LCD displays such as tablet PCs and smartphones. Additionally, as a result of incrementally improving the properties and characteristics of our marketed liquid crystals portfolio, we increased our market share to more than 60% in 2012 from around 55% in 2011.

The Pigments & Cosmetics business unit also increased its sales in 2012, albeit in comparison with a moderate previous year. Apart from significant positive foreign exchange rate effects, Pigments & Cosmetics registered organic sales growth with functional materials for plastic and printing applications and especially with the Xirallic® family of effect pigments, which are primarily used in automotive coatings. In 2011, volumes of Xirallic® pigments declined significantly as a result of supply bottlenecks due to the temporary shut-down of the business unit's site in Onahama (Japan) caused by one of the strongest earthquakes Japan had ever seen. To raise its future supply reliability, the business unit commissioned a second production site for Xirallic® pigments in Germany in 2012, which helped to regain market share lost in this segment in 2011. From an overall market perspective, however, the automotive industry became increasingly cautious during the second half of the year with respect to its near-term volume projections.

Divestments had a negligible effect on the performance of the division in 2012. The sale of the battery electrolyte business to BASF, announced in February 2012, lowered sales only by 0.1%.

Performance Materials | Key figures

€ million	2012	2011	Change in %
Total revenues	1,675.6	1,467.4	14.2
Sales	1,674.2	1,464.7	14.3
Operating result (EBIT)	598.5	691.0	-13.4
Margin (% of sales)	35.7	47.2	-
EBITDA	723.4	801.1	-9.7
Margin (% of sales)	43.2	54.7	-
EBITDA pre one-time items	730.7	682.7	7.0
Margin (% of sales)	43.6	46.6	-

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Inventory optimization and softer pricing weighing on gross margin

In 2012, the division's gross profit grew 9.6% to € 959 million (2011: € 875 million), at a lower rate than sales growth, which reduced gross margin to 57.3% (2011: 59.8%). Several factors were responsible for this development: Higher volumes in addition to underutilization of production capacity as a result of reducing inventory levels led to an increase in production costs of 21.0% to € 716 million (2011: € 592 million). Furthermore, price concessions as a result of higher volumes additionally weighed on the gross margin.

Total selling, general and administration costs (including also license and commission expenses, other operating expenses/income) increased more than fourfold by € 179 million to € 219 million (2011: € 40 million). This development is attributable to the very low levels in the prior year, which included other operating income of € 157 million from the sale of the CropBioscience business to Novozymes. Moreover, other operating expenses of € 26 million related to the efficiency program were booked for the first time in 2012. The division has set itself the goal of optimizing the existing production network in addition to streamlining its organizational structure. Overall, other operating expenses of € 39 million in 2012 compared with other operating income of € 127 million in the previous year. The 7.9% increase in marketing and selling expenses and 6.4% rise in administrative costs, however, remained significantly lower than sales growth.

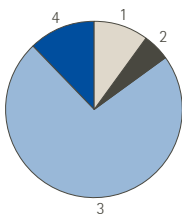
R&D at an unchanged high level, displaying leadership claim for liquid crystal materials

The same applies to R&D investments, which rose 3.5% to € 137 million (2011: € 133 million). This ongoing high level of 8.2% of sales (2011: 9.1%) reflects the sustainable innovation strategy of the division, especially in Liquid Crystals. Merck intends to maintain its leading market position in liquid crystal materials by both continuously improving existing products and developing new ones.

The aforementioned one-time items also had a significant impact on the operating result of the division. EBIT fell by 13.4% to € 599 million (2011: € 691 million) and EBITDA by 9.7% to € 723 million (2011: € 801 million). Adjusted for one-time items, EBITDA pre rose by 7.0% to € 731 million (2011: € 683 million), representing 43.6% of sales (2011: 46.6%).

Performance Materials | Sales by region – 2012

€ million/% of divisional sales



1 Europe	160	10%
2 North America	90	5%
3 Emerging Markets	1,218	73%
4 Rest of World	206	12%

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China becoming third biggest sales contributor, Japan falling behind

From a geographic perspective, Emerging Markets generated sales of € 1,218 million in 2012 (2011: € 998 million), or 73% of the division's sales, reflecting the high concentration of liquid crystals customers in Asia. Divisional sales in this region showed a strong 13.9% organic increase also as a result of strong demand from the emerging Chinese display industry. As a result, Merck's liquid crystals sales to China more than doubled, elevating China to the number three single market in terms of sales – behind South Korea and Taiwan – overtaking Japan. The sales decline in Japan, which is part of the Rest of World region, was due to the difficult market environment faced by the Japanese display and electronic industry in 2012. As a result, sales of Performance Materials in the Rest of World region declined organically by 15.2% to € 206 million (2011: € 226 million), accounting for 12% of the division's sales

Effect pigments business affected by difficult economic environment in Europe

In the regions of Europe and North America, Performance Materials generates sales almost exclusively with products from the Pigments & Cosmetics business unit. Sales in Europe declined 4.2% organically to € 160 million (2011: € 167 million), or 10% of divisional sales due to both slowing automotive production in this region as well as softer sales to customers in the cosmetics industry. In contrast, sales in North America recorded a high growth rate similar that of the Emerging Markets. Sales grew 13.7% organically to € 90 million (2011: € 74 million), driven primarily by sales of Xirallic® pigments for automotive coatings as well as strong demand for the division's active ingredients for cosmetics.

Performance Materials | Sales growth components by region – 2012

€ million / change in %	Sales	Organic growth	Exchange rate effects	Acquisitions/ divestments	Reported sales growth
Europe	160.3	-4.2	0.3	-	-3.9
North America	89.5	13.7	8.7	-1.5	20.9
Emerging Markets	1,218.3	13.9	8.2	-	22.1
Rest of World	206.1	-15.2	6.3	-	-8.9
World in total	1,674.2	7.4	7.0	-0.1	14.3

Cooperation established with Epson for the development of cost-efficient manufacturing processes for OLED displays

In October 2012, Merck and Seiko Epson Corporation announced a cooperation and licensing agreement for inkjet inks used in the manufacture of OLED (organic light-emitting diode) displays. OLED is an alternative technology to LCD used to create flat-panel displays. Today, OLED is only used in small displays such as smart phones. According to the agreement, Epson will supply Merck with ink technology able to dissolve Merck's OLED materials, providing the possibility to apply soluble OLED materials on display substrates using specifically designed printing heads. Today, mass production of OLED displays is based on insoluble OLED materials that are applied using complex chemical vapor deposition (CVD) and masking technologies, resulting in highly limited efficiencies of those production processes. Successful development of a printable OLED technology could pave the way for the cost-efficient production of large OLED displays, particularly for televisions.