ortho-Xylene

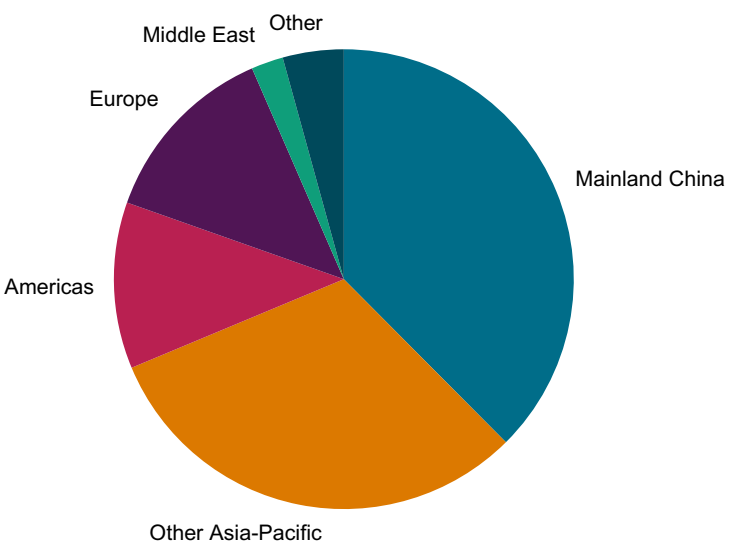
December 2024

Abstract

ortho-Xylene (also referred to as 1,2-dimethyl-benzene, o-xylene or OX) is an aromatic compound typically sourced from crude oil. It is part of the mixed xylenes stream, which consists of OX, meta-xylene (m-xylene) and para-xylene (p-xylene). Although these three isomers have similar structures, they possess distinct chemical properties and applications. OX ranks as the second-most-consumed component derived from the mixed xylenes stream.

The following pie chart shows world consumption of ortho-xylene:

World consumption of ortho-xylene — 2023



Data compiled April 4, 2024.
Source: S&P Global Commodity Insights.
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In 2023, the 10 largest OX producers, predominantly located in Asia, represented nearly 70% of the total global capacity, indicating a relatively concentrated market. The majority of these producers are international oil companies, national oil companies or major refiners and petrochemical manufacturers. The leading OX producers in the world are China Petrochemical Corp. (Sinopec), ExxonMobil Corp. and Reliance Industries Ltd.

Isolated OX is primarily utilized in the production of phthalic anhydride (PA), which is a crucial ingredient for manufacturing plasticizers. In certain regions, PA can also be derived from naphthalene. PA is mainly used to create phthalate-based polyvinyl chloride (PVC) plasticizers, unsaturated polyester resins for fiber-reinforced materials, and alkyd resins for coatings. Over the past five years, global consumption of OX has declined, largely attributed to the rising use of naphthalene as a feedstock for PA in mainland China, along with stagnant global demand for PA. Furthermore, increasingly strict regulations, such as the REACH regulation in the European Union, are promoting the gradual phaseout of phthalate-based plasticizers, which is hindering the growth of PA and consequently OX consumption.

In the next five years, global capacity for OX is anticipated to rise, driven by potential capacity expansions in Southern Asia. Production in mainland China is also expected to increase, leading to a reduction in imports due to the region's growing self-sufficiency. The global trade of OX has been relatively limited, accounting for approximately 25%-30% of total global consumption in recent years. The primary importers in 2023 were Western Europe and Southern Asia, while the main exporters included Eastern Asia (ex-mainland China), Europe, and South-eastern Asia and Oceania.

In developed countries, the OX and PA markets are considered to have stabilized, with expectations of slow growth continuing through 2028. The anticipated softer growth in the mainland Chinese steel industry is expected to restrict the availability of new naphthalene volumes, which in turn will limit the further replacement of domestic OX-based PA production units.

For more detailed information, see the table of contents, shown below.

S&P Global's Chemical Economics Handbook — *ortho-Xylene* is the comprehensive and trusted guide for anyone seeking information on this industry. This latest report details global and regional information, including:

Global summary; regional coverage

Producers with annual capacities and plant sites

Production figures and trends

Consumption and forecasts by end use application

Manufacturing processes and environmental issues

Trade – imports and exports

Key benefits

S&P Global's Chemical Economics Handbook — *ortho-Xylene* has been compiled using primary interviews with key suppliers and organizations, and leading representatives from the industry in combination with S&P Global's unparalleled access to upstream and downstream market intelligence and expert insights into industry dynamics, trade and economics.

This report can help you:

– Identify trends and driving forces influencing chemical markets

– Forecast and plan for future demand

– Understand the impact of competing materials

– Identify and evaluate potential customers and competitors

– Evaluate producers

– Track changing prices and trade movements

– Analyze the impact of feedstocks, regulations and other factors on chemical profitability

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