



[CLICK TO VIEW](#)

[Table of Contents 2](#)

[List of Tables & Charts 3](#)

[Study Overview 4](#)

[Sample Text, Table & Chart 5](#)

[Sample Profile, Table & Forecast 6](#)

[Order Form & Corporate Use License 7](#)

[About Freedonia, Custom Research, Related Studies, 8](#)

World Silicones

Industry Study with Forecasts for **2017 & 2022**

Study #3022 | May 2013 | \$6100 | 310 pages

www.freedoniagroup.com



The Freedonia Group

767 Beta Drive

Cleveland, OH • 44143-2326 • USA

Toll Free US Tel: 800.927.5900 or +1 440.684.9600

Fax: +1 440.646.0484

E-mail: info@freedoniagroup.com

Table of Contents

EXECUTIVE SUMMARY

MARKET ENVIRONMENT

General	4
Global Economic Overview	5
Recent Historical Trends	5
World Economic Outlook	7
World Population Outlook	10
World Construction Outlook	12
World Manufacturing Overview	14
World Chemicals Outlook	16
World Motor Vehicle Production Outlook	18
World Health Care Overview	21
Technology	24
Basic Silicone Synthesis	25
Siloxane	25
Silicone Products	27
Environmental & Regulatory Trends	30

OVERVIEW

General	33
Demand by Region	34
Demand by Market	37
Electrical & Electronic	40
Construction	43
Transportation	45
Health & Personal Care	49
Chemical	53
Other Markets	56
Demand by Product	59
Elastomers	61
Fluids	64
Resins	68
Gels & Other	71
Production & Trade	74

NORTH AMERICA

Economic Overview	77
Silicone Demand	79
United States	81
Canada	87
Mexico	91

WESTERN EUROPE

Economic Overview	97
Silicone Demand	99
Germany	102
France	107

Italy	112
United Kingdom	117
Spain	121
Other Western Europe	126

ASIA/PACIFIC

Economic Overview	133
Silicone Demand	135
China	138
Japan	145
South Korea	152
India	156
Taiwan	161
Other Asia/Pacific	166

OTHER REGIONS

Central & South America	173
Brazil	177
Other Central & South America	181
Eastern Europe	186
Russia	190
Other Eastern Europe	195
Africa/Mideast	200

INDUSTRY STRUCTURE

General	206
Market Share	208
Acquisitions & Divestitures	213
Marketing Strategies	214
Channels of Distribution	215
Technology & Manufacturing	217
Research & Development	218
Cooperative Agreements	219

COMPANY PROFILES

Allergan Incorporated	224
Ashland Incorporated	227
Berkshire Hathaway	229
Caledonia Investments	231
China National Bluestar Group	235
Clariant International	240
CRI-SIL Silicone Technologies	242
CSL Silicones	243
Dongyue Group	244
Dow Corning	245
Emerald Performance Materials	251
Evonik Industries	253
GB Silicone Technology	258
Gelest Incorporated	259

Handy & Harman	261
Henkel AG	263
Jiangsu Hongda New Material	266
Johnson & Johnson	267
Kaneka Corporation	268
KCC Corporation	270
Kemira Oyj	273
Milliken & Company	275
Momentive Performance Materials	276
NuSil Technology	282
Provista SA	286
Rogers Corporation	287
Saint-Gobain	289
Shin-Etsu Chemical	292
Silchem Silicone Chemicals	296
Specialty Silicone Products	299
Total SA	301
Wacker Chemie	304
Zhejiang Wynca Chemical	309

List of Charts

MARKET ENVIRONMENT

- 1 World Siloxane Production, 2012.....27

OVERVIEW

- 1 World Silicone Demand by Region, 2002-202237
- 2 World Silicone Demand by Market, 2012...39
- 3 World Silicone Demand by Product, 2012..61

NORTH AMERICA

- 1 North America: Silicone Demand by Country, 201281

WESTERN EUROPE

- 1 Western Europe: Silicone Demand by Country, 2012 102

ASIA/PACIFIC

- 1 Asia/Pacific: Silicone Demand by Country, 2012 138

INDUSTRY STRUCTURE

- 1 World Silicone Market Share, 2012 209

[Click here to purchase online](#)

List of Tables/Charts

EXECUTIVE SUMMARY

1 Summary Table..... 3

MARKET ENVIRONMENT

1 World Gross Domestic Product by Region ..10
 2 World Population by Region12
 3 World Construction Expenditures
 by Region14
 4 World Manufacturing Value
 Added by Region.....16
 5 World Chemical Manufacturing
 Value Added by Region18
 6 World Motor Vehicle Production21
 7 World Health Care Expenditures24

