

# World Industrial Silica Sand

Industry Study with Forecasts for 2020 & 2025

Study #3469 | October 2016 | \$6200



## Hydraulic fracturing is an expanding market

Through 2020, silica sand used in hydraulic fracturing (frac sand) will represent the fastest expanding market for industrial sand and account for nearly as much additional demand as the much larger glass manufacturing segment. North America will continue to dominate the hydraulic fracturing market for silica sand, accounting for over 90 percent of the 2020 segment total. However, the most rapid frac sand demand growth will be recorded in Central and South America, where Argentina's Vaca Muerta shale basin is undergoing rapid development, spurred by extensive foreign and domestic investment.

## North America & Asia/Pacific to show most rapid gains

Both North America and the Asia/Pacific region will post market increases over five percent annually through 2020. In North America, gains will primarily be spurred by healthy sales growth in hydraulic fracturing applications. In recent years, an explosion in horizontal drilling activity fueled double-digit gains. As drilling began to slow in 2014 and 2015, oil and gas drilling firms used more sand per well to stimulate greater productivity out of existing wells. This trend will continue bolstering frac sand demand through 2020.

## Regulatory developments may affect suppliers

Two important regulatory developments are expected to affect silica sand suppliers in the near term. In the US, the Occupational Health and Safety Administration (OSHA) has halved the permissible exposure limit for respirable crystalline silica. Meanwhile, in Western Europe the European Commission announced in December 2015 that it had grown regionwide recycling targets, with 75 percent of glass expected to be recycled by 2025. Both the more stringent silica dust exposure limit and the European recycling targets are projected to have a modest negative impact on demand. These regulations are expected to accelerate the ongoing trends of reduced abrasive sand-blasting and increased glass recycling in the developed parts of the world.

## Study coverage

This study reviews the worldwide industrial silica sand market. It presents historical data (2005, 2010 and 2015) plus forecasts (2020 and 2025) for supply and demand, as well as demand by market (hydraulic fracturing, foundry, glass, building products, chemicals, other) for six regions and 19 countries. The study also considers key market environment factors, assesses the industry structure and analyzes company market share.

# World Industrial Silica Sand

Industry Study with historical data for 2005,  
2010 & 2015 plus forecasts for 2020 & 2025

