ELASTOSIL® FLR 3900/60 A/B

Liquid Silicone Rubber (LSR)

Fluorinated liquid silicone rubber of the ELASTOSIL® FLR 3900 series are paste-like, easily-pigmentable two-component compounds. Its vulcanizates are noted for their improved resistance against fuel and oil. ELASTOSIL® FLR 3900 grades show low compression set without post-cure.

Properties

ELASTOSIL® FLR 3900/60 is a fast curing fluorinated liquid silicone rubber with enhanced fuel and oil resistance.

The addition of heat stabilizers at service temperatures of more than 180 °C is recommended.

Further information to improve the heat stability by use of specific ELASTOSIL® Color Pastes FL can be obtained from the Technical Information Sheet "ELASTOSIL® Color Pastes FL".

Specific features

- Balanced fuel and solvent resistance
- Fast curing
- Low compression set without post-cure
- Low-temperature flexible
- Media resistant
- Oil resistant
Technical data

Properties Uncured

<table>
<thead>
<tr>
<th>Property</th>
<th>Condition</th>
<th>Value</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Viscosity, dynamic (1 s⁻¹)</td>
<td>-</td>
<td>4700000 mPa·s</td>
<td>DIN EN ISO 3219</td>
</tr>
<tr>
<td>Viscosity, dynamic (10 s⁻¹)</td>
<td>-</td>
<td>850000 mPa·s</td>
<td>DIN EN ISO 3219</td>
</tr>
</tbody>
</table>

These figures are only intended as a guide and should not be used in preparing specifications.

Properties Cured

Cure conditions: 5 min / 165 °C in press

<table>
<thead>
<tr>
<th>Property</th>
<th>Condition</th>
<th>Value</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>-</td>
<td>translucent</td>
<td>-</td>
</tr>
<tr>
<td>Hardness Shore A</td>
<td>-</td>
<td>62</td>
<td>ISO 7619-1</td>
</tr>
<tr>
<td>Density</td>
<td>-</td>
<td>1.26 g/cm³</td>
<td>DIN EN ISO 1183-1 A</td>
</tr>
<tr>
<td>Tensile strength</td>
<td>-</td>
<td>6.5 N/mm²</td>
<td>ISO 37 type 1</td>
</tr>
<tr>
<td>Elongation at break</td>
<td>-</td>
<td>260 %</td>
<td>ISO 37 type 1</td>
</tr>
<tr>
<td>Compression Set</td>
<td>22 h</td>
<td>150 °C</td>
<td>20 %</td>
</tr>
<tr>
<td>Tear strength</td>
<td>-</td>
<td>15 N/mm</td>
<td>ASTM D 624 B</td>
</tr>
</tbody>
</table>

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All the information provided is in accordance with the present state of our knowledge. Nonetheless, we disclaim any warranty or liability whatsoever and reserve the right, at any time, to effect technical alterations. The information provided, as well as the product’s fitness for an intended application, should be checked by the buyer in preliminary trials. Contractual terms and conditions always take precedence. This disclaimer of warranty and liability also applies particularly in foreign countries with respect to third parties’ rights.

Applications

- Automotive Parts
- Molded Seals (LSR)
- Automotive & Transport
- Gaskets & Membranes

Application details

Grades of ELASTOSIL® FLR 3900 can be used for gaskets in aviation and automotive industry. Parts made from ELASTOSIL® FLR 3900 can generally be used for technical applications, but do not comply with regulations in the pharmaceutical and food industry.
Processing

The A and B components are delivered ready to use in 20 kg pail and 200 kg drum kits. With adequate metering equipment, they can be pumped directly from the original containers into the injection molding machine and mixed by a static mixer. The mixing ratio is 1:1. At room temperature, mixtures of A and B components have a pot life of at least three days.

For detailed information please refer to the latest edition of our brochure “SOLID AND LIQUID SILICONE RUBBER - MATERIAL AND PROCESSING GUIDELINES”.

Fluorosilicone of the ELASTOSIL® FLR 3900 series can form toxic gases at temperatures above 150 °C. A proper ventilation has to be installed.

Packaging and storage

Packaging

This product is available in 20 kg pail and 200 kg drum kits.

Storage

Once opened, containers should always be resealed after use to prevent the platinum catalyst from being poisoned by amines, sulphur or phosphorus compounds. The ‘Best use before end’ date of each batch is shown on the product label. Storage beyond the date specified on the label does not necessarily mean that the product is no longer usable. In this case however, the properties required for the intended use must be checked for quality assurance reasons.

Safety notes

Comprehensive instructions are given in the corresponding Material Safety Data Sheets. They are available on request from WACKER subsidiaries or may be printed via WACKER web site http://www.wacker.com.

QR Code ELASTOSIL® FLR 3900/60 A/B

For technical, quality or product safety questions, please contact:

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info@wacker.com, www.wacker.com

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