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US Collection

Silicones: United States

November 2019



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About This Report

Scope

This report forecasts to 2023 US silicone demand in nominal US dollars at the manufacturer level. Total demand is segmented by product in terms of:

- elastomers
- fluids
- resins
- gels and other products such as foams and pastes

Total demand is also segmented by market as follows:

- transportation
- construction
- personal care
- electronic products
- medical and healthcare
- other markets such as chemical, electrical equipment, and machinery

To illustrate historical trends, total demand is provided in annual series from 2008 to 2018; the various segments are reported at five-year intervals for 2008, 2013, and 2018.

For the purposes of this report, silicones are defined as polymers of silicon and oxygen. To avoid double counting, silicone demand is determined at the producer level and includes only basic products such as elastomers, fluids, resins, and gels.

Siloxanes used as silicone products themselves (as in personal care product formulations) are also included. Foam control agents used in foam insulation are included in the chemicals – rather than the construction – market.

Excluded are:

- downstream silicone products such as adhesives, sealants, lubricants, defoamers, and molded rubber goods
- siloxanes used as raw materials for silicones, although siloxanes used as silicone products themselves (as in personal care product formulations) are included
- silanes, including chlorosilane intermediates and silane coupling agents, which are not defined as silicone polymers
- fluids used as intermediates in the production of other silicone product types, including gels, elastomers, and resins

About This Report

Key macroeconomic indicators are also provided with quantified trends. Other various topics, including profiles of pertinent leading companies, are covered in this report. A full outline of report items by page is available in the Table of Contents.

Sources

Silicones: United States (FF55022) is based on *Global Silicones*, a comprehensive industry study published by The Freedonia Group. Reported findings represent the synthesis and analysis of data from various primary, secondary, macroeconomic, and demographic sources, such as:

- firms participating in the industry, and their suppliers and customers
- government/public agencies
- intergovernmental and non-governmental organizations
- trade associations and their publications
- the business and trade press
- indicator forecasts by The Freedonia Group
- the findings of other reports and studies by The Freedonia Group

Specific sources and additional resources are listed in the Resources section of this publication for reference and to facilitate further research.

Industry Codes

Table 5 | NAICS & SIC Codes Related to Silicone

NAICS/SCIAN 2017		SIC	
North American Industry Classification System		Standard Industrial Classification	
325199	Silicone (Except Resins) Manufacturing	2821	Plastic Materials, Synthetic Resins, and Nonvulcanizable Elastomers
325211	Silicone Resins Manufacturing	2822	Synthetic Rubber (Vulcanizable Elastomers)
325212	Silicone Rubber Manufacturing	2869	Industrial Organic Chemicals, Not Elsewhere Classified

Source: US Census Bureau

Freedonia Methodology

The Freedonia Group, a subsidiary of MarketResearch.com, has been in business for more than 30 years and in that time has developed a comprehensive approach to data analysis that takes into account the variety of industries covered and the evolving needs of our customers.

Every industry presents different challenges in market sizing and forecasting, and this requires flexibility in methodology and approach. Freedonia methodology integrates a

About This Report

variety of quantitative and qualitative techniques to present the best overall picture of a market's current position as well as its future outlook: When published data are available, we make sure they are correct and representative of reality. We understand that published data often have flaws either in scope or quality, and adjustments are made accordingly. Where no data are available, we use various methodologies to develop market sizing (both top-down and bottom-up) and then triangulate those results to come up with the most accurate data series possible. Regardless of approach, we also talk to industry participants to verify both historical perspective and future growth opportunities.

Methods used in the preparation of Freedonia market research include, but are not limited to, the following activities: comprehensive data mining and evaluation, primary research, consensus forecasting and analysis, ratio analysis using key indicators, regression analysis, end use growth indices and intensity factors, purchase power parity adjustments for global data, consumer and end user surveys, market share and corporate sales analysis, product lifespan analysis, product or market life cycle analysis, graphical data modeling, long-term historical trend analysis, bottom-up and top-down demand modeling, and comparative market size ranking.

Freedonia quantifies trends in various measures of growth and volatility. Growth (or decline) expressed as an average annual growth rate (AAGR) is the least squares growth rate, which takes into account all available datapoints over a period. The volatility of datapoints around a least squares growth trend over time is expressed via the coefficient of determination, or r^2 . The most stable data series relative to the trend carries an r^2 value of 1.0; the most volatile – 0.0. Growth calculated as a compound annual growth rate (CAGR) employs, by definition, only the first and last datapoints over a period. The CAGR is used to describe forecast growth, defined as the expected trend beginning in the base year and ending in the forecast year. Readers are encouraged to consider historical volatility when assessing particular annual values along the forecast trend, including in the forecast year.

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Resources

The Freedonia Group

Global Silicones

Freedonia Industry Studies

Adhesives & Sealants in the US

Architectural Paint Market in the US

Construction Chemicals in the US

Disposable Medical Supplies in the US

Gaskets & Seals

Global Adhesives & Sealants

Global Architectural Paint

Global Disposable Medical Supplies

Global Electric Power Transmission & Distribution Equipment

Global Industrial Rubber Products Market

Global Thermoplastic Elastomers

Global 3D Printing Market

Liquid-Applied Roof Coatings in the US

Liquid Silicone Rubber

Paint & Coatings: US Market Forecasts

Silicones Market in the US

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Commercial Building Construction: United States

Construction: United States

Electronic Components: United States

Healthcare: United States

Hoses & Belts: United States

Manufacturing: United States

Medical Services: United States

Motor Vehicles: United States

Renewable Energy: United States

Thermoplastic Resins: United States

Transport Equipment: United States

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Adhesives & Sealants Industry

Chemical Engineering

Chemical Week

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Global Cosmetic Industry

ICIS Chemical Business

Plastics News

Rubber & Plastics News

Agencies & Associations

Global Silicones Council

Occupational Safety & Health Administration

Plastics Industry Association

Silicones Environmental, Health, and Safety Center

United States Census Bureau

United States Environmental Protection Agency

United States Food and Drug Administration

United States International Trade Commission