Study #3469  
October 2016  
\$6200



## CONTENTS SUMMARY

### Executive Summary

### Market Environment

### World Supply & Demand

#### Regional Overview

Demand

Production

International Trade

#### Demand by Market

Glass

Container Glass

Flat Glass

Other Glass

Foundry

Hydraulic Fracturing

Building Products

Chemicals

Other Markets

### North America

Economic Overview

Silica Sand Supply & Demand

Silica Sand Markets & Suppliers

United States

Canada

Mexico

### Western Europe

Economic Overview

Silica Sand Supply & Demand

Silica Sand Markets & Suppliers

Germany

France

Italy

United Kingdom

Spain

Other Western Europe

### Asia/Pacific

Economic Overview

Silica Sand Supply & Demand

Silica Sand Markets & Suppliers

China

India

Japan

Indonesia

South Korea

Australia

Taiwan

Other Asia/Pacific

### Other Regions

Central & South America

Economic Overview

Silica Sand Supply & Demand

Silica Sand Markets & Suppliers

Brazil

Other Central & South America

Eastern Europe

Economic Overview

Silica Sand Supply & Demand

Silica Sand Markets & Suppliers

Russia

Poland

Other Eastern Europe

Africa/Mideast

Economic Overview

Silica Sand Supply & Demand

Silica Sand Markets & Suppliers

Turkey

Other Africa/Mideast

### Industry Structure

Market Composition

Market Share

Production

Marketing

Distribution

Cooperative Agreements

Acquisitions & Divestitures

## TABLES & CHARTS

### Executive Summary

1 Summary Table

### World Supply & Demand

1 World Industrial Silica Sand  
Demand by Region

Cht World Industrial Silica Sand  
Demand by Region, 2015

2 World Silica Sand Production  
by Region

3 World Silica Sand Net Exports  
by Region

4 World Silica Sand Demand  
by Market

Cht World Silica Sand Demand  
by Market, 2015

5 World Glass Demand for Silica Sand  
by Segment & Region

6 World Container Glass Demand  
for Silica Sand by Region

7 World Flat & Other Glass Demand  
for Silica Sand by Region

8 World Foundry Demand for  
Silica Sand by Region

9 World Hydraulic Fracturing  
Demand for Silica Sand by Region

10 World Building Products Demand  
for Silica Sand by Region

11 World Chemical Demand for  
Silica Sand by Region

12 World Demand for Silica Sand Used  
in Other Markets by Region

Tables for each region/country:  
Silica Sand Supply & Demand  
Silica Sand Demand by Market  
... plus macroeconomic indicators  
Charts for each major region include:  
Silica Sand Demand  
by Country, 2015  
Silica Sand Demand  
by Market, 2015

### Industry Structure

1 World Silica Sand Sales  
by Company, 2015

Cht World Silica Sand  
Market Share, 2015

2 Selected Cooperative Agreements

3 Selected Acquisitions & Divestitures

### ASIA/PACIFIC

#### China: Silica Sand Markets & Suppliers

Silica sand consumption is expected to grow at a rate of 1.5 percent per year through 2025. While this will be less than the 2.5 percent growth rate during the 2010-2015 period, it will still outstrip the 0.5 percent growth rate of the US market.

The fastest sales in the world are in the US, albeit from a very small base. The impact of coal dependence on the US market necessitates continued investment in shale gas drilling activity. Nevertheless, a number of headwinds exist, preventing more rapid development. First, low oil and gas prices continuing into the near term will reduce the return on investment that producers can expect, causing a number of foreign firms to withdraw their support. Second, China's shale gas reserves are more difficult to access than those in the US, further increasing investment costs. Additionally, ceramic proppants are favored by the Chinese market, limiting sales opportunities for silica sand suppliers. As a result, frac sand will remain a small portion of the country's market in the near term, accounting for only three percent of 2020 national silica sand consumption.

In absolute terms, the most demand growth is expected in the already sizable flat glass and fiberglass industries. In addition to the automotive and architectural glass markets prominent across the world, the rapidly expanding market for photovoltaic solar panels will also fuel flat glass silica sand consumption. Furthermore, China's position as a global supplier of a variety of manufactured goods will drive silica sand demand for all types of glass items, from simple mirrors to electronic display screens.

©2016 by MarketResearch.com, Inc. - All rights reserved

## This study can help you:

- Determine your market & sales potential
- Learn more about industry competitors
- Assess new products & technologies
- Identify firms to merge with or acquire
- Complement your research & planning
- Gather data for presentations
- Confirm your own internal data
- Make better business decisions

TABLE VII-10

### RUSSIA: SILICA SAND DEMAND BY MARKET (million metric tons)

Item	2005	2010	2015	2020	2025
Eastern Europe Silica Sand Demand % Russia					
Silica Sand Demand					
Glass:					
Flat Glass					
Container Glass					
Other Glass					
Foundry					
Hydraulic Fracturing					
Building Products					
Chemicals					
Other					
\$/metric ton					
Silica Sand Demand (mil \$)					

Source: The Freedonia Group

TABLE V-3

### GERMANY: SILICA SAND SUPPLY & DEMAND (million metric tons)

Item	2005	2010	2015	2020	2025
Population (mil persons)					
GDP/capita					
Gross Domestic Product (bil 2014\$)					
Manufacturing Value Added (bil 2014\$)					
Construction Expenditures (bil 2014\$)					
kg silica sand/capita					
kg silica sand/000\$ GDP					
Silica Sand Demand					
net exports					
Silica Sand Production					

Source: The Freedonia Group

## Related Studies

### World Flat Glass

Global flat glass demand is forecast to rise 5.0% per year through 2020 to 9.6 billion square meters, with a value of \$94 billion. The Asia/Pacific region was the largest in 2015, led by China, the top national market worldwide. The architectural market will remain the largest, though stronger growth is forecast in markets such as electronic displays and solar energy. This study reviews the \$72.2 billion flat glass industry, with supply and demand forecasts by market for 2020 and 2025 in 6 regions and 21 countries. The study also details industry structure and evaluates market share.

