Market Study: Pigments

World Report (8th edition)

Ceresana
Market Research Since 2002

This brochure provides further information on the study “Pigments - World (8th edition)”

Executive Summary

Around the world, green is considered the color of new beginnings, of growth, of life. However, finding truly “green” pigments is a challenge: cadmium, cobalt, copper and other heavy metals can be dangerous, while natural earth colors are less durable and more difficult to process. Nevertheless, the outlook for these small, coloring particles is predominantly positive: global demand will increase to 14.5 million tonnes per year by 2032, according to the latest, eighth Ceresana report.

The construction industry is the main customer for pigments

By far the most important sales market for pigments are paints and coatings, which consumes around 5 million tonnes per year. 2.5 million tonnes of this is accounted for by interior and exterior paints for the construction industry. There are major regional differences in the use of pigments, which is why Ceresana’s study examines the applications paints and coatings, plastics and printing inks in detail, along with their respective submarkets.

Colorful plastics, building materials, inks

Plastics are the second largest area of application. Around 1.4 million tonnes of pigments are used every year for packaging alone. Pigments are also used for numerous industrial plastic products. They are followed by construction materials, printing inks and paper. In the case of printing inks, the use of pigments in offset printing predominates with a share of 51%, ahead of flexo printing, which is primarily used for labels, corrugated cardboard, and films.

TiO2, iron oxides & carbon black sell the best

Organic pigments can be produced in part from biogenic materials – but currently only account for a small share of the global market. The best-selling pigment types are inorganic pigments, especially metal salts. Around 60% of total pigment demand is accounted for by the white pigment titanium dioxide (TiO2), which is mainly used for paints and coatings. Iron oxide pigments, the most widely used inorganic color pigments, come in second, followed by carbon black, which is mainly used for printing inks, paints and coatings.

Market Study in Brief:

Chapter 1 analyzes the global market - including forecasts up to 2032: The development of revenues, demand, and production is detailed for each region of the world. Demand is given for the various types of pigments: TiO2, Carbon Black, Iron oxide, Other inorganic pigments, and Organic pigments.
Moreover, the different applications are examined. The following are considered individually: Paints and coatings, broken down into the submarkets: Construction industry, Transportation, Industry, Others; Plastics, divided into: Packaging, Construction industry, Industry, Others; Paper; Construction materials; Printing inks, split into: Offset printing, Flexo printing, Others; Other applications.

Chapter 2 analyzes 31 countries in detail in terms of demand, export, import, production, and revenues. The data regarding demand per country is split by pigment types and applications. In addition, demand for the individual pigment types per application is provided.

Chapter 3 provides a useful directory of the 62 most important manufacturers of pigments, for example, Altana, DIC, Heubach, Lanxess, Merck, Sibelco, Venator, and Vibrantz.

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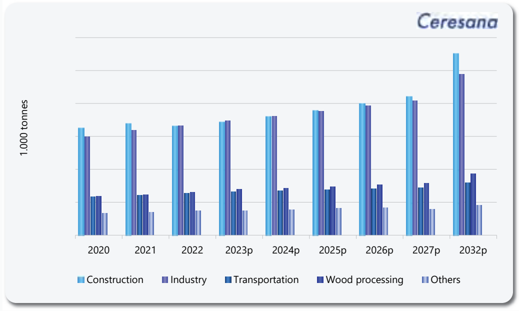
1.6.4 Asia Pacific – Applications and Products

The segment paints and coatings accounted for the largest share of the 5.44 million tonnes of pigments that were utilized in the Asia-Pacific region in 2020. The highest percentage increase in the upcoming ten years is expected for the application area "Printing Inks - Flexography". Titanium dioxide represented the largest sub-market in terms of products in 2020. We expect demand for organic products to increase most notably in percentages during the forecasting horizon. Detailed information on the market dynamics of the individual application areas and products can be found in the respective tables.



Graph: Demand for pigments in Asia-Pacific from 2018 to 2030 – split by applications

in 1,000 tonnes	2018	2019	2020	2021p	2022p	2023p	2024p	2025p	2030p	2020-2030
Paints and Coatings	X	X	X	X	X	X	X	X	X	X% p.a.
Construction Industry	X	X	X	X	X	X	X	X	X	X% p.a.
Industry	X	X	X	X	X	X	X	X	X	X% p.a.
Automotive Coatings	X	X	X	X	X	X	X	X	X	X% p.a.
Others	X	X	X	X	X	X	X	X	X	X% p.a.
Plastics	X	X	X	X	X	X	X	X	X	X% p.a.
Packaging	X	X	X	X	X	X	X	X	X	X% p.a.
Construction Industry	X	X	X	X	X	X	X	X	X	X% p.a.
Industry	X	X	X	X	X	X	X	X	X	X% p.a.
Others	X	X	X	X	X	X	X	X	X	X% p.a.
Construction Materials	X	X	X	X	X	X	X	X	X	X% p.a.
Printing Inks	X	X	X	X	X	X	X	X	X	X% p.a.
Offset	X	X	X	X	X	X	X	X	X	X% p.a.
Flexography	X	X	X	X	X	X	X	X	X	X% p.a.
Others	X	X	X	X	X	X	X	X	X	X% p.a.
Paper	X	X	X	X	X	X	X	X	X	X% p.a.
Other Applications	X	X	X	X	X	X	X	X	X	X% p.a.
Total	X	X	X	X	X	X	X	X	X	X% p.a.