OVERVIEW

1 World Silicone Demand by Region36
 2 World Silicone Demand by Market.....39
 3 World Electrical & Electronic
 Markets for Silicones43
 4 World Construction Markets for Silicones ..45
 5 World Transportation
 Markets for Silicones49
 6 World Health & Personal Care
 Markets for Silicones53
 7 World Chemical Markets for Silicones55
 8 Other World Markets for Silicones.....59
 9 World Silicone Demand by Product60
 10 World Silicone Elastomer Demand
 by Region & Market.....64
 11 World Silicone Fluid Demand
 by Region & Market.....68
 12 World Silicone Resin Demand
 by Region & Market.....71
 13 World Silicone Gel & Other Silicone
 Demand by Region & Market74

NORTH AMERICA

1 North America: Key Indicators
 for Silicone Demand78
 2 North America: Silicone Demand
 by Market & Product.....80
 3 United States: Key Indicators
 for Silicone Demand83
 4 United States: Silicone Demand
 by Market & Product.....85
 5 Canada: Key Indicators
 for Silicone Demand88

6 Canada: Silicone Demand
 by Market & Product.....90
 7 Mexico: Key Indicators
 for Silicone Demand93
 8 Mexico: Silicone Demand
 by Market & Product.....95

WESTERN EUROPE

1 Western Europe: Key Indicators
 for Silicone Demand99
 2 Western Europe: Silicone Demand
 by Market & Product.....101
 3 Germany: Key Indicators
 for Silicone Demand104
 4 Germany: Silicone Demand
 by Market & Product.....106
 5 France: Key Indicators
 for Silicone Demand109
 6 France: Silicone Demand
 by Market & Product.....111
 7 Italy: Key Indicators
 for Silicone Demand114
 8 Italy: Silicone Demand
 by Market & Product.....116
 9 United Kingdom: Key Indicators
 for Silicone Demand118
 10 United Kingdom: Silicone Demand
 by Market & Product.....120
 11 Spain: Key Indicators
 for Silicone Demand123
 12 Spain: Silicone Demand
 by Market & Product.....125
 13 Other Western Europe: Key Indicators
 for Silicone Demand128
 14 Other Western Europe: Silicone
 Demand by Market & Product130
 15 Other Western Europe: Silicone
 Demand by Country132

ASIA/PACIFIC

1 Asia/Pacific: Key Indicators
 for Silicone Demand135
 2 Asia/Pacific: Silicone Demand
 by Market & Product.....137
 3 China: Key Indicators
 for Silicone Demand140
 4 China: Silicone Demand
 by Market & Product.....143
 5 Japan: Key Indicators
 for Silicone Demand147
 6 Japan: Silicone Demand
 by Market & Product.....150

7 South Korea: Key Indicators
 for Silicone Demand153
 8 South Korea: Silicone Demand
 by Market & Product.....155
 9 India: Key Indicators
 for Silicone Demand158
 10 India: Silicone Demand
 by Market & Product.....160
 11 Taiwan: Key Indicators
 for Silicone Demand163
 12 Taiwan: Silicone Demand
 by Market & Product.....165
 13 Other Asia/Pacific: Key Indicators
 for Silicone Demand168
 14 Other Asia/Pacific: Silicone Demand
 by Market & Product.....170
 15 Other Asia/Pacific: Silicone
 Demand by Country172

OTHER REGIONS

1 Central & South America: Key Indicators
 for Silicone Demand175
 2 Central & South America: Silicone
 Demand by Market & Product176
 3 Brazil: Key Indicators
 for Silicone Demand178
 4 Brazil: Silicone Demand
 by Market & Product.....180
 5 Other Central & South America: Key
 Indicators for Silicone Demand183
 6 Other Central & South America: Silicone
 Demand by Market & Product185
 7 Eastern Europe: Key Indicators
 for Silicone Demand188
 8 Eastern Europe: Silicone Demand
 by Market & Product.....190
 9 Russia: Key Indicators
 for Silicone Demand192
 10 Russia: Silicone Demand
 by Market & Product.....194
 11 Other Eastern Europe: Key Indicators
 for Silicone Demand197
 12 Other Eastern Europe: Silicone Demand
 by Market & Product.....199
 13 Africa/Mideast: Key Indicators
 for Silicone Demand202
 14 Africa/Mideast: Silicone Demand
 by Market & Product.....204

INDUSTRY STRUCTURE

1 World Silicone Sales by Company, 2012..208
 2 Selected Acquisitions & Divestitures.....214
 3 Selected Cooperative Agreements.....221

[Click here to purchase online](#)

Demand will benefit in part from the rising use of high value silicones in emerging applications, particularly in the newly industrialized nations where the use of silicones is not yet mature.

