



Consumer Solutions

ENGINEERED ELASTOMER SOLUTIONS FOR VEHICLE SYSTEMS DESIGN

Smart science drives component durability innovation



DESIGN FOR PROCESS EFFICIENCY AND PERFORMANCE DURABILITY



Meet trend-driven design needs for energy efficiency, greater comfort, safety and sustainability with engineered elastomers from Dow. Our selection of advanced silicone and fluorosilicone rubber elastomers can help you achieve:

- **Energy efficiency** by enabling lightweight design with proven mechanical and environmental resistance
- **Driving comfort** by reducing squeaks; rattles; and noise, vibrations and harshness (NVH)
- **Safety** by improving component durability and safety system reliability
- **Sustainability** with efficient processing and increased service life of components

Choose from a wide range of high-performance engineered elastomers to meet your requirements for efficient processing and durable performance:

- High-consistency silicone rubber (HCR)
- Liquid silicone rubber (LSR)
- Fluorosilicone rubber (FSR)
- Liquid fluorosilicone rubber (F-LSR)

Key performance advantages of these engineered elastomer technologies from Dow include:

- Excellent resistance to fuel, oil and solvents
- Wide service-temperature range from -40 to 316°C (-40 to 600°F)
- Stable electrical insulating properties when exposed to severe-duty service requirements
- Excellent mechanical strength and flexibility with durable resistance to aging, cracking, softening and compression set
- Application-matched choices in hardness, specific gravity, tensile strength, elongation, color and flow properties
- Process-matched compounds and standard bases for extrusion, calendering, and injection or compression molding



INNOVATE WITH SMART SCIENCE

Proven, effective engineered elastomer solutions from Dow can help you meet vehicle system design goals for innovation in process efficiency and performance durability:

POWERTRAIN

- 1 Anti-drainback oil filter valve
- 2 Cylinder head
- 3 Oil pan
- 4 Air intake manifold
- 5 Fuel delivery diaphragms
- 6 EGR valve diaphragms
- 7 Fuel quick-connect seals
- 8 Turbocharger, intercooler hoses
- 9 Radiator seals
- 10 Engine coolant hoses
- 11 Heater hoses
- 12 Transmission seals
- 13 Driveline CVJ boots
- 14 Engine mounts, exhaust hangers

CHASSIS AND BRAKES

- 15 Gaskets and seals
- 16 Bellows, dust covers, boots

ELECTRICAL

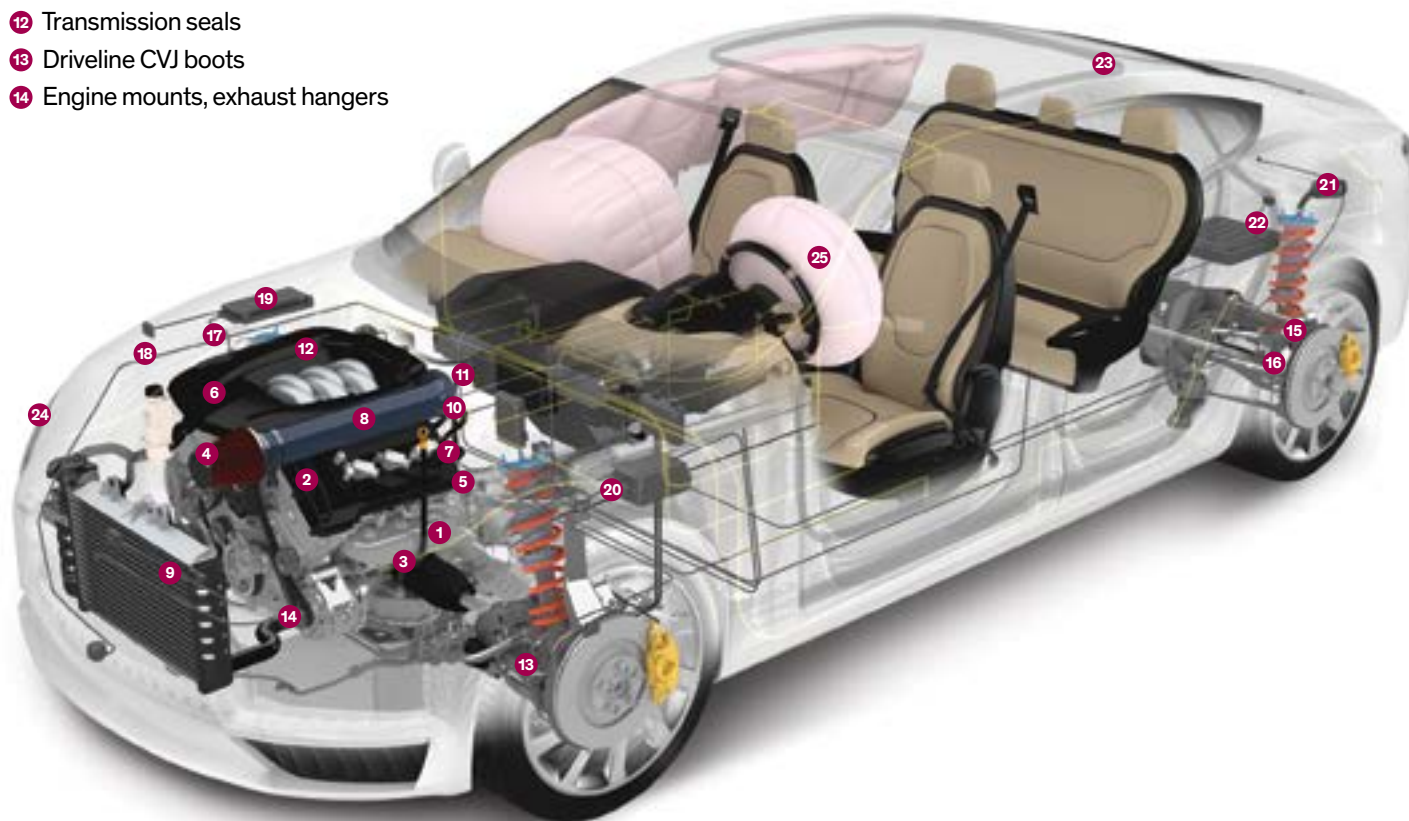
- 17 Wire harness connectors
- 18 Coil-to-plug wire insulation
- 19 Spark plug boots
- 20 Ignition cable insulation
- 21 HEV-EV charging cable insulation
- 22 Battery connector seals

