Sulfur Chemicals, Miscellaneous

December 2024

Abstract

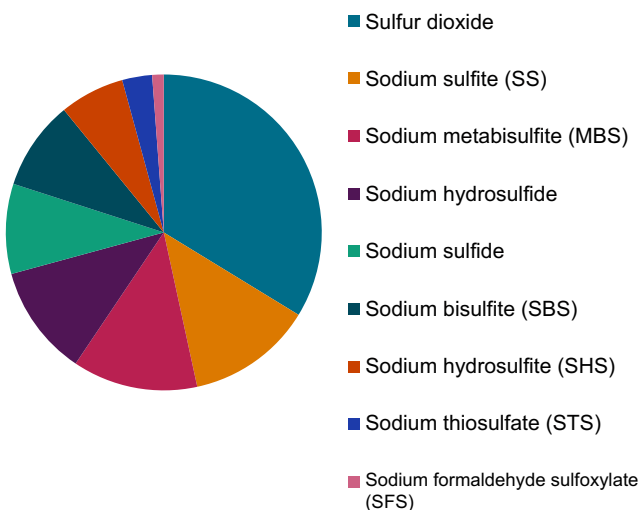
This report reviews the merchant markets for sulfur dioxide and other miscellaneous sulfur chemicals — sodium hydrosulfide, sodium hydrosulfite, sodium sulfide, sodium sulfites, sodium thiosulfate and sodium formaldehyde sulfoxylate. Although demand into sulfuric acid is noted for some regions, full discussion of that market can be found in the CEH *Sulfuric Acid* report.

Consumption of these compounds varies widely by region, depending on the regional requirements for the major end-use markets — reducing and bleaching agents in the pulp and paper and textile industries, as well as in the photographic and food industries, and as precipitating and reducing agents in the treatment of water.

The following pie charts show world consumption of miscellaneous sulfur chemicals by type and by region:

S&P Global
Commodity Insights

World consumption of miscellaneous sulfur chemicals by type — 2024



Data compiled Nov. 30, 2024.
Source: S&P Global Commodity Insights.
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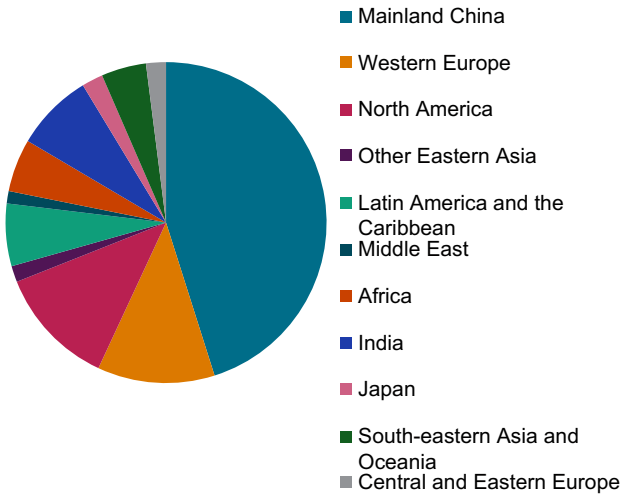
World consumption of miscellaneous sulfur chemicals by region — 2024



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Where competing products exist, liquid sulfur dioxide is almost always the lowest-cost alternative. However, concerns over safety in transport, handling, storage and use are often the impetus for substitution. Competing products in some applications include sodium sulfites (SS, SBS and MBS) and sodium thiosulfate, which can either be coproducts in the manufacture of liquid sulfur dioxide or produced directly/captively from a liquid sulfur dioxide feed.

The markets that are anticipated to experience the largest growth over the forecast period include mineral ore processing, oil recovery, and use as a chemical intermediate for other sulfur compounds, including the manufacture of ammonium bisulfite, ammonium thiosulfate and polyphenylene sulfide (PPS) resins.

Although developing regions may experience higher-than-average demand in some applications, the majority of end-use markets are mature and reflect very little and even declining growth. Furthermore, the growth potential for sulfur dioxide remains challenged by mounting regulations and environmental pressures, as well as the high risks and costs associated with handling and transportation.

Mainland China has taken a leading position for most derivative markets and has become the major global supplier. The rapid development in mainland China's metal manufacturing (smelting operations) as well as increased demand for sulfuric acid in domestic fertilizer production has propelled the mainland Chinese sulfur industry. This expansion occurred at the same time as implementation of a series of environmental regulations to reduce sulfur dioxide emissions, which resulted in an overall contraction in most industrialized regions. Derivative manufacture will remain a primary outlet for mainland Chinese sulfur dioxide, particularly as efforts to further reduce emissions take hold.

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

S&P Global's Chemical Economics Handbook – *Sulfur Chemicals, Miscellaneous* 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 – *Sulfur Chemicals, Miscellaneous* 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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CONTACTS

Americas: +1 800 597 1344
Asia-Pacific: +60 4 296 1125
Europe, Middle East, Africa: +44 (0) 203 367 0681

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