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
<table>
<thead>
<tr>
<th>APPLICATION</th>
<th>DESIGN NEEDS</th>
<th>POTENTIAL SOLUTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>POWERTRAIN SYSTEMS</strong></td>
<td></td>
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</tr>
<tr>
<td>Anti-drainback oil filter valve</td>
<td>Stable mechanical properties; resistance to hardening or softening over a wide range of service temperatures; oil resistance</td>
<td>SILASTIC™ Liquid Silicone Rubber 9390-70 XIAMETER™ 21068-V Silicone Rubber</td>
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<tr>
<td>Oil pan gasket</td>
<td>Resistance to engine oil; good resistance to compression set</td>
<td>XIAMETER™ Q4-2918 Silicone Rubber Compound XIAMETER™ Q4-2918LV Silicone Rubber Compound</td>
</tr>
<tr>
<td>Rocker cover gasket</td>
<td>Good resistance to oil; good compression set and compression stress relaxation</td>
<td>XIAMETER™ MX 4108 Silicone Rubber XIAMETER™ Q4-2918 Silicone Rubber Compound XIAMETER™ Q4-2918LV Silicone Rubber Compound XIAMETER™ 24057-V HCR Compound XIAMETER™ 24096-V Silicone Rubber XIAMETER™ 24097-V HCR Compound <strong>Cured-in-place gasketing (CIPG):</strong> SILASTIC™ RBL-9694-30P Liquid Silicone Rubber SILASTIC™ RBL-9694-45M Liquid Silicone Rubber</td>
</tr>
<tr>
<td>Air intake manifold gasket</td>
<td>Oil resistance; good aging in hot fuel vapors; good resistance to compression set</td>
<td>SILASTIC™ 28057-V Fluorosilicone Compound <strong>Cured-in-place gasketing (CIPG):</strong> SILASTIC™ RBL-9694-30P Liquid Silicone Rubber SILASTIC™ RBL-9694-45M Liquid Silicone Rubber</td>
</tr>
<tr>
<td>Fuel delivery diaphragms</td>
<td>Fuel resistance and flexibility over a wide range of service temperatures</td>
<td>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™ EFX60MLCO0 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</td>
</tr>
<tr>
<td>Exhaust gas recirculation (EGR) valve diaphragms</td>
<td>Fuel resistance; flexibility in high service temperatures (200°C)</td>
<td>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™ EFX70MLCO0 Silicone Rubber SILASTIC™ FL 70-9201 Fluoro Liquid Silicone Rubber (F-LSR) SILASTIC™ 28075HD-V Fluorosilicone Rubber</td>
</tr>
<tr>
<td>Fuel delivery quick-connector seals</td>
<td>Fuel resistance; flexible in heat and cold; good permeation resistance; good compression set resistance and stress relaxation properties; low swell; high tear strength</td>
<td>SILASTIC™ EFX70MLCO0 Silicone Rubber SILASTIC™ EFX75MLC10 Fluorosilicone Rubber SILASTIC™ FCM 75-4955 LC Silicone Rubber SILASTIC™ 28075HD-V Fluorosilicone Rubber</td>
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### POWERTRAIN SYSTEMS (continued)

