

ELASTOSIL[®] LR 3015/50 A/B



Liquid Silicone Rubber (LSR)

ELASTOSIL[®] LR 3015/50 A/B liquid silicone rubber is a pastelike, readily pigmentable two-component compound with short curing time. Its vulcanizates are noted for their high oil resistance. They are colored off white and have moderate mechanical properties. Thanks to the excellent compression set, there is no need to post-cure technical parts.

Properties

ELASTOSIL[®] LR 3015/50 offers improved oil resistance, especially low compression set in contact with engine oils.

Specific features

- Fast curing
- Low compression set without post-cure
- Oil resistant
- Reduced volatile content

Technical data

Properties Uncured

Property	Condition	Value	Method
Viscosity, dynamic (1 s ⁻¹)	-	400000 mPa·s	DIN EN ISO 3219
Viscosity, dynamic (10 s ⁻¹)	-	180000 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

Property	Condition	Value	Method
Appearance	-	beige	-
Hardness Shore A	-	50	DIN ISO 48-4
Density	-	1.36 g/cm ³	DIN EN ISO 1183-1 A
Tensile strength	-	5.4 N/mm ²	ISO 37 type 1
Elongation at break	-	470 %	ISO 37 type 1
Tear strength	-	12 N/mm	ASTM D 624 B
Compression Set	22 h 175 °C	18 %	DIN ISO 815-1 type B method A

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

Oil resistance

After immersion in oil

Property	70 h / 150 °C IRM 901	70 h / 150 °C IRM 902	70 h / 150 °C IRM 903	Method
Hardness Shore A	50	48	38	DIN ISO 48-4
Tensile strength	5.2 N/mm ²	5.1 N/mm ²	3.0 N/mm ²	ISO 37
Elongation at break	390 %	380 %	280 %	ISO 37
Volume swell	4 %	7 %	43 %	-

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

Oil resistance

After immersion in oil

Property	70 h / 150 °C Lubrizol® OS 206 304	1000 h / 150 °C Lubrizol® OS 206 304	Method
Hardness Shore A	45	42	DIN ISO 48-4
Tensile strength	4.4 N/mm ²	4.0 N/mm ²	ISO 37
Elongation at break	290 %	270 %	ISO 37
Volume swell	19 %	19 %	-

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
- Molded Parts
- Molded Seals (Automotive)

Application details

ELASTOSIL® LR 3015/50 A/B is particularly suitable for the economical production of large series of injection molded articles. Parts made from ELASTOSIL® LR 3015/50 A/B can generally be used for technical applications without post-curing, but do not comply with regulations concerning use in the pharmaceutical and food industry. Due to their high oil resistance, ELASTOSIL® LR 3015/50 A/B is mainly used to produce gaskets for automotive and other mechanical engineering applications.

Processing

ELASTOSIL® LR 3015/50 A/B is less abrasive than common liquid silicone rubbers with improved oil resistance. This increases the lifetime of molds, dies and machinery.

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".

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® LR 3015/50 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.