#3449..... August 2016..... \$6000

### World Activated Carbon

Worldwide demand for activated carbon -- including powdered, granular, and other types -- will rise 6.0 percent per year to 1.9 million metric tons in 2020. China and other developing countries in the Asia/Pacific and Africa/Mideast regions will post the best growth based on infrastructure improvements and higher environmental standards. Powdered activated carbon will see the best growth. The study details the global 1.4 million metric ton AC market with forecasts for 2020 and 2025 by type. The study also evaluates company market share and profiles global players.

#3404..... April 2016..... \$6500

### World Specialty Silicas

World demand for specialty silicas is forecast to rise 5.0 percent per year to 3.5 million metric tons in 2020, valued at \$8.8 billion. The tire rubber market will grow the fastest. The most rapid gains for specialty silicas will occur in industrializing countries in Asia, since the region dominates global rubber production. This study provides historical demand data (2005, 2010, 2015) plus forecasts (2020, 2025) by product and market in 6 regions and 16 countries. The study also considers market environment factors, evaluates company market share, and profiles global industry competitors.

#3407..... April 2016..... \$6400

### Specialty Silicas

Demand for specialty silicas in the US is forecast to rise 4.7 percent annually to \$2.1 billion in 2019. Precipitated silica will be the largest and fastest growing product segment, driven by robust gains in the large tire rubber sector, as well as in coatings and inks. Rubber will also be the fastest growing market overall, with tire rubber outpacing the nontire rubber segment. This study analyzes the \$1.7 billion US specialty silica industry, with forecasts for 2019 and 2024 by product and market. The study also evaluates company market share and profiles US industry participants.

#3368..... January 2016..... \$5200

## Contact Freedonia

1.800.927.5900 (US & Canada)

+1 440.684.9600 (Int'l)

email: [info@freedoniagroup.com](mailto:info@freedoniagroup.com)

website: [freedoniagroup.com](http://freedoniagroup.com)

## Freedonia's methods

- Establishing consistent economic & market forecasts
- Using input/output ratios, flow charts & other economic methods to quantify data
- Employing in-house analysts who meet stringent quality standards
- Interviewing key industry participants, experts & end users
- Researching a proprietary database that includes trade publications, government reports & corporate literature

## About The Freedonia Group

The Freedonia Group is a leading international industry market research company that provides its clients with information and analysis needed to make informed strategic decisions for their businesses. Studies help clients identify business opportunities, develop strategies, make investment decisions and evaluate opportunities and threats. Freedonia research is designed to deliver unbiased views and reliable outlooks to assist clients in making the right decisions. Freedonia capitalizes on the resources of its proprietary in-house research team of experienced economists, professional analysts, industry researchers and editorial groups. Freedonia covers a diverse group of industries throughout the United States and other world markets. Industries analyzed by Freedonia include:

Automotive & Transport • Chemicals • Construction & Building Products • Consumer Goods • Energy & Petroleum • Industrial Components • Healthcare & Life Sciences • Machinery & Equipment • Metals, Minerals & Glass • Packaging • Plastics & Other Polymers • Security • Services • Textiles & Nonwovens • Water Treatment

## The Freedonia Group is a division of MarketResearch.com

## About MarketResearch.com

With offices in London, New York City, and Washington D.C., [MarketResearch.com](http://MarketResearch.com) is the leading provider of global market intelligence products and services. With research reports from more than 720 top consulting and advisory firms, [MarketResearch.com](http://MarketResearch.com) offers instant online access to the world's most extensive database of expert insights on industries, companies, products, and trends.



[Click here to purchase study online](#)