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Specialty Silicas

US Industry Study with Forecasts for **2013 & 2018**

Study #2491 | April 2009 | \$4600 | 203 pages

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Precipitated silica accounts for the largest share of specialty silica demand in both volume and value terms. This silica type will also constitute the fastest-growing segment of the market.

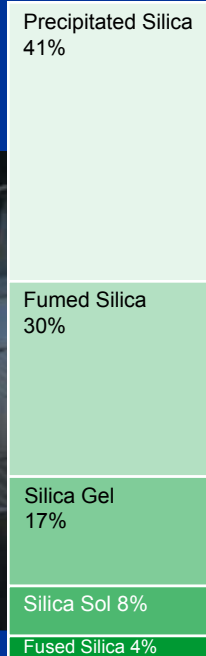
US demand to grow 3.7% annually through 2013

US specialty silica demand is projected to increase 3.7 percent per year through 2013, led by healthy advances in the large precipitated silica segment. Overall volume gains are forecast to accelerate from the pace of the 2003-2008 period, benefitting from an expected rebound in nondurable goods output through 2013.

Precipitated silica accounts for the largest share of specialty silica demand in both volume and value terms. This silica type will also constitute the fastest-growing segment of the market, aided by above-average gains in its primary market -- tire rubber. Increasing use of precipitated silica as a replacement for carbon black in tire reinforcement applications in the US will offer significant opportunities for growth.

Fumed silica represents the second largest product type in value terms, owing to its higher price relative to other silica types. Demand for fumed silica is expected to be healthy, benefitting from gains in small volume markets such as plastics, adhesives and sealants, cosmetics and toiletries, and food and beverages. However, growth in the large electronics market -- where fumed silica finds use in chemical mechanical planarization slurries -- will slow significantly from the pace of the previous decade, restrained by changes in electronics technology, competition from nonsilica materials and greater electronics production in Asia.

US Specialty Silica Demand, 2008 (\$1.4 billion)



Key markets to advance at above-average annual rates

The rubber industry is projected to remain the largest specialty silica market through 2013. The nontire segment accounts for more than half of volume demand. However, the tire rubber market is expected to expand more rapidly, accounting for over 80 percent of volume gains in the rubber market through 2013. Above-average advances will reflect greater use of precipitated silica in the production of "green" tires, which offer increased fuel efficiency and enhanced performance relative to conventional carbon black tires. Demand will benefit from the growing popularity of these tires in the US due to recent high fuel costs,

increasing environmental awareness, and efforts by automakers to comply with new corporate average fuel economy standards for automobiles.

The cosmetics and toiletries market, which represents the second largest market in value terms, will also advance at an above-average pace through 2013. Precipitated silica accounts for the vast majority of demand in this market, and will benefit from a rebound in toothpaste production. Continued growth in high-performance toothpaste and gel sales will also support advances, as will specialty silica use in non-toothpaste cosmetic and toiletry products such as skin and hair care products.

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Sample Text, Table & Chart

MARKETS

Rubber Outlook

As the largest market for specialty silicas, rubber consumption is projected to expand less than 1 percent per year through 2013. This is a reversal of the 2008. Over the forecast period, demand for rubber used in tires and tire-related products is expected to grow at a rate of 0.5 percent per year through 2013. The world's largest motor vehicle manufacturers are in a position that it will not relinquish in the foreseeable future. Demand is supported by both steady increases in the aftermarket and OEM tire demand coinciding with the recovery in the automotive market. Strongest gains in the OEM market are forecast for heavy-duty trucks and buses, ensuring continued demand for larger-sized performance tires both in OEM and replacement markets. Passenger cars, which accounted for over 40 percent of motor vehicle production in 2008, are expected to see significant gains from depressed 2008 levels, benefitting tire rubber demand going forward.

The US nontire rubber sector, which utilizes each of the five types of silicas examined in this study, will advance at a rate of 0.5 percent annually to 2.4 billion pounds in 2013, the largest market for nontire rubber. For the next five years, motor vehicle production over the 2003-2008 period is expected to improve substantially through 2013, benefiting demand for specialty products. Industrial machinery also utilizes specialty silicas which ensure pressurized flows of fluids and convey materials through the manufacturing process.

