Elastomers

Product Selector
LSR – HCR - Specialties
Silicone Elastomers

Silicones are chosen when a combination of critical properties and benefits in one engineering material is required, e.g.*

- Little change of physical properties over broad temperature range
- Broad chemical / fluid resistance
- Excellent heat stability
- Good flexibility
- Low compression set
- Excellent dielectric properties
- Favorable burning characteristics
- Outstanding low temperature flexibility
- Ozone-, UV- and weathering resistance
- Water repellency
- Low hardness without use of plasticizers
- Cost- efficient processing (cure- speed, flow, etc.)
- Achievable bonding incl. self-bonding to various substrates
- Ease of assembly through self-lubrication
- Neutral odor and taste, chemical inertness
- Easy to color / Transparency
- FDA / USP compliancy, UL listing

*Note: some properties may exclude each other like excellent compression set vs. high tear- strength, good rebound resilience vs. high tensile strength etc. No Silicone grade will cover all above properties in one product. However Silicones offer the broadest available spectrum of favorable properties of all relevant engineering elastomers.

The Silicone Elastomers of GE Bayer Silicones are distinguished between:

- **LSR**: Liquid Silicone Rubber. This material is designed for short cycle time injection molding and full automatic flash-less, trim- free processing. GE Bayer Silicones provides training, developmental support, concept work and prototyping in the Application Development Center (ADC) in order to support existing and new customers.

- **HCR**: Heat Cured Rubber. Typical processes include extrusion, calendaring as well as injection-, compression- and transfer- molding. GE Bayer Silicones supplies base materials for customers with their own compounding and ready-to-use-compounds tailored for specific customer requirements. From our own compounding location – supporting the European market.

This product overview lists most of the commercially available grades. More specialty grades and segmental formulations of HCR and LSR are available on request.

Questions? Please contact our Elastomers Technical Service Team directly:

**Automotive:** manfred.rolle@ge.com  +49 (0) 214 30 67 349
**Healthcare:** klaus-dieter.pesch@ge.com  +49 (0) 214 30 71226
**Custom Compounds HCR**
  - Mohammed.Fiaz@ge.com  +44 (0) 1204 473055
  - Nuzhet.Ismail@ge.com  +44 (0) 1204 668559
**High Voltage Insulation**
  - Stefan.Rist@ge.com  +49 (0) 214 30 65769
**Industrial Applications:**
  - Werner.Rauer@ge.com  +49 (0) 214 30 31975
  - Andreas.Daniel@ge.com  +49 (0) 214 30 31926
**Technical Service India:**
  - Silicones.Response@ge.com  +91 80 28398567
**Central Product Information:**
  - gebayersilicones@ge.com  +31 (0) 164 29 32 76

GE Bayer Silicones has a quality system according to DIN EN ISO 9001:2000
### Liquid Silicone Rubber Grades

#### High Voltage Insulation
- Electrically Insulating (+ grey available)

#### Electro Conductive
- Silopren* Electro 242-1
- Silopren* Electro 242-2
- Silopren* Electro 242-3
- Silopren* Electro 245
- Silopren* Electro 240
- Silopren* LSR 2345/07
- Silopren* LSR 2345/03
- Silopren* LSR 2345/04
- Silopren* LSR 2345/05
- Silopren* LSR 2345/06

#### Additives / Primers
- **General Additives**
  - Color Paste Additive U
  - Hardness Additive TP 3547
  - Bonding Additive TP 3662
  - Reactive Additive TP 3581
  - Modulus Additive TP 3813
  - Heat Stab. Additive TP3605
- **Primers**
  - Bonding Agent TP 3621
  - Bonding Agent 3-2, 2-4
  - Bonding Agent BA 2

#### LSR Color Pastes
- **Yellow**
  - RAL approx. 1016
  - Pantone approx. 604 C
- **Blue**
  - RAL approx. 5005
  - Pantone approx. 2915 C
- **Orange**
  - RAL approx. 2004
  - Pantone approx. 021 C
- **Vermilion**
  - RAL approx. 2002
  - Pantone approx. 179 C
- **Green**
  - RAL approx. 6010
  - Pantone approx. 364 C
- **Light Green**
  - RAL approx. 6032
  - Pantone approx. 356 C
- **Red**
  - RAL approx. 3020
  - Pantone approx. 285 C 2x
- **Light Grey**
  - RAL approx. 7040
  - Pantone approx. 5 2005 R80B
- **Grey**
  - RAL approx. 7000
- **White**
  - RAL approx. 9010

#### Coatings
- LSR Topcoat
- Low Surface Friction Coating
- Silopren* LSR 2345/07
- Conductive Coating
# Heat Cured Rubber Grades

