

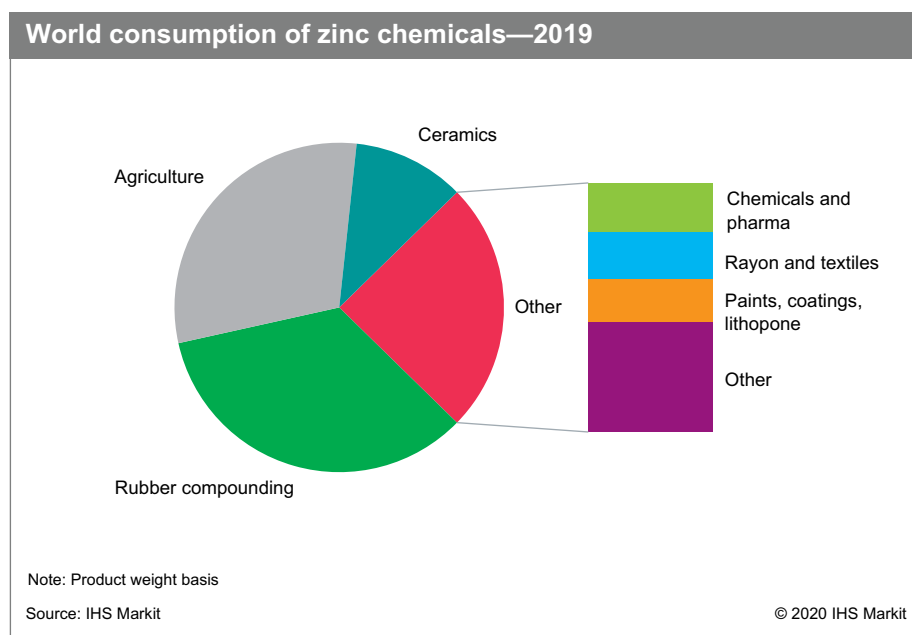
Zinc Chemicals, Inorganic

30 April 2020

Abstract

This report covers the major zinc chemicals of commercial importance: zinc oxide (accounting for 59% of the market for the three chemicals), zinc sulfate (36%), and zinc chloride (5%). The major market segments for zinc chemicals include rubber compounding, agriculture, and ceramics.

The following pie chart shows world consumption of zinc chemicals by end use:



At present, use of zinc oxide as a vulcanization agent in rubber compounding remains the single largest end use. This market is driven largely by automotive markets, more specifically tires, belts, hoses, and other. Global automotive production had rebounded strongly since the economic downturn in 2009–10, with considerable rubber capacity increases in Asia and South America and a surge in new tire and rubber capacity in the United States, as global manufacturers moved closer to automobile production centers. However, the economic downturn in 2020 on the back of the worldwide coronavirus crisis is expected to hit the automotive industry hard, and changes in consumer trends will hamper recovery of zinc oxide demand by the automotive segment in the short term.

Zinc chemicals continue to show growth in the area of fertilizers, animal feed, and food consumption. More than 50% of the soils in the world are considered to be zinc-deficient. With the population having doubled in the past 30 years and projected to increase from 7 billion to over 9 billion by 2050, the arable land per person continues to decline; therefore, crop yields must increase. In many studies, including projects in Brazil, China, India, and Turkey, agricultural yields were

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increased by adding zinc to standard fertilizers and premixes. In addition, various organizations and businesses alike have begun to emphasize the benefits of zinc used in food and nutritional supplements.

The third-largest application is the consumption of zinc oxide in the production of tiles, ceramics, and glass. As this market primarily trends along with economic conditions, it has begun to reflect decreased demand growth globally in the past two years. Although historically driven by tile and ceramic manufacturing in Europe, rapid expansion over the past 15–20 years has resulted in Chinese market dominance. Greater demand in developing countries, such as Brazil, India, and various Southeast Asian countries more recently has begun to reflect further shifts into those regions.

Other uses of zinc chemicals represent an assortment of applications including consumption for chemical intermediates, rayon, paints and coatings, textiles, batteries, and electronics. The use of zinc sulfate for rayon manufacture is the fastest-growing application for zinc chemicals.

Combined, the rubber compounding and agricultural markets accounted for almost two-thirds of total zinc chemical consumption as of 2019. Demand for the three primary zinc chemicals is forecast to increase at an average annual rate of 2.0% through 2024.

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

IHS Markit's Chemical Economics Handbook – *Inorganic Zinc Chemicals* 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

IHS Markit's Chemical Economics Handbook – *Inorganic Zinc Chemicals* has been compiled using primary interviews with key suppliers and organizations, and leading representatives from the industry in combination with IHS Markit'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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