

Evonik for Silicone

Explore our broad range of products
for the silicone industry.



Evonik products - enhancing silicone performance in a variety of markets

MARKETS

Transportation

Together we can reach any destination

The first astronaut to walk on the moon wore silicone boots. Silicone products have enabled breakthroughs in automotive design, railway technology and aerospace engineering for many decades. Along with elastomers, silicone-based oils, adhesives and sealants as well as protective coatings contribute to more stable, light-weight, and accordingly, more fuel-efficient means of transport. Evonik offers reliable product solutions such as polymers, silanes, siloxanes, fillers as well as a wide range of additives for these markets to respond to ever-changing needs.

Construction

Silicone solutions around every corner

Silicones can be found in almost every aspect of the construction industry: shower cabinets, wall paint, fiberglass used for insulation or glass facades of steel structures in large buildings, the so-called "structural glazing." And both, homeowners and professional craftsmen working at construction sites need silicone sealants. Evonik offers products in the form of various silicone systems for virtually every need in the construction industry, either as a raw material or as an additive.

Electrical & Electronical Appliances

Electrifying developments

Electricity and the electronics industry are indispensable parts of modern life. Whenever we use a computer or mobile phone or set the microwave timer, we expect perfect performance from the electronics in the device. Evonik offers reliable raw materials for silicone-based products such as complete assemblies, wires & cables, sleeveings, high-voltage insulators, surge arresters, printed circuit boards and LED displays. They guarantee optimum design, function, compatibility and a long service life.

Lifestyle & Household Goods

There is no place like home

In a figurative sense, silicone household goods are almost part of the family. Thanks to their optimized rheological and optical properties, silicones based on Evonik products offer excellent mechanical strength. They give kitchen ware such as cake or muffin molds their heat-resistant properties, and help highly transparent baby bottle pacifiers to withstand the stresses of daily use. Moreover, there's always something to glue, repair or seal in every household and Evonik products play an important role in almost any formulation.

Medical & Dental Care

Clean, compatible, transparent

Well-known applications such as dental molding compounds or silicone tubing for catheters would be inconceivable without silicone rubber, and offer major advantages in terms of biological inertness and water resistance. Consumer products made of silicone also are skin-compatible and environmentally friendly, easy to sterilize and yet highly transparent – a significant advantage over conventional latex and PVC-based products.

Renewable Energies

Into the rising sun

Evonik is well-positioned to serve the needs of the established market for renewable energies such as solar cells, photovoltaic systems and wind power. Silicone-based adhesives and sealants as well as materials for encapsulation play an increasingly important role. Evonik offers a number of formulation components to convert sunlight and wind into energy as effectively as possible.

Silicone Elastomer applications

Renewable Energies

- Solar-cells
- Photovoltaics
- Wind-turbines

Construction

- Structural glazing, low modulus expansion joints
- Non-migrating natural stone sealants
- Underfloor heatings

Transportation

- **Automotive:** turbo charger hoses, sealants, spark plug boots, sleeves, encapsulants for electronic circuits and sensors
- **Railway:** sealants, hoses, gaitors, encapsulants for electronic circuits and sensors
- **Aviation:** sealants, hoses, encapsulants for electronic circuits and sensors
- Thermal conductive elastomers for e-mobility, battery packaging
- Low volatile sealants for high temperature applications

