US forecasts to 2008 & 2013

Silicones

US demand rising 7% per year through 2008

Demand for silicones in the US is forecast to rise seven percent per year to $3.7 billion in 2008. Growth will be driven by intense product development activities and a favorable environmental profile compared to competitive materials. These low volume, relatively high priced materials are used in a wide variety of applications due to performance characteristics such as high heat resistance, chemical resistance and water repellence.

Fluids remain dominant silicone product

Fluids are the largest product group in the silicone industry, accounting for 46 percent of total value demand in 2003. Demand for silicone fluids will benefit from expanding applications in the cosmetic and toiletry market. Consumer propensity for higher-end, branded products will promote greater use of silicone in formulated personal care items such as shampoo, hair styling products, sun care lotions and skin care lotions.

Silicone resins accounted for over 30 percent of total silicone demand in 2003. Demand for silicone resins will result from steady use in the formulation of paints, coatings, adhesives, sealants and caulks. Silicone resins, for example, are gaining market share over acrylic resins in masonry coatings. In addition, increased demand for high heat resistant coatings in various end uses, such as motor vehicles and appliances, will promote silicone resin use. Silicone-based sealants and caulks find the majority of their use in the construction market, which will provide solid gains through 2008 based on an acceleration in construction spending.

Liquid elastomers to post rapid gains

The best gains in the elastomers segment are forecast for liquid silicone elastomers, which will benefit from their versatility. Elastomers are primarily used in the fabrication of various elastomeric components, such as hose, tubing and gaskets. These products command a higher pricing structure over standard silicone elastomers, promoting aggregate gains for elastomer silicones through 2008.

Silicone gels, foam and other silicone products account for the remainder of silicone demand. Above-average gains are projected for silicone gels, which will benefit from an expected recovery in electronic component shipments from a weak 2003 performance. Silicone foam and other products will also achieve above-average gains, partially arising from favorable opportunities in various transportation segments.

Industry structure

The silicones industry is intensely competitive and highly concentrated, encompassing only a handful of producers in the US. Product development is a major factor in this rapidly evolving industry. However, greater market penetration may be restrained by the high cost of these materials, limiting their use to applications in which their performance advantages are indispensable.

Study coverage

These and other major findings are examined in the new Freedonia study, Silicones, available for $3900. The study presents historical US data to 2003 plus forecasts to 2008 and 2013 by product, application and market. The study also provides market share for leading suppliers and profiles of key producers.
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Freedonia Industry Study #1782 - “Silicones”

Freedonia’s methods involve:

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

MARKETS

Cosmetic & Toiletries Silicone Demand -- US demand for silicones in cosmetics and toiletries is projected to increase 7.8 percent per annum to $459 million in 2008, stimulated mainly by advances in skin formulations of skin care products, where they reduce irritation; and heat-activated hair care products, which help between heat and the hair cuticle. While the hairspray market remains flat, other hair styling aids -- such as mousses and gels formulated to build body, enhance shine and gloss, strengthen hair, and leave a more touchable hair style -- will stimulate demand for silicones. Silicones will also benefit from the increased use of active ingredients as these polymers often serve as binders and delivery agents. Further advances will be limited by competition with less expensive refined petroleum products such as mineral oil, although silicones will continue to gain market share, especially in higher end products where they are valued for their ability to impart a moisturizing feel without leaving a greasy or tacky residue on the skin.

Silicones cover a broad range of fluid oils, resins and compounds, such as cyclomethicone, dimethicone, laurylmethicone, phenyl trimethicone and cationic emulsions, which impart good feel and performance characteristics to creams, lotions, cosmetics and hair care products. Specific applications include hair conditioners, hairsprays, mousse, hair shine enhancers, deodorants, skin lotions and creams, sun care products, foundations, blushes, lipsticks and hair colorants. Silicones act as emollients, emulsifiers, water barriers and delivery systems for active or incompatible ingredients.

Consumers are increasingly seeking hair care products which add body, shine, moisture and manageability or impart other properties without creating a heavy, weighted down feeling. Silicones are among the primary beneficiaries of this trend. The increasing sale of leave-in hair conditioners should also boost demand for silicones as these products provide conditioning without a heavy, greasy or tacky feel -- which is especially important for products which are not...

PRODUCTS

elastomers are primarily valued for their heat resistance quality. These materials are typically consumed in the fabrication of hose, belting, gaskets and seals consumed in the manufacture and maintenance of aerospace equipment, electronic equipment, industrial machinery and motor vehicles.

The consumer market accounted for 32 percent of total silicone elastomer demand in 2003. In this market, silicones are valued for a variety of performance characteristics, including clarity, water repellance and non-irritation. Major applications include diving gear (e.g., masks and snorkels) and adult toys.

The remainder of silicone elastomer demand is consumed by the medical market. In the medical market, silicone elastomers are primarily valued for their clarity, and non-allergic and non-irritation characteristics. Tubing is a major application for silicone elastomers in the medical market.

This study can help you:

• Determine your market & sales potential
• Explore promising geographic markets
• Learn more about industry competitors
• Assess new products & technologies
• Identify firms to merge with or acquire
• Complement your research & planning
• Gather data for presentations
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#1776 .................... 03/2004 .................. $3900

Cosmetic & Toiletry Chemicals
The US market for cosmetic and toiletry chemicals will grow 5.1% annually through 2008. Gains will be driven by growing use of active ingredients designed to enhance appearance and counter the effects of aging, and by plant-derived and specialty additives that protect from sun, wind, smoke, heat and pollution. The study analyzes the $5.3 billion US cosmetic and toiletry chemical industry to 2008 and 2013 by product, function and market segment. It also evaluates market share and profiles key firms.
#1766 .................... 02/2004 .................. $3900

Thermoplastic Elastomers
US demand for thermoplastic elastomers (TPEs) will grow 6% annually through 2007. Gains will be driven by direct replacement and over-molding of competing materials, design trends featuring “soft-touch” surfaces and favorable outlooks for key end-use industries. The TPE industry will also face increased intra-material competition in certain applications. This study analyzes the $1.9 billion US TPE industry to 2007 and 2012 by type and market. It also evaluates market share and profiles leading competitors.
#1735 .................... 12/2003 .................. $4100

Specialty Foams
US specialty foam demand will rise 6.1% per year through 2007, driven by cost/performance advantages in electrical/electronic, industrial, and transportation uses. Among plastic foams, polyurethane and engineered plastic will remain dominant while fluoropolymers and silicones lead gains. Nonplastic foams will grow even faster. This study analyzes the $990 million US specialty foam industry to 2007 and 2012 by type, market and application. It also profiles industry participants and evaluates market share.
#1695 .................... 08/2003 .................. $3800

Silicones
$3900

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