

ELASTOSIL[®] LR 3001/55 FR A/B



Liquid Silicone Rubber (LSR)

Liquid silicone rubber ELASTOSIL[®] LR 3001/55 FR A/B is a paste-like, low inflammable two-component compound.

Properties

The excellent flame retardancy is confirmed by achieved UL94-V0 listings at 0.75 mm and 3 mm thickness and f1 rating acc. to UL746C: Underwriters Laboratories File E75704 (Wacker Chemie AG).

Good heat resistance, high oil resistance as well as short curing times are further benefits of this material.

Specific features

- Flame retardant
- Reduced volatile content

Technical data

Properties Uncured

| Property | Condition | Value | Method |
|--|-----------|--------------|-----------------|
| Viscosity, dynamic (1 s ⁻¹) | - | 240000 mPa-s | DIN EN ISO 3219 |
| Viscosity, dynamic (10 s ⁻¹) | - | 140000 mPa-s | DIN EN ISO 3219 |

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, post-cured 4 h / 200 °C

| Property | Condition | Value | Method |
|----------------------------------|---------------|------------------------------|-------------------------------|
| Appearance | - | dark-gray / black | - |
| Hardness Shore A | - | 55 | DIN ISO 48-4 |
| Density | - | 1.36 g/cm ³ | DIN EN ISO 1183-1 A |
| Tensile strength | - | 6.3 N/mm ² | ISO 37 type 1 |
| Elongation at break | - | 300 % | ISO 37 type 1 |
| Tear strength | - | 15 N/mm | ASTM D 624 B |
| Compression Set ⁽¹⁾ | 22 h 175 °C | 13 % | DIN ISO 815-1 type B method A |
| Volume resistivity | - | 1,7 x 10 ¹⁵ Ohmcm | IEC 62631-3-1 |
| Dielectric strength (1-mm-sheet) | - | 28 kV/mm | IEC 60243-1 |
| LOI | - | 35 % | EN ISO 4589-2 / ASTM D2863 |
| Rebound resilience | - | 67 % | ISO 4662 |

¹post-cured 6 h / 200 °C

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

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

- General Automotive Parts
- General Rubber Parts (Railway)
- Molded Parts

- Molded Seals (Automotive)

Application details

This grade is especially designed for economical manufacturing of flame retardant technical articles/parts by Liquid Injection Moulding process.

Processing

The A and B components are delivered ready to use in 25 kg pail and 250 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 refer to our brochure "SOLID AND LIQUID SILICONE RUBBER - MATERIAL AND PROCESSING GUIDELINES".

Packaging and storage

Packaging

This product is available in 25 kg pail and 250 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® LR 3001/55 FR A/B



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

Wacker Chemie AG, Hanns-Seidel-Platz 4, 81737 Munich, Germany
productinformation@wacker.com, www.wacker.com

The data presented in this medium are in accordance with the present state of our knowledge but do not absolve the user from carefully checking all supplies immediately on receipt. We reserve the right to alter product constants within the scope of technical progress or new developments. The recommendations made in this medium should be checked by preliminary trials because of conditions during processing over which we have no control, especially where other companies' raw materials are also being used. The information provided by us does not absolve the user from the obligation of investigating the possibility of infringement of third parties' rights and, if necessary, clarifying the position. Recommendations for use do not constitute a warranty, either express or implied, of the fitness or suitability of the product for a particular purpose.