World demand to rise 5.9 percent annually

World demand for silicones is expected to rise 5.9 percent per year to \$18.9 billion in 2017. Gains will represent an acceleration from recent historical trends, fueled by an improved outlook for global manufacturing and construction activity from the recession-plagued 2007-2012 period, particularly in North America and Western Europe. Increases in silicone demand will also benefit from the rising use of high value materials in emerging applications, particularly in the newly industrialized nations of the world where the use of silicones is not yet mature. Advances will be limited, however, by the high cost of silicones relative to competitive materials in many uses.

Asia/Pacific region to remain fastest growing

The Asia/Pacific region has risen to become the leading market for silicones, accounting for nearly 40 percent of global demand in 2012. While slowing to some extent through 2017, silicone demand growth in the Asia/Pacific region will remain the world's fastest. Gains will be driven by continued strong growth in China, the emergence of India as a significant silicone market, and a favorable economic outlook for the higher income countries in the region. Above average growth is also forecast for South America, Eastern Europe, and the Africa/Mideast region, areas in which silicone demand per capita is currently among the lowest in the world.



While silicone demand in the more mature markets of North America and Western Europe will rise at a pace below the global average through 2017, advances will be a marked improvement over the performance of the 2007-2012 period. In North America, demand for silicone will benefit from a strong rebound in construction spending as the large US market continues to recover from a housing slump. Demand in Western Europe will be fueled by a turnaround in manufacturing and construction activity. As silicones become increasingly well established in these regions, technological advancements and product innovation will become essential to expand the application base for long term market growth.

Construction to be fastest growing silicone market

Electrical and electronics was the leading outlet for silicones in 2012. Gains in this market will be bolstered by demand in high growth new applications such as components for LEDs and solar energy products. The most rapid increases, however, will be in the construction market, driven in large part by a recovery in the silicone-intensive construction sectors of the US and Western Europe. More moderate gains are expected in other outlets such as paper production, textiles, and plastic additives, restrained by slow-growing markets and limited new applications for silicones.

Copyright 2013 The Freedonia Group, Inc.

[Click here to purchase online](#)

Sample Text, Table & Chart

ASIA/PACIFIC

China: Markets & Products

Silicone demand in China is forecast to advance almost per year to \$... the silicone demand gr... tremendous... more than fivefo... for nearly 20... in value terms in 201... growth will... in this stellar pace, Ch... main the wo... for silicones throug... will surpass... est in the world. Ga... fueled by con... growth in China, includ... silicone-consuming industries such as building construction, care products, electronic components, and motor vehicles. At the use of silicones is not yet mature in the Chinese market, p... larly for manufactured goods intended for domestic sales. A... silicones which are used tend to be more basic, lower-value t... presents further opportunities for value growth in the already rapidly advancing Chinese market.

Electrical and electronic products were the leading market for silicones in China in 2012, accounting for nearly 30 percent of demand. China's electronics output rose at a tremendous pace during the 2000s and early 2010s, driving demand for silicones in applications such as encapsulants, elastomeric components, process solvents, and optical materials. China is also the world's largest producer of electrical power transmission and distribution equipment, which uses silicones in transformer fluids, rubber components, sealants, and coatings, among others. Continued growth in both of these market segments will fuel gains in electrical and electronic silicone demand through 20...

Construction is also a particularly prominent market for... in China. In construction, silicones are primarily used as ad... sealants, with room temperature vulcanizing (RTV) sealants widely used type in the Chinese market. Specialized protect...

140

Copyright 2013

TABLE VI-4

CHINA: SILICONE DEMAND BY MARKET & PRODUCT
(million dollars)

Item	2002	2007	2012	2017	2022
Manufacturing Value Added (bil 2011\$) ¹					785
\$ silicones/000\$ MVA					5
Silicone Demand					0
By Market:					
Electrical & Electronic					0
Construction					5
Transportation					5
Health & Personal Care					5
Chemicals					0
Other Markets					0
By Product:					
Elastomers					0
Fluids					0
Resins					5
Gels & Other Products					5
% China					7
Asia/Pacific Silicone Demand	22				20

SAMPLE
TABLE

CHART VIII-1

WORLD SILICONE MARKET SHARE, 2012
(\$14.2 billion)