EXTERIOR


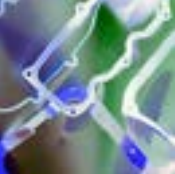





- 23 Sunroof seals
- 24 Lighting assembly seals

SAFETY

- 25 Airbag fabric coatings










SELECTION GUIDE: ENGINEERED ELASTOMERS



APPLICATION	DESIGN NEEDS	POTENTIAL SOLUTIONS
POWERTRAIN SYSTEMS		
	Anti-drainback oil filter valve	Stable mechanical properties; resistance to hardening or softening over a wide range of service temperatures; oil resistance SILASTIC™ Liquid Silicone Rubber 9390-70 XIAMETER™ 21068-V Silicone Rubber
	Oil pan gasket	Resistance to engine oil; good resistance to compression set XIAMETER™ Q4-2918 Silicone Rubber Compound XIAMETER™ Q4-2918LV Silicone Rubber Compound
	Rocker cover gasket	Good resistance to oil; good compression set and compression stress relaxation XIAMETER™ MX 4108 Silicone Rubber XIAMETER™ Q4-2918 Silicone Rubber Compound XIAMETER™ Q4-2918LV Silicone Rubber Compound XIAMETER™ 24048-V Silicone Rubber XIAMETER™ 24057-V HCR Compound XIAMETER™ 24096-V Silicone Rubber XIAMETER™ 24097-V HCR Compound Cured-in-place gasketing (CIPG): SILASTIC™ RBL-9694-30P Liquid Silicone Rubber SILASTIC™ RBL-9694-45M Liquid Silicone Rubber
	Air intake manifold gasket	Oil resistance; good aging in hot fuel vapors; good resistance to compression set SILASTIC™ 28057-V Fluorosilicone Compound Cured-in-place gasketing (CIPG): SILASTIC™ RBL-9694-30P Liquid Silicone Rubber SILASTIC™ RBL-9694-45M Liquid Silicone Rubber
	Fuel delivery diaphragms	Fuel resistance and flexibility over a wide range of service temperatures SILASTIC™ EFX20MHS00 Fluorosilicone Compound SILASTIC™ EFX30MHS00 Fluorosilicone Compound SILASTIC™ FL 30-9201 Fluoro Liquid Silicone Rubber SILASTIC™ FL 40-9201 Fluoro Liquid Silicone Rubber SILASTIC™ FCM 55-1241-FX Fluorosilicone Compound SILASTIC™ EFX60MLC00 Silicone Rubber SILASTIC™ FCM 60-1278-FX FSR Rubber SILASTIC™ FL 60-9201 Fluoro Liquid Silicone Rubber (F-LSR) SILASTIC™ FL 70-9201 Fluoro Liquid Silicone Rubber (F-LSR) SILASTIC™ 28075HD-V Fluorosilicone Rubber SILASTIC™ 28819-V Fluorosilicone Compound SILASTIC™ 38640-V Fluorosilicone Rubber
	Exhaust gas recirculation (EGR) valve diaphragms	Fuel resistance; flexibility in high service temperatures (200°C) SILASTIC™ FL 30-9201 Fluoro Liquid Silicone Rubber SILASTIC™ FL 40-9201 Fluoro Liquid Silicone Rubber SILASTIC™ FL 60-9201 Fluoro Liquid Silicone Rubber (F-LSR) SILASTIC™ EFX70MLC00 Silicone Rubber SILASTIC™ FL 70-9201 Fluoro Liquid Silicone Rubber (F-LSR) SILASTIC™ 28075HD-V Fluorosilicone Rubber
	Fuel delivery quick-connector seals	Fuel resistance; flexible in heat and cold; good permeation resistance; good compression set resistance and stress relaxation properties; low swell; high tear strength SILASTIC™ EFX70MLC00 Silicone Rubber SILASTIC™ EFX75MLC10 Fluorosilicone Rubber SILASTIC™ FCM 75-4955 LC Silicone Rubber SILASTIC™ 28075HD-V Fluorosilicone Rubber

