

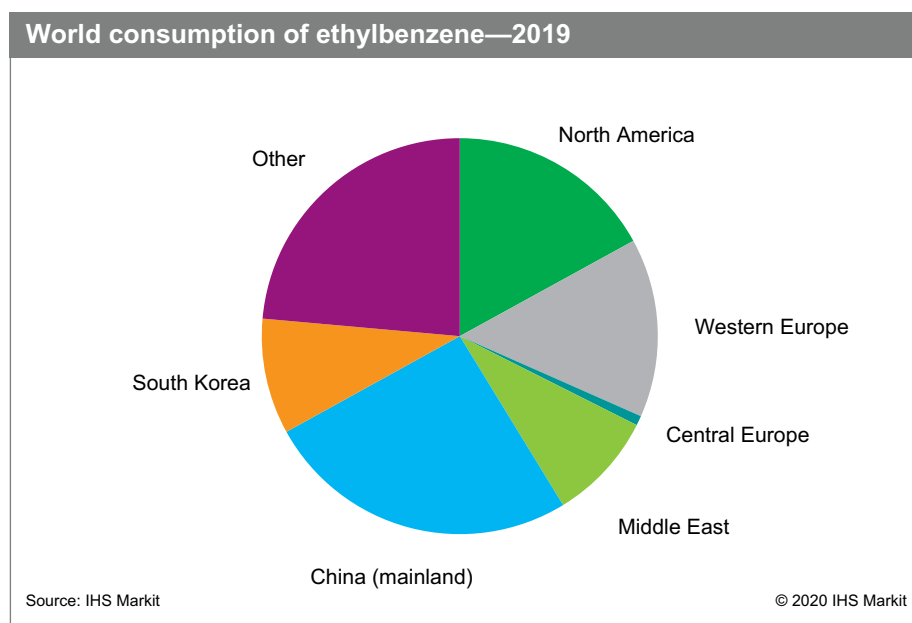
Ethylbenzene

31 January 2020

Abstract

Ethylbenzene (EB) is a highly flammable, colorless liquid that has a sweet aroma similar to that of gasoline. Nearly all ethylbenzene produced in the world is used in the manufacture of styrene; therefore, ethylbenzene demand is determined primarily by styrene production. Styrene is used mostly in polymer production for polystyrene, acrylonitrile-butadiene-styrene (ABS) and styrene-acrylonitrile (SAN) resins, styrene-butadiene elastomers and latexes, and unsaturated polyester resins. The major styrene industry markets include packaging, electrical/electronic/appliances, construction, and consumer products. Consumption of ethylbenzene for uses other than the production of styrene is estimated to be around 2%. These applications include use as a solvent and, on occasion, the production of diethylbenzene, acetophenone, and ethyl anthraquinone.

The following pie chart shows world consumption of ethylbenzene:



In 2019, total ethylbenzene demand was approximately 32.1 million metric tons, corresponding to a 1.8% average annual increase over the last five years. Of that amount, 408,000 metric tons of ethylbenzene fell into the Other category, where ethylbenzene is consumed in solvent uses, and occasionally in the production of diethylbenzene, acetophenone, and ethyl anthraquinone. Northeast Asia, North America, Western Europe, Central Europe, and South America were the only regions where ethylbenzene was consumed for Other applications in 2019.

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Polystyrene (PS) is styrene's largest demand sector, accounting for 34% of global styrene demand. The other main end uses for styrene and their shares in 2019 include expandable polystyrene (22%), ABS resins (18%), unsaturated polyester resins (6%), SB latex (5%), and SB rubber (4%).

Polystyrene is broken into two types: general-purpose polystyrene (GPPS) and high-impact polystyrene (HIPS). General-purpose polystyrene is a clear crystal polymer that can have different properties, such as melt flow index and chemical resistance, among others. High-impact polystyrene contains about 7% polybutadiene, which is grafted onto the styrene polymer. For more specific details, refer to the CEH *Styrene* report.

Northeast Asia is the dominant player in the ethylbenzene industry, accounting for 47% and 49% of global capacity and consumption, respectively. China is the main driver, accounting for 57% of regional capacity and 53% of regional demand as of 2019. China will also be the fastest-growing country in the forecast for ethylbenzene, with an expected 7.6% average annual increase between 2019 and 2024. The CIS and Baltic States will be a very distant second, with an expected average annual growth rate of about 1.7% over the next five years.

There were a total of 89 ethylbenzene producers across the world in 2017. The top 15 producers represented more than 58% of the total capacity in 2019. INEOS Styrolution is the largest producer, with capacity located in North America and Western Europe and around 7.1% capacity share in 2019. Royal Dutch/Shell and SINOPEC are the next two largest, accounting for about 6.7% and 6.2% capacity shares, respectively.

Global ethylbenzene demand is projected to grow at about 2% per year during the forecast period.

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

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

Contents

Executive summary	5
Summary	6
Manufacturing processes	12
Benzene alkylation	12
Superfractionation	12
Other	13
Catalysts	13
Supply and demand by region	15
North America	15
– United States	16
– Producing companies	16
– Salient statistics	17
– Consumption	18
– Canada	19
– Producing companies	19
– Salient statistics	19
Mexico	20
South America	20
– Producing companies	20
– Salient statistics	21
Western Europe	22
– Producing companies	22
– Salient statistics	23
– Consumption	24
Central Europe	24
– Producing companies	24
– Salient statistics	25
– Consumption	25
CIS and Baltic States	26
– Producing companies	26
– Salient statistics	27
Middle East and Africa	27
– Producing companies	27
– Salient statistics	28
Indian Subcontinent	29
Northeast Asia	29
– China	31
– Producing companies	31
– Salient statistics	34
– Consumption	34

– Japan	35
– Producing companies	35
– Salient statistics	36
– South Korea	36
– Producing companies	36
– Salient statistics	37
– Taiwan	38
– Producing companies	38
– Salient statistics	38
Southeast Asia	39
– Producing companies	39
– Salient statistics	40
Additional resources	41
Revisions	42

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