Table: Demand for pigments in Asia-Pacific from 2018 to 2030 – split by applications

Market Study: "Pigments - World (8th edition)"

31 Countries, 62 Producers, 430 Pages, 118 Graphs, 308 Tables, 12/2023

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(Revenues, production, import & export, demand split by application and by product type, and demand for pigments per application in 31 countries)

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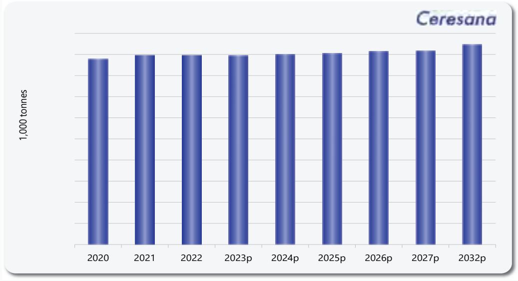
2.1.3 France

2.1.3.1 Demand and Revenues

Demand for pigments in France amounted to X tonnes in 2022. The market volume is expected to increase to approx. X tonnes by the end of our forecast period. Revenues generated with pigments amounted to approximately EUR X million in 2022. Over the next ten years, we expect this figure to grow by around X% p.a.



Graph: Demand in France from 2020 to 2032

Revenues	2020	2021	2022	2023p	2024p	2025p	2026p	2027p	2032p	2022-2032
million USD	X	X	X	X	X	X	X	X	X	X% p.a.
million EUR	X	X	X	X	X	X	X	X	X	X% p.a.

Table: Revenues generated in France from 2020 to 2032, in million USD and million EUR

In 2022, the segment "paints and coatings" represented the largest submarket. From 2022 to 2032, demand in the application areas "plastics" and "construction materials" is expected to experience the highest percentage increase.

in 1,000 tonnes	2020	2021	2022	2023p	2024p	2025p	2026p	2027p	2032p	2022-2032
Paints and coatings	X	X	X	X	X	X	X	X	X	X% p.a.
Plastics	X	X	X	X	X	X	X	X	X	X% p.a.
Construction materials	X	X	X	X	X	X	X	X	X	X% p.a.
Printing inks	X	X	X	X	X	X	X	X	X	X% p.a.
Paper	X	X	X	X	X	X	X	X	X	X% p.a.
Others	X	X	X	X	X	X	X	X	X	X% p.a.
Total	X	X	X	X	X	X	X	X	X	X% p.a.

Table: Demand in France from 2020 to 2032 – split by application

in 1,000 tonnes	2020	2021	2022	2023p	2024p	2025p	2026p	2027p	2032p	2022-2032
Titanium dioxide	X	X	X	X	X	X	X	X	X	X% p.a.
Carbon black	X	X	X	X	X	X	X	X	X	X% p.a.
Iron oxide	X	X	X	X	X	X	X	X	X	X% p.a.
Other inorganics	X	X	X	X	X	X	X	X	X	X% p.a.
Organics	X	X	X	X	X	X	X	X	X	X% p.a.
Total	X	X	X	X	X	X	X	X	X	X% p.a.

Table: Demand in France from 2020 to 2032 – split by product

in 1,000 tonnes	2020	2021	2022	2023p	2024p	2025p	2026p	2027p	2032p	2022-2032
Paints and coatings	X	X	X	X	X	X	X	X	X	X% p.a.
Plastics	X	X	X	X	X	X	X	X	X	X% p.a.
Printing inks	X	X	X	X	X	X	X	X	X	X% p.a.
Paper	X	X	X	X	X	X	X	X	X	X% p.a.
Others	X	X	X	X	X	X	X	X	X	X% p.a.
Total	X	X	X	X	X	X	X	X	X	X% p.a.

Table: Demand for titanium dioxide in France from 2020 to 2032 – split by application

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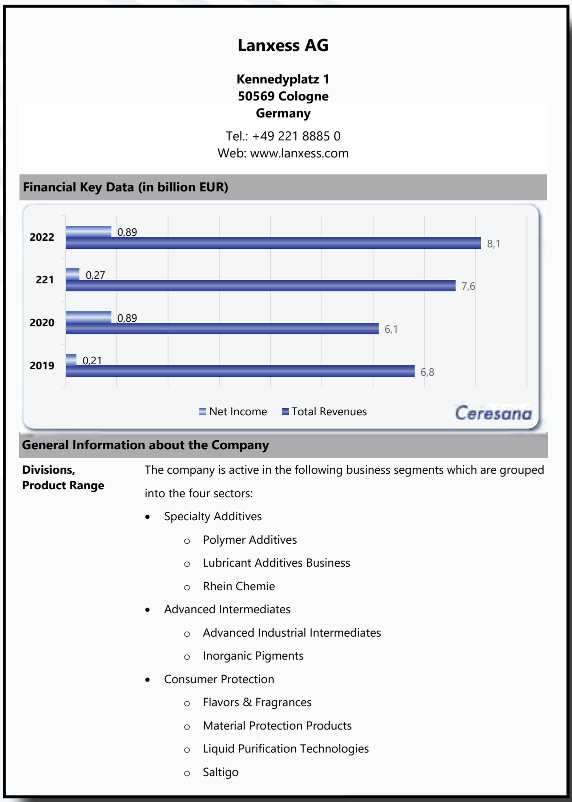


