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Note:
EUR 1 = US$1.4
Sample Reading

As a substance composed of both organic and inorganic polymers, silicones present unique properties and find application in a large variety of areas. Silicone-based products are mainly used in construction, automotive & transportation, electrical and electronic applications, paints & coatings, etc.

Construction & building is the largest application market of silicone products, in term of market value as well as market volume. Its demand on silicones was valued at US$2.75 billion in 2008, accounting for roughly 22% of the total silicone market. Following an average rate, the market is forecast to approach US$3 billion at 4% p.a. by 2012 and to reach US$4.17 billion at 7% p.a. by 2015.
In term of volume, the silicone consumption in construction makes up roughly 40% of the total silicone demand. The volume consumption in this area was estimated at 1.5 million tonnes in 2008. It is forecast growth at 5-7% annually to approach 1.9 million tonnes by 2012 and to reach 2.32 million tonnes by 2015.

Automotive & transportation is the second largest application market with the annual consumption making up around 15% of the total silicone market in term of value. As all major car makers are severely hit by the current economic crisis, this market experiences a plunge after a period of rapid growth. Valued at US$1.88 billion in 2008, it is forecast to grow by 3% in the next year to approach US$2 billion by 2010 and to reach US$2.66 billion at 6% p.a. by 2015.
The volume consumption in this application accounts for 12% of the total silicone market volume. Estimated at approximately 450 thousand tonnes, the demand is expected to follow below average growth in the next years. It is forecast to increase to 540 thousand tonnes by 2012 and to reach 624 thousand tonnes by 2015.

Electrical & electronic application makes up roughly 13% of the total silicone market, with estimated market value at US$1.63 billion in 2008. … (Vol. I, P.26)
New reliable seal quality silicone products for electrical plug connectors, 2008
There is a trend towards using more electronics in automotives for increasing safe and comfort, which means an increased number of plug-in cable connectors and sealing elements in turn. New seal quality silicone has been developed for permanent reliable protection against moisture. Another alternative is the self-lubricating, oil-free silicone elastomer.

Silicone rubber solutions for electrical utilities and power delivery professionals, 2008
A latest generation of silicone rubber has been introduced by Momentive for use in high-voltage insulation, rod insulation on, and hollow-core insulation for, transformer, circuit breaker applications, cabling joints and terminations.

UV-active silicones for the microelectronics industry, 2008
New UV-active silicone elastomers have been developed and marketed under the brand name Semicosil UV by Wacker Chemie, for encapsulating electronic components.
The novel UV-active silicone elastomers are easy-to-manage one- and two-component systems based on polyorganosiloxanes. The elastomers are characterized by a long shelf life, fast processing and the absence of any by-products on curing. SEMICOSIL® UV cures without photoinitiators and offers processors maximum flexibility. SEMICOSIL® UV-active silicones boost productivity and lower energy and production costs, especially in the case of large components.

Silicone resins completely compatible with powder coatings binders, 2007
Silicone resins that are claimed to be completely compatible with a wide range of powder coating binders such as solid grade epoxies and polyesters have been developed. … …

(Vol. I P.48)
5.4.1.1 Silicone market in medical devices by application

Silicone market in medical devices by application in US$ million

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<tr>
<th></th>
<th>2008</th>
<th>2009</th>
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<tr>
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<td>333</td>
<td>353</td>
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<td>424</td>
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<tr>
<td>Transdermal drug</td>
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<td>165</td>
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<td>204</td>
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<tr>
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<td>Skin adhesive</td>
<td>123</td>
<td>129</td>
<td>136</td>
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<tr>
<td>Others</td>
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<td>1180</td>
<td>1549</td>
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Silicone market in medical devices by application in value 2008

- Catheters and tubing: 36%
- Implants: 24%
- Transdermal drug delivery: 18%
- Skin adhesive: 14%
- Others: 8%

Silicone market in medical devices by application in US$ million

(Vol. I 175)
5.5 Paints & coatings

5.5.1 Applications and market

Paints & coating is one of the most important application markets for silicone suppliers. The unique combination of organic and inorganic properties makes silicone well suited to paints & coating application.

Silicone resins
Being a major component, silicone resin plays an important role in coating. Silicone resins are used as binders or co-binders. Chemically combining the silicone and organic resins gives a higher degree of compatibility, which allows a broader range of organic resins to be used.

When paints for exterior surfaces are exposed to sunlight, moisture, rainfall, and subject to wet, dry, hot and cold conditions, the combination of UV radiation, variable temperature and humidity rapidly degrades organic polymers, roughening the coating surface and exposing the pigments.

Major benefits silicones provide throughout the life of the coating include:
- excellent resistance to weathering
- excellent heat resistance
- water repellence

Silicone resins are therefore widely used in paints for exterior surfaces, masonry surfaces, in high temperature coatings, such as ovens, chimneys, car exhausts, aerospace and some industrial uses, etc.

Silicone fluids
Silicone fluids are also widely used in paints & coatings in low-level as performance-enhancing additives. They are used for foam control, substrate wetting, levelling, adhesion, slip, release, etc.

... ...

(Vol. I 180)
Momentive Performance Materials Incorporated (US)

22557 West Lunn Road
Strongsville, OH 44149
USA
Phone: +1 440-878-5700
Fax: +1 440-878-5928
http://www.momentive.com

Year of foundation: 2006
Number of employees: ca. 5000
Revenue 2008: US$2.6 billion

Company profile

Momentive Performance Materials Corporation is one of three largest manufacturers of silicones. It is also a leading global supplier of quartz and specialty ceramics, and exclusive licensee of GE-branded sealants globally.

Momentive Performance Materials is a company created by the sale of GE Advanced Materials business to Apollo Management, LP, a private equity fund, in early December 2006 for $3.8 billion.

Momentive specializes in the development, production and marketing of four product lines: silicones, sealants & adhesives, quartz, and ceramics.

Momentive develops and manufactures a full range of silicones, supplying hundreds of industrial and consumer applications. Its silicone based product lines include adhesion promoters, adhesives & sealants, adhesives & sealants additives, antifoams, coating additives, coupling agents, crosslinkers, elastomers & silicone rubber, silicone emulsions, gels & encapsulants, grease organomodified fluids, silicone gel, silicone surfactants, surface modifiers, … …

(Vol. II, P. 113)
# Order Form

**Please return this form**

Via Fax: +49-2102-8761 471 or  
Via Email: market@acmite.com or  
Via Post: Acmite Market Intelligence / Dechenstr 17, 40878 Ratingen, Germany

If you have any question please email to: market@acmite.com

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**Sum**

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Country: _____________________  
Fax: _________________________

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Email: _________________________

Date: _________________________  
Signature: _________________________