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<td>Turbocharger, intercooler hoses</td>
<td>Wide range of service temperatures; good fuel, oil and exhaust gas resistance; good interlayer adhesion without cracking or peeling; high mechanical strength</td>
<td><strong>Outer layer:</strong>&lt;br&gt;SILASTIC™ HCC 55-1002-NP Silicone Rubber&lt;br&gt;SILASTIC™ HCC 65-1027-NP HCR Compound&lt;br&gt;SILASTIC™ HCC 70-1012-GP Silicone Rubber&lt;br&gt;SILASTIC™ HCC 70-1031-NP HCR Compound&lt;br&gt;SILASTIC™ 35125-T RED Silicone Rubber Red</td>
</tr>
<tr>
<td>Radiator seals</td>
<td>Chemical resistance to coolant; low compression set; excellent bonding properties</td>
<td><strong>SELF-ADHESIVE COMPOUNDS</strong>&lt;br&gt;Intermediate layer:&lt;br&gt;SILASTIC™ HCE 70-4770 SA Silicone Rubber</td>
</tr>
<tr>
<td>Water coolant hoses and radiator hoses</td>
<td>Good chemical and high-temperature resistance; good processing characteristics for calendering and extrusion</td>
<td><strong>Cured-in-place gasketing (CIPG):</strong>&lt;br&gt;SILASTIC™ RBL-9694-30P Liquid Silicone Rubber&lt;br&gt;SILASTIC™ RBL-9694-45M Liquid Silicone Rubber</td>
</tr>
<tr>
<td>Low-pressure heater hoses</td>
<td>Good chemical and high-temperature resistance; good processing characteristics for calendering and extrusion</td>
<td>SILASTIC™ HCE 65-1029-NP Silicone Rubber&lt;br&gt;SILASTIC™ HCR 65-1030-NP Silicone Rubber&lt;br&gt;SILASTIC™ HCE 70-1026-NP Silicone Rubber&lt;br&gt;XIAMETER™ RBB-2100-60 Base&lt;br&gt;XIAMETER™ RBB-2100-70 Base&lt;br&gt;SILASTIC™ 20031-D BLU Silicone Rubber&lt;br&gt;SILASTIC™ 20032-D RED Silicone Rubber&lt;br&gt;SILASTIC™ 20039-D GRN Silicone Rubber&lt;br&gt;SILASTIC™ 20063-L BLK Silicone Rubber&lt;br&gt;SILASTIC™ 20093-T Red Silicone Rubber Red</td>
</tr>
<tr>
<td>CVJ boots</td>
<td>High fatigue life; durable flexibility over a wide range of service temperatures; chemical resistance to lubricants and contaminants</td>
<td>SILASTIC™ EHX60MH501 HCR Compound&lt;br&gt;SILASTIC™ HCM-1102 Silicone Rubber</td>
</tr>
<tr>
<td>Engine mounts, exhaust hangers</td>
<td>High tear strength; withstand extreme heat and cold; stable mechanical properties</td>
<td>SILASTIC™ EHP65MHT00 HCR Compound&lt;br&gt;XIAMETER™ HCM 75-4731 LC Silicone Rubber&lt;br&gt;XIAMETER™ 24142-V Silicone Rubber&lt;br&gt;XIAMETER™ 21058-V Silicone Rubber&lt;br&gt;XIAMETER™ 24104-V Silicone Rubber&lt;br&gt;XIAMETER™ 24140-V Silicone Rubber</td>
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**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.
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<th>APPLICATION DESIGN NEEDS POTENTIAL SOLUTIONS</th>
</tr>
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<td><strong>CHASSIS AND BRAKE SYSTEMS</strong></td>
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</tbody>
</table>
| 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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## APPLICATION DESIGN NEEDS POTENTIAL SOLUTIONS

### 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

<table>
<thead>
<tr>
<th>Airbag fabric coatings</th>
<th>High performance at lower coating weights; high thermal resistivity; excellent adhesion to PET and PA; foldability; flexibility</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>COATINGS</strong></td>
</tr>
</tbody>
</table>
|                        | **Flat Fabric:**  
SILASTIC™ LCF 3600 Coating  
SILASTIC™ LCF 4630 Liquid Silicone Rubber | **One-piece woven (OPW):**  
SILASTIC™ LCF 3760 Liquid Silicone Rubber  
SILASTIC™ 3715 Curing Agent |

### SEAM SEALANT

| SILASTIC™ SE 8777 Kit |

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HANDLING PRECAUTIONS

PRODUCT SAFETY INFORMATION REQUIRED FOR SAFE USE IS NOT INCLUDED IN THIS DOCUMENT.

BEFORE HANDLING, READ PRODUCT AND SAFETY DATA SHEETS AND CONTAINER LABELS FOR SAFE USE, PHYSICAL AND HEALTH HAZARD INFORMATION. THE SAFETY DATA SHEET IS AVAILABLE ON THE DOW WEBSITE AT WWW.CONSUMER.DOW.COM, OR FROM YOUR DOW SALES APPLICATION ENGINEER, OR DISTRIBUTOR, OR BY CALLING DOW CUSTOMER SERVICE.

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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.