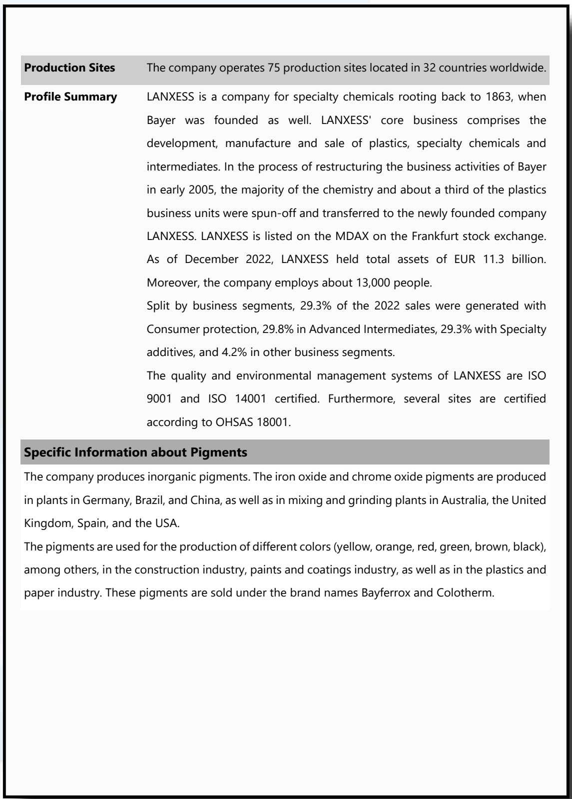
Lanxess AG

Kennedyplatz 1
50569 Cologne
Germany
Tel.: +49 221 8885 0
Web: www.lanxess.com

Financial Key Data (in billion EUR)

General Information about the Company

Divisions, Product Range	The company is active in the following business segments which are grouped into the four sectors: • Specialty Additives o Polymer Additives o Lubricant Additives Business o Rhein Chemie • Advanced Intermediates o Advanced Industrial Intermediates o Inorganic Pigments • Consumer Protection o Flavors & Fragrances o Material Protection Products o Liquid Purification Technologies o Saltigo



Production Sites	The company operates 75 production sites located in 32 countries worldwide.
Profile Summary	LANXESS is a company for specialty chemicals rooting back to 1863, when Bayer was founded as well. LANXESS' core business comprises the development, manufacture and sale of plastics, specialty chemicals and intermediates. In the process of restructuring the business activities of Bayer in early 2005, the majority of the chemistry and about a third of the plastics business units were spun-off and transferred to the newly founded company LANXESS. LANXESS is listed on the MDAX on the Frankfurt stock exchange. As of December 2022, LANXESS held total assets of EUR 11.3 billion. Moreover, the company employs about 13,000 people. Split by business segments, 29.3% of the 2022 sales were generated with Consumer protection, 29.8% in Advanced Intermediates, 29.3% with Specialty additives, and 4.2% in other business segments. The quality and environmental management systems of LANXESS are ISO 9001 and ISO 14001 certified. Furthermore, several sites are certified according to OHSAS 18001.

Specific Information about Pigments

The company produces inorganic pigments. The iron oxide and chrome oxide pigments are produced in plants in Germany, Brazil, and China, as well as in mixing and grinding plants in Australia, the United Kingdom, Spain, and the USA.

The pigments are used for the production of different colors (yellow, orange, red, green, brown, black), among others, in the construction industry, paints and coatings industry, as well as in the plastics and paper industry. These pigments are sold under the brand names Bayferrox and Colotherm.

*Note: The profiles are assigned to the country in which the company or holding is headquartered. Profiles also include JVs and subsidiaries.

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MADE IN GERMANY

Ceresana
Mainaustr. 34
78464 Konstanz
Germany

+49 7531 94297 0

info@ceresana.com

www.ceresana.com

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- Biobased Insulation Material - World
- Biobased Paints and Coatings - World
- Biobased Solvents - World
- Biobased Surfactants - World
- Bioplastic Packaging - World
- Bioplastic Films - World
- Bioplastics - World
- Polylactic Acid (PLA) - World

Chemicals

- Biocides - World
- Carbon Black - World
- Chelating Agents - World
- Fillers - Europe
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- Titanium Dioxide (TiO2) - World

Packaging

- Bags, Sacks & Pouches - Europe
- Bags, Sacks & Pouches - World
- Corrugated Board & Solid Board - Europe
- Flexible Packaging - Europe
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Industry

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