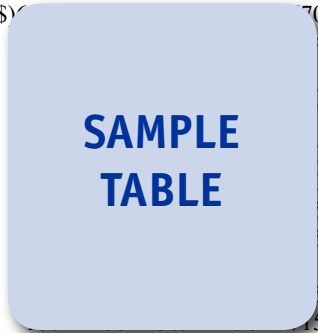


SAMPLE
CHART

Sample Profile, Table & Forecast

TABLE III-4
WORLD CONSTRUCTION MARKETS FOR SILICONES
 (million dollars)

Item	2002	2007	2012	2017	2022
World Construction Expend (bil 2011\$)					
\$ silicone/mil \$ construction					
Construction Silicone Demand					
By Region:					
North America					
Western Europe					
Asia/Pacific					
Other Regions					
By Segment:					
Adhesives & Sealants					
Coatings & Other Segments					



COMPANY PROFILES

CSL Silicones Incorporated
 144 Woodlawn Road West
 Guelph, Ontario N1H 1B5
 Canada
 519-836-9044
 http://www.csl.com

Annual Sales:
 Employment:
 Key Products: _____ products

CSL Silicones is a producer of room temperature vulcanizing (RTV) silicone products. The privately held company's operations are in Guelph, Ontario, Canada.

The Company competes in the world silicone industry through the manufacture of RTV silicone products, which are formulated to withstand extreme temperatures, seal aggressive fluids, and perform predictably in mechanical, chemical, thermal, and electrical applications. Examples of CSL Silicones' RTV silicone products are coatings and sealants marketed under the SI-COAT and CSL brand names, respectively.

CSL Silicones' SI-COAT line includes anti-graffiti protective coatings featuring hydrophobicity properties that allow graffiti-tagging to be easily removed without the need for chemicals; anti-corrosion protective coatings formulated to protect against corrosion; and high voltage insulator coatings designed to provide extended-term flashover protection in adverse conditions in order to prevent power outages. In October 2012, SI-COAT 529 anti-graffiti protective coatings were chosen for use in Montreal, Ontario, Canada for use in the Rue do Fort

Copyright 2013 The Freedonia Group, Inc.



"Gains will represent a strong acceleration from the relatively sluggish advances experienced during the 2007-2012 period, which was hampered by declining demand in both the North American and West European markets. Going forward, however, a recovery in construction spending in these regions is expected to fuel a healthy rebound in silicone demand. In North America, for example, construction silicone demand will rise over ..."
 --Section III, pg. 43

ONLINE: www.freedoniagroup.com

MAIL: Print out and complete the order form and send to The Freedonia Group (see address at the bottom of this form)

PHONE: Call toll free, 800.927.5900 (US) or + 1 440.684.9600

FAX: + 1 440.646.0484 (US)

EMAIL: info@freedoniagroup.com

Free Handling & Shipping

There is NO charge for handling or UPS shipping in the US. Expect delivery in 3 to 5 business days. Outside the US, Freedonia provides free airmail service. Express delivery is available at cost.

Orders Outside of the US

Checks must be made payable in US funds, drawn against a US bank and mailed directly to The Freedonia Group. For wire transfers please contact our customer service department at info@freedoniagroup.com. Credit cards accepted.

Credit Card Orders

For convenience, Freedonia accepts American Express, MasterCard or Visa. Credit card purchases must include account number, expiration date and authorized signature.

Save 15%

If you order three (3) different titles at the same time, you can receive a 15% discount. If your order is accompanied by a check or wire transfer, you may take a 5% cash discount (discounts do not apply to Corporate Use Licenses).

Corporate Use License

Now every decision maker in your organization can act on the key intelligence found in all Freedonia studies. For an additional \$2600, companies receive unlimited use of an electronic version (PDF) of the study. Place it on your intranet, e-mail it to coworkers around the world, or print it as many times as you like,

[Click here to learn more about the Corporate Use License](#)

ORDER FORM

F-WEB.-3022

World Silicones \$6100

Corporate Use License (add to study price) * + \$2600

Additional Print Copies @ \$600 each *
Total (including selected option) \$ _____

Enclosed is my check (5% discount) drawn on a US bank and payable to The Freedonia Group, Inc., in US funds (Ohio residents add 7.75% sales tax)

Bill my company American Express MasterCard Visa

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Credit Card #

MM	YY

Expiration Date

Signature _____

Name _____

Title _____

Company _____

Division _____

Street _____
(No PO Box please)

City/State/Zip _____

Country _____

Phone _____ Fax _____

Email _____

* Please check appropriate option and sign below to order an electronic version of the study.

Corporate Use License Agreement

The above captioned study may be stored on the company's intranet or shared directory, available to company employees. Copies of the study may be made, but the undersigned represents that distribution of the study will be limited to employees of the company.