APPLICATION	DESIGN NEEDS	POTENTIAL SOLUTIONS
POWERTRAIN SYSTEMS (continued)		
	Turbocharger, intercooler hoses Wide range of service temperatures; good fuel, oil and exhaust gas resistance; good interlayer adhesion without cracking or peeling; high mechanical strength	Outer layer: SILASTIC™ HCC 55-1002-NP Silicone Rubber SILASTIC™ HCC 65-1027-NP HCR Compound SILASTIC™ HCC 70-1012-GP Silicone Rubber SILASTIC™ HCC 70-1031-NP HCR Compound SILASTIC™ 35125-T RED Silicone Rubber Red Liner: SILASTIC™ FCC 55-1047-FX Fluorosilicone Rubber SELF-ADHESIVE COMPOUNDS Intermediate layer: SILASTIC™ HCE 70-4770 SA Silicone Rubber Liner: SILASTIC™ FCE 50-4948 SA Silicone Rubber
	Radiator seals Chemical resistance to coolant; low compression set; excellent bonding properties	XIAMETER™ RBL-2004-70 Liquid Silicone Rubber Cured-in-place gasketing (CIPG): SILASTIC™ RBL-9694-30P Liquid Silicone Rubber SILASTIC™ RBL-9694-45M Liquid Silicone Rubber
	Water coolant hoses and radiator hoses Good chemical and high-temperature resistance; good processing characteristics for calendaring and extrusion	SILASTIC™ HCE 65-1029-NP Silicone Rubber SILASTIC™ HCR 65-1030-NP Silicone Rubber SILASTIC™ HCE 70-1026-NP Silicone Rubber XIAMETER™ RBB-2100-60 Base XIAMETER™ RBB-2100-70 Base SILASTIC™ 20031-D BLU Silicone Rubber Blue SILASTIC™ 20032-D RED Silicone Rubber Red SILASTIC™ 20039-D GRN Silicone Rubber Green SILASTIC™ 20063-L BLK Silicone Rubber Black SILASTIC™ 20093-T Red Silicone Rubber Red
	Low-pressure heater hoses Good chemical and high-temperature resistance; good processing characteristics for calendaring and extrusion	SILASTIC™ 27788-Z Silicone Rubber SILASTIC™ 27790-Z Silicone Rubber
	CVJ boots High fatigue life; durable flexibility over a wide range of service temperatures; chemical resistance to lubricants and contaminants	SILASTIC™ EHX60MHS01 HCR Compound SILASTIC™ HCM-1102 Silicone Rubber
	Engine mounts, exhaust hangers High tear strength; withstand extreme heat and cold; stable mechanical properties	SILASTIC™ EHP65MHT00 HCR Compound XIAMETER™ HCM 75-4731 LC Silicone Rubber XIAMETER™ 24142-V Silicone Rubber XIAMETER™ 21058-V Silicone Rubber XIAMETER™ 24104-V Silicone Rubber XIAMETER™ 24140-V Silicone Rubber

NOTE: These silicone and fluorosilicone engineered elastomers are proven, effective solutions for vehicle systems design innovation. Contact your Dow representative for product options to meet specialized requirements.

