

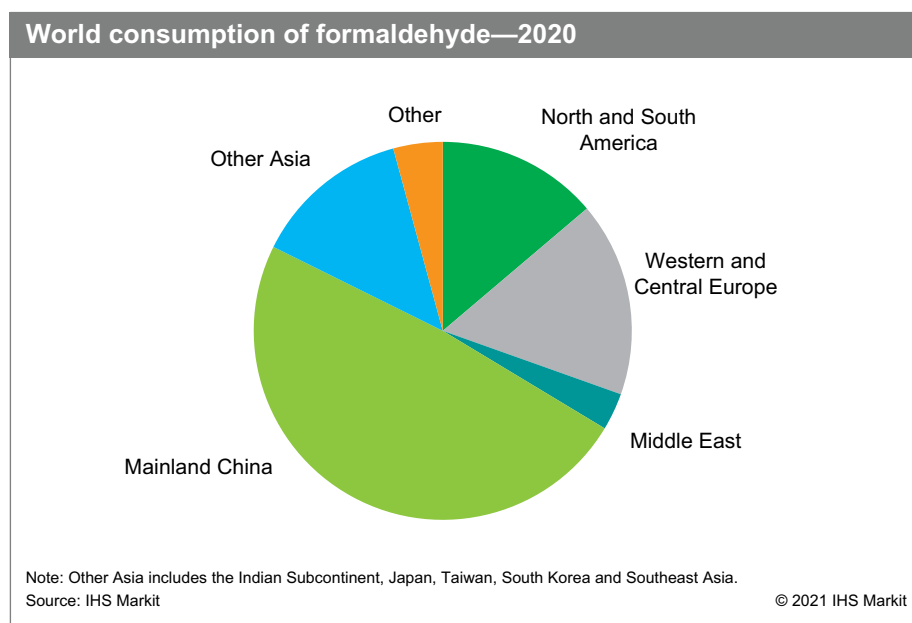
# Formaldehyde

November 2021

## Abstract

Formaldehyde is the most commercially important aldehyde. Production of urea-, phenol-, and melamine-formaldehyde resins (UF, PF, and MF resins) accounts for nearly 70% of world consumption of formaldehyde in 2020; other large applications include polyacetal resins, pentaerythritol, methylenebis (4-phenyl isocyanate) (MDI), 1,4-butanediol (BDO), and hexamethylenetetramine (HMTA). Most formaldehyde producers are concerned primarily with satisfying captive requirements for derivatives and/or supplying local merchant sales. Formaldehyde is usually produced close to the point of consumption since it is fairly easy to make, but it is costly to transport and can develop problems associated with stability during transport. As a result, world trade in formaldehyde is minimal.

The following pie chart presents world consumption of formaldehyde in 2020:



Construction and remodeling activity, vehicle and furniture production, and original equipment manufacture (OEM) account for most world consumption of formaldehyde. Demand for these markets is greatly influenced by general economic conditions. As a result, demand for formaldehyde largely follows the patterns of the leading world economies. Formaldehyde resins are used in the wood products industry predominantly as adhesives. Growth of these resins is strongly correlated to construction and remodeling activity, and to a lesser degree, the automotive industry.

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Concerns over possible human carcinogenicity from exposure to formaldehyde have been a controversial issue. Numerous studies assessing the human risk of low-level exposure to formaldehyde have been conducted; interpretation of study findings has been varied. The lack of conclusive evidence has led to widespread disagreement among industry, government agencies, and unions regarding the appropriate risk assessment for formaldehyde.

Mainland China is the single-largest market for formaldehyde; other markets with large markets include the United States, Germany, the Netherlands, Spain, Italy, Belgium, Poland, Russia, India, South Korea, Japan, Brazil, and Canada.

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

**IHS Markit's Chemical Economics Handbook – *Formaldehyde*** 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 – *Formaldehyde*** 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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