Medical & Dental Care

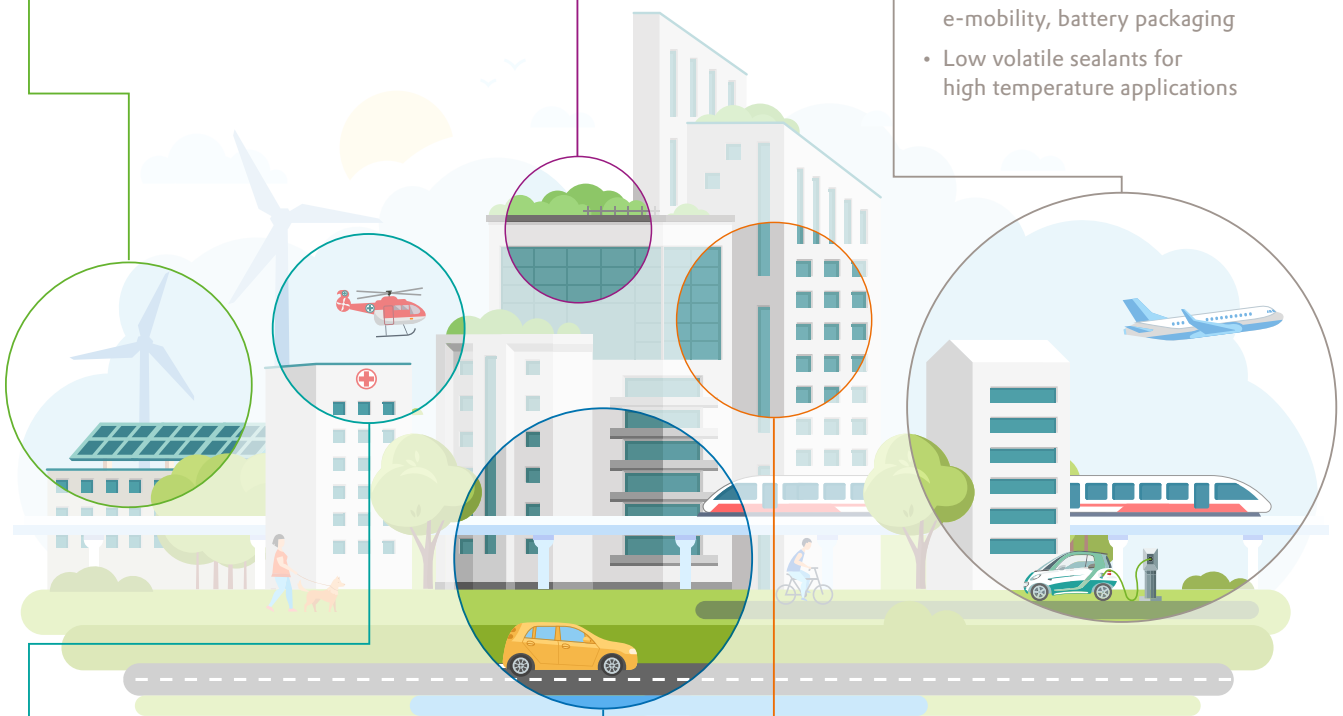
- Catheters
- Dental molding compounds
- Low trauma PSA's for wound dressings
- Prostheses and implants
- Impression materials for otology and podology

Lifestyle & Household Goods

- Baby bottle pacifiers
- Kitchen ware, e.g. baking forms, pancake turner
- Showerheads
- Sporting goods, e.g. swimming cap and goggle
- Textile coatings
- Oven sealings, heating pads, heating conductors

Electrical & Electronical Appliances

- High-voltage insulators, composite-hollow-insulators
- LED encapsulation, roll covers
- Safety cables, cable end plug, cable compounds
- Thermal interface materials
- Key pads for computers, TV's and remote controls
- Protective potting of electronic parts (electric tooth brush, wind speed sensors, position lighting of wind generators, automotive parts)



Products and Contact

Brand	Chemistry/Product	Silicone Systems	Markets
AEROSIL®	AEROSIL® fumed silica as functional filler for silicone elastomers	RTV-1, RTV-2, HCR, LSR	● ● ● ● ●
AEROXIDE®	AEROXIDE® fumed oxides and fumed mixed oxides as additives for silicone elastomers	RTV-1, RTV-2, HCR, LSR	● ● ● ● ●
SIPERNAT®	SIPERNAT® specialty silica as functional filler for silicone elastomers	RTV-1, RTV-2, HCR, LSR	● ● ● ● ●
Dynasylan®	Dynasylan® functional silanes as crosslinker, adhesion promoter, water scavenger	RTV-1, RTV-2, HCR, LSR	● ● ● ● ● ●
POLYVEST® MA 75	POLYVEST® low viscous, maleic anhydride modified polybutadiene	for chalk filled RTV-1 systems, RTV-2	● ● ●
POLYVEST® EP ST-E	POLYVEST® silane modified polybutadienes, surface treatment of fillers	RTV-1, RTV-2	● ● ●
TEGOSIL® Heatban	Pastes for heat resistance	HCR, LSR	● ●
TEGOSIL® FR	Homogeneous paste of non-toxic highly filled functional fillers	HCR, LSR	● ● ● ●
TEGOSIL® HT	Homogeneous paste of non-toxic highly filled functional fillers	HCR, LSR	● ● ●
TEGOMER® TEGOPREN®	Friction & haptic modification, surface treatment of particles	HCR, LSR	● ●
Polymer VS	Vinyl-terminated PDMS	RTV-2, HCR, LSR	● ● ● ● ●
VQM	Vinyl functional QM resins in Polymer VS	RTV-2, HCR, LSR	● ● ● ● ●
Polymer OH	Hydroxy-terminated PDMS	RTV-1	● ● ● ● ●

- Transportation
- Construction
- Electrical & Electronical Appliances
- Lifestyle & Household Goods
- Medical & Dental Care
- Renewable Energies

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