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TABLE IV-9

CHEMICAL MARKET FOR SPECIALTY SILICAS BY TYPE & APPLICATION (million pounds)

Item	1998	2003	2008	2013	2018
Chemical Product Shpts (bil 2000\$)	310.0	300.0	310.0	325.0	353.0
lb silica/mil \$ chemicals	1.6	1.6	1.6	1.6	1.6
Specialty Silica Demand					1.1
By Type:					
Precipitated Silica					0.8
Silica Gel					0.2
Silica Sol					0.6
Fumed Silica					0.5
By Application:					
Catalysts					0.7
Defoamers					0.6
Pharmaceuticals					0.3
Other					0.5
\$/lb					0.0
Specialty Silica Demand (mil \$)					0.3
% chemicals					0.4
Total Specialty Silica Demand (mil \$)	0.0	0.0	0.0	0.0	0.4

SAMPLE TABLE

CHART V-1

US SPECIALTY SILICA MARKET SHARE, 2008 (\$1.4 billion)



SAMPLE CHART

Sample Profile, Table & Forecast

TABLE III-3
PRECIPITATED SILICA MARKETS
(million pounds)

Item	1998	2003	2008	2013	2018
Precipitated Silica Demand	2,600	2,600	2,600	2,600	2,600
Rubber:					
Tire					76
Nontire					54
Cosmetics & Toiletries					93
Plastics					73
Chemicals					58
Agriculture & Animal Health					50
Food & Beverages					29
Coatings & Inks					27
Paper & Textiles					9
Other					21
\$/lb					54
Precipitated Silica Demand (mil \$)	3,500	3,500	3,500	3,500	25



COMPANY PROFILES

Cabot Microelectronics Corporation
 870 North Commons Drive
 Aurora, IL 60504
 630-375-6631
<http://www.cabotcmp.com>

Revenue
 US Revenue
 Employees

Key Products: chemical planarization, polishing

SAMPLE PROFILE

Cabot Microelectronics is a producer of chemical mechanical polishing slurries used in the manufacture of integrated circuit devices in the semiconductor industry, disk drive components and other products. The Company also distributes CMP polishing pads and provides wastewater management and water recovery services.

The Company participates in the specialty silica industry through the production of SEMI-SPERSE CMP slurries, which are generally used in the manufacture of advanced integrated circuit devices by the semiconductor markets. A major raw material used in the formulation of SEMI-SPERSE CMP slurries are fumed silicas. These ultra-fine, high-purity fumed silicas are typically used as the abrasive material to smooth and flatten the wafer surface, preparing it for subsequent production steps.

Cabot Microelectronics manufactures CMP slurries in the US in Aurora, Illinois. The Company has a research and development site, a distribution center and administrative activities in Aurora. Outside of

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“Cosmetics and toiletries will remain one of the leading markets for precipitated silica. Although growth will continue to be relatively healthy, advances in demand for silica in this market will decelerate from the previous decade, when the introduction and market success of high performance toothpastes offering whitening, remineralization, gum disease fighting action and other benefits propelled gains. Demand will benefit from a rebound in US toothpaste shipments following the declines of the 2003-2008 period.”
 --Section III, pg. 35

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OTHER STUDIES

Waxes

The US market for waxes is analyzed in this study. It presents historical demand data (1998, 2003, 2008) and forecasts to 2013 and 2018 by wax type (e.g., petroleum and mineral waxes such as paraffin, microcrystalline and montan; synthetic waxes such as polymer and Fischer-Tropsch; vegetable and animal waxes) and market (e.g., industrial, consumer, commercial). The study also considers market environment factors, details industry structure, evaluates company market share and profiles industry competitors.

#2456 04/2009..... \$4600

Specialty Films

US demand for specialty films will grow 4.7% annually through 2012. Their penetration into new, high-growth market areas such as photovoltaic modules and biodegradable bags will bolster demand. Rapid adoption of modified atmosphere packaging will further fuel gains, as will improved processing methods in film coating and metallization. This study analyzes the \$6 billion US specialty film industry, with forecasts for 2012 and 2017 by product, function and market. It also evaluates market share and profiles industry players.

#2452 01/2009..... \$4700

Metal Powders

US metal powder demand through 2012 will improve from a flat 2002 to 2007 performance. Gains will be supported by new uses for many types of metal powders (e.g., iron and steel, stainless steel, aluminum, tungsten). An improved outlook for electronics -- which use the most expensive metal powders -- will boost total value demand. This study analyzes the \$3.5 billion US metal powders industry, with forecasts for 2012 and 2017 by product, application and market. It also evaluates market share and profiles industry players.

#2397 11/2008..... \$4600

Lubricants

US market value for lubricants will rise 4% annually through 2012, driven by the impact of high base oil costs and shifts toward higher-quality formulations. The key engine oil segment will grow the fastest based on increasing motor vehicles in use and continued growth in the "do-it-for-me" engine oil change market. This study analyzes the \$13.4 billion US lubricant industry, with forecasts for 2012 and 2017 by base oil, lubricant product and market. It also evaluates company market share and profiles industry players.

#2384 09/2008..... \$4700

World Activated Carbon

Global activated carbon demand will rise 5.2% yearly through 2012. Of the top three markets, China will gain market share while the US and Japan lose market share. Water treatment will remain the top segment, although other uses such as power plant flue gas treatment and motor vehicle emission canisters will grow faster. This study analyzes the world activated carbon industry, with forecasts for 2012 and 2017 by type, application, market, world region and for 17 countries. It also evaluates market share and profiles industry players.

#2363 05/2008..... \$5700

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