## Standard Grades

- **General Purpose**
  - 20 Shore A: HV A/411
  - 30 Shore A: HV A/411
  - 40 Shore A: HV A/411
  - 50 Shore A: HV A/411
  - 60 Shore A: SE 6060 EU-LV
  - 70 Shore A: SE 6070 EU-LV
  - 80 Shore A: HV A/811

- **High Mechanical**
  - HV 3/411
  - HV 3/511
  - HV 3/611
  - HV 3/711

- **No Post Cure**
  - HV 1/401
  - HV 1/501
  - HV 1/601
  - HV 1/701

- **High Temperature**
  - HV 7/402
  - HV 7/502
  - HV 7/602
  - HV 7/702

- **Health Care**
  - HV 3/322
  - HV 3/422
  - HV 3/522
  - HV 3/622
  - HV 3/722

- **High Transparency**
  - HV 2/2160
  - HV 2/3370UL

## Cable Grades

- **General Purpose**
  - HV 2/2160
  - HV 2/2170
  - HV 2/56305
  - VPAI3700

- **Hard Ash Cable**
  - SE 9275 EU LV

## Specialties

- **Semi-Conductive**
  - HV 5/600-3
  - 3 Ω·cm
  - HV 5/600-10
  - 10 Ω·cm
  - XE23-B2484

- **Steam Resistant**
  - SE 5559U brown
  - SE 5592 EU FR translucent
  - RS 36 off-white
  - RS 375 white

- **Flame Retardant**
  - SE 5559U white
  - SE 6916 EU HA off-white
  - HV 2/3370UL white

## Additives

- **Mold Release**
  - VH 9

- **Flame Retardant**
  - SE 6921 EU FR translucent
  - FS 3 white

- **Reversion Stabilizer**
  - RS 56 off-white
  - RS 75 white

- **Heat Stabilizer**
  - SE 6916 EU HA off-white
  - HS 12 white

- **X-Ray, Addition cure**
  - Addisil X-Ray
**Regional Information**

Europe, Middle East, Africa & India  
GE Bayer Silicones GmbH & Co. KG  
Building V7  
D-51368 Leverkusen, Germany  
T 00.800.4321.1000  
T2 +31.164.293276  
E gebayersilicones@ge.com

North America  
World Headquarters  
187 Danbury Road  
Wilton, CT 06897, USA  
T 800.295.2392  
F 607.754.7517

Latin America  
Rodovia Eng. Constâncio Clntra, Km 78.5 Itatiba, SP – 13255-700, Brazil  
T +55.11.4534.9650  
F +55.11.4534.9660

Pacific  
GE Toshiba Silicones  
6-2-31 Roppongi Minato-ku  
Tokyo 106-8550 Japan  
T +81.3.3479.5361  
F +81.3.3479.5391

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**Customer Service Centers**

Europe, Middle East, Africa & India  
GE Bayer Silicones GmbH & Co. KG  
T 00.800.4321.1000  
T2 +31.164.293276  
E gebayersilicones@ge.com

North America  
South Charleston, WV 25303, USA  
• Specialty Fluids  
• UA, Silanes, Resins, and Specialties  
• RTV Products-Elastomers  
• Sealants and Adhesives & Construction  
T 800.523.5862  
T 800.334.4674  
T 800.332.3390  
T 877.943.7325  
E cs-na.osi@ge.com  
F 304.746.1623  
F 304.746.1623  
F 304.746.1623  
F 304.746.1623

Canada  
St-Eustache, Quebec  
• Within U.S. & Canada  
• Outside U.S. & Canada  
T 800.363.0496  
T +450.974.0899  
E +650.974.0380

Latin America  
Argentina & Chile  
Brazil  
Mexico & Central America  
Venezuela, Ecuador, Peru, Colombia, & Caribbean  
T +54.23.2055.2857  
T +55.11.4534.9650  
T +52.55.5257.6042  
T +58.21.2902.5167  
E csla.gesosi@ge.com  
F +54.23.2055.2811  
F +55.11.4534.9660  
F +52.55.5257.6094  
F +58.21.2902.5158

Pacific  
Japan  
China  
Korea  
Singapore  
T +81.276.20.6182  
T +86.800.820.0202  
T +82.2530.6400  
T +65.6220.7022  
E helpdesk@getos.co.jp

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**Worldwide Hotline**  
T 800.295.2392  
T +607.786.8131  
T +607.754.7517

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Typical product data should not be used as specifications. Assistance and specifications are available by contacting GE Bayer Silicones. Material Safety Data Sheets are available upon request from GE Bayer Silicones. Similar information for chemicals used with GE Bayer Silicones products may be obtained from the respective suppliers.

Products may be ordered from your regular sales contact or please call GE Bayer Silicones Customer Service Center, Bergen Op Zoom, The Netherlands at +800-4321-1000 to find out the nearest sales office. (Please use the prefix needed for international dialing from your country; e.g. “00” for Germany).  
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