APPLICATION	DESIGN NEEDS	POTENTIAL SOLUTIONS
CHASSIS AND BRAKE SYSTEMS		
	Bellows, dust covers, boots, gaskets, seals	Good mechanical properties; tear strength; weatherability XIAMETER™ EHP60MHS01 Silicone Rubber SILASTIC™ HCM 1102 HCR Compound
ELECTRICAL SYSTEMS		
	Wire harness connector seal	Watertight protection; heat and fluid resistance; easy assembly with self-lubricating properties; high mechanical strength; easy processing SILASTIC™ 9204-20 Liquid Silicone Rubber SILASTIC™ 9202-30 Liquid Silicone Rubber SILASTIC™ 9204-30 Liquid Silicone Rubber SILASTIC™ 9201-50 Liquid Silicone Rubber SILASTIC™ 9202-50 Liquid Silicone Rubber SILASTIC™ 9204-50 Liquid Silicone Rubber SILASTIC™ WS 190-60-01 Silicone Rubber XIAMETER™ 23010-V Silicone Rubber XIAMETER™ 23023-V Silicone Rubber XIAMETER™ 23077-V Silicone Rubber
	Distributorless ignition (DLI) plug wire	Weatherability; wide range of service temperatures XIAMETER™ 29046B-T Silicone Rubber
	Spark plug boots	Electrical insulation for high voltages; high service temperatures XIAMETER™ RBL-9280-60E Liquid Silicone Rubber XIAMETER™ 23004-V Silicone Rubber XIAMETER™ 25065-V Silicone Rubber
	Ignition cable insulation	Electrical insulation for high voltages; high service temperatures XIAMETER™ 23004-V Silicone Rubber
	Hybrid and electric vehicle charging cable insulation	Reliable electrical insulation; high mechanical strength and flexibility; low flammability; weatherability SILASTIC™ RBC 7100-60 Compound XIAMETER™ RBB-2100-70 Base
	HEV/EV battery connector seals	Watertight protection; heat and fluid resistance; easy assembly with self-lubricating properties; high mechanical strength; easy processing SILASTIC™ 9204-20 Liquid Silicone Rubber SILASTIC™ 9202-30 Liquid Silicone Rubber SILASTIC™ 9204-30 Liquid Silicone Rubber SILASTIC™ 9201-50 Liquid Silicone Rubber SILASTIC™ 9202-50 Liquid Silicone Rubber SILASTIC™ 9204-50 Liquid Silicone Rubber SILASTIC™ WS 190-60-01 Silicone Rubber XIAMETER™ 23010-V Silicone Rubber XIAMETER™ 23023-V Silicone Rubber XIAMETER™ 23077-V Silicone Rubber

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EXTERIOR SYSTEMS															
	Lighting assembly seals	Good heat resistance; watertight protection; easy assembly; good mechanical strength	SILASTIC™ 9204-20 Liquid Silicone Rubber SILASTIC™ 9202-30 Liquid Silicone Rubber SILASTIC™ 9204-30 Liquid Silicone Rubber SILASTIC™ 9201-50 Liquid Silicone Rubber SILASTIC™ 9202-50 Liquid Silicone Rubber SILASTIC™ 9204-50 Liquid Silicone Rubber XIAMETER™ RBL-9280-60E Liquid Silicone Rubber												
SAFETY SYSTEMS															
	Airbag fabric coatings	High performance at lower coating weights; high thermal resistivity; excellent adhesion to PET and PA; foldability; flexibility	<table border="1"> <thead> <tr> <th colspan="2">COATINGS</th> </tr> </thead> <tbody> <tr> <td>Flat Fabric:</td> <td>One-piece woven (OPW):</td> </tr> <tr> <td>SILASTIC™ LCF 3600 Coating</td> <td>SILASTIC™ LCF 3760 Liquid Silicone Rubber</td> </tr> <tr> <td>SILASTIC™ LCF 4630 Liquid Silicone Rubber</td> <td>SILASTIC™ 3715 Curing Agent</td> </tr> <tr> <th colspan="2">SEAM SEALANT</th> </tr> <tr> <td colspan="2">SILASTIC™ SE 6777 Kit</td> </tr> </tbody> </table>	COATINGS		Flat Fabric:	One-piece woven (OPW):	SILASTIC™ LCF 3600 Coating	SILASTIC™ LCF 3760 Liquid Silicone Rubber	SILASTIC™ LCF 4630 Liquid Silicone Rubber	SILASTIC™ 3715 Curing Agent	SEAM SEALANT		SILASTIC™ SE 6777 Kit	
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SUSTAINABLE DESIGN SOLUTIONS

Enhance your vehicle systems design sustainability with silicone and fluorosilicone engineered elastomers from Dow. These advanced elastomer technologies can be custom-formulated for specified performance characteristics, regulatory standards and specialized process requirements. They are proven, effective solutions that can resist degradation from alternative fuels, synthetic oils and aggressive fluids; withstand increased operating temperatures; help reduce material consumption in lighter-weight vehicles; and aid local production of global vehicle platforms.

MORE DOW SMART SCIENCE

In addition to the silicone and fluorosilicone rubber featured in this selection guide, Dow also offers more smart science for vehicle system design innovation with our DOWSIL™ and XIAMETER™ adhesives and sealants.

LEARN MORE: CONTACT US

To learn more about how our engineered elastomers can help meet challenging design needs in automotive and transportation applications, contact your Dow Technical Representative, visit consumer.dow.com.

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