

Corrosion Inhibitors

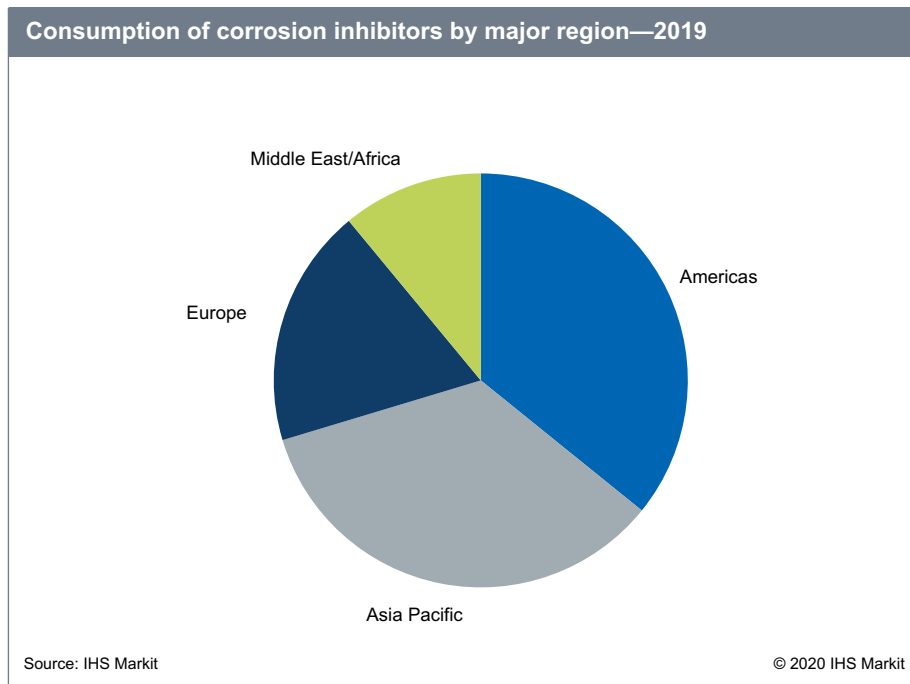
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Abstract

Corrosion inhibitors are consumed primarily in three markets: water treatment, metal treatment and lubricants, and oil and gas production. Globally, water treatment is the largest market, with a share of 44%, followed by metal treatment/lubricants/fuels, with 32%. Oil and gas production accounts for the remaining corrosion inhibitor consumption, at 24%. Consumption for water treatment is stable and will parallel the regional economic patterns. The global corrosion inhibitor market for water treatment will increase at a low rate through 2024. Consumption for metal treatment is highly influenced by machinery manufacturing and operation. Demand for corrosion inhibitors in this application is expected to be sluggish in the next five years. Demand for corrosion inhibitors in oil and gas ultimately depends on the price of crude oil. It is expected that the crude oil price will be stable at a midlevel in the next five years. As a result, the corrosion inhibitor growth rate will not be high.

Corrosion inhibitors can prevent system shutdowns and the loss of heat transfer, extend equipment life, help avoid product contamination, and maintain appearance. Aside from corrosion inhibitors, other methods of combating corrosion include coatings and linings, cathodic protection, and materials selection.

The following pie chart shows consumption of corrosion inhibitors in the major consuming regions:



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Most sales of corrosion inhibitors by their basic manufacturers are to service companies that formulate end-use products for the water treatment, lubricants and fuels, metal treatment (including metalworking fluids and rust-preventive oils), and oil and gas field production industries. The end-use products normally contain other functional components, as well as large volumes of solvents and dispersants. Although these service companies are more directly involved than basic manufacturers in the business of solving corrosion problems, the products and the technology of corrosion control are only a part, although an important one, of their overall business.

World consumption of corrosion inhibitors grew at an average annual rate of above 2% from 2016 to 2019. Consumption is expected to grow at an average annual rate of below 2% during 2019–24. The relatively low growth rates projected for corrosion inhibitors reflect the high degree of maturity of most of the basic industries in the developed markets. They also reflect the replacement of steel by plastics, ceramics, and corrosion-resistant alloys in the industries. Industries have also used corrosion inhibitors more efficiently by employing better monitoring and control techniques in order to minimize discharge in effluent streams and environmental impact.

In North America, the average annual growth rate of corrosion inhibitors during 2016–19 rebounded to above 2% after collapsing during 2014 and 2016, which was mainly due to the sudden decline in the crude oil price in 2014. The declining crude oil price negatively impacted drilling activities in 2015 and 2016. During 2019–24, North America will experience a stable annual growth.

China will also experience lower corrosion inhibitor growth resulting from a slowing economy, in particular in the industrial sector. Likewise, other regions, such as Brazil, will experience slower growth because of weak economies and unstable political environments.

One major market trend is the positioning of the major Western water treatment companies, such as Ecolab, GE, and Ashland, in China. The other major trends in this business are related to regulatory and environmental concerns, which can result in the replacement of some product types by others that are either less toxic or perceived as less threatening to the environment. These issues can relate to the corrosion inhibitors themselves or to developments in the end-use market segment in which they are used.

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

IHS Markit's Specialty Chemicals Update Program – *Corrosion Inhibitors* is the comprehensive and trusted guide for anyone seeking information on this industry. This latest report details global and regional information, including



Industry structure,
operating characteristics
and regulatory
environment



Products, functions
and markets



Cost structure/
profitability



Technology changes
and emerging
substitution practices



Quantitative market
analysis and forecasts

Key benefits

IHS Markit's Specialty Chemicals Update Program – *Corrosion Inhibitors* 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 the competitive environment and key players

- Assess key issues facing both suppliers and their end-use customers
- Understand industry integration strategies
- Keep abreast of industry structure changes, regulatory requirements, and other factors affecting profitability
- Identify new business opportunities and threats
- Follow important commercial developments
- Recognize trends and driving forces influencing specialty chemical markets

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