Signature _____

Individual Use License Agreement

The undersigned hereby represents that the above captioned study will be used by only ___ individual(s) who are employees of the company and that the study will not be loaded on a network for multiple users. In the event that usage of the study changes, the Company will promptly notify Freedonia of such change and will pay to Freedonia the appropriate fee based on Freedonia's standard fee schedule then in effect. Note: Entire company corporate use license, add \$2600; one additional user, add \$600; two additional users, add \$1200; three additional users, add \$1800.

Signature _____

OTHER STUDIES

Silicones

US demand for silicones is forecast to climb 4.7 percent annually to \$4.3 billion in 2018, with volume rising 3.2 percent per year to 900 million pounds. Silicone elastomers will grow the fastest, overtaking fluids as the leading product type. The construction and medical markets will be the fastest growing segments, while the industrial market will remain dominant. This study analyzes the \$3.4 billion US silicones industry, with forecasts for 2018 and 2023 by product, market and application. It also evaluates company market share and profiles industry players.

#3138..... March 2014..... \$5100

World Thermoplastic Elastomers

World thermoplastic elastomer (TPE) demand will rise 5.5 percent per year to 5.8 million metric tons in 2017. The Asia/Pacific region will remain the largest market and will grow the fastest. Styrene block copolymers (SBCs) will continue as the leading TPE product, while polyolefin elastomers (POEs) will grow the fastest. This study analyzes the 4.5 million metric ton world TPE industry, with forecasts for 2017 and 2022 by market, product, world region, and for 15 countries. The study also evaluates company market share and profiles industry players.

#3051..... August 2013..... \$6400

High-Temperature Plastics

US demand for high-performance flat glass products is forecast to rise 8.2 percent annually to \$9.2 billion in 2017. Solar control glass such as low-emissivity (low-e) glass will grow the fastest, while security and safety glass will remain the largest product segment. Among other products, heads-up display windshields will post strong sales growth. This study analyzes the \$6.2 billion US high-performance flat glass industry, with forecasts for 2017 and 2022 by product and market. The study also evaluates company market share and profiles industry competitors.

#3053..... June 2013..... \$5100

Specialty Plastic Additives

US demand for specialty plastic additives is forecast to rise 4.5 percent annually to 4.0 billion pounds in 2017, driven by a rebound in the key construction market. Processing aids and property modifiers are expected to be the fastest growing types, while plasticizers will remain the largest segment. PVC will remain the dominant resin and will grow the fastest. This study analyzes the 3.2 billion pound US plastic additives industry, with forecasts for 2017 and 2022 by type and resin. The study also evaluates company market share and profiles major producers.

#3016..... April 2013..... \$4900

Custom Thermoplastic Compounding

US demand for custom compounded thermoplastics is forecast to rise 5.0 percent annually to 11.4 billion pounds in 2017, valued at \$14.3 billion (resin content only). Construction will offer the best market prospects, as the industry recovers from recession. PVC represents the largest and fastest growing compounded thermoplastic. This study analyzes the 8.9 billion pound US custom compounded thermoplastic industry, with forecasts for 2017 and 2022 by resin and market. The study also evaluates company market share and profiles industry players.

#2991..... February 2013..... \$5100

About The Freedonia Group

The Freedonia Group, Inc., 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, the emerging China market, and other world markets. Industries analyzed by Freedonia include:

- Chemicals • Plastics • Life Sciences • Packaging • Building Materials • Security & Electronics • Industrial Components & Equipment • Automotive & Transportation Equipment • Household Goods • Energy/Power Equipment

[Click here to learn more about Freedonia](#)

Freedonia Custom Research

Freedonia Custom Research delivers the same high quality, thorough and unbiased assessment of an industry or market as an industry study. Since the research initiative is based upon a company's specific needs, companies harness Freedonia's research capabilities and resources to answer unique questions. When you leverage the results of a Freedonia Custom Research engagement, you are able to obtain important answers to specific questions and issues associated with: mergers and acquisitions, new product launches/development, geographic expansion, entry into new markets, strategic business planning, and investment and funding decisions.

Freedonia Custom Research is ideal for companies seeking to make a strategic difference in the status quo and focus on future business growth. Working side by side with clients, Freedonia's team is able to define a research project that is custom-tailored to answer specific questions and provide the basis from which a company can make informed business decisions.

[Click here to learn more about Custom Research](#)



[Click here for complete title list](#)



[Click here to visit freedoniagroup.com](http://www.freedoniagroup.com)