

ELASTOSIL® LR 3003/30 A/B

LIQUID SILICONE RUBBER

Product description

Liquid silicone rubbers of the ELASTOSIL® LR 3003 series are paste-like, easily-pigmentable two-component compounds with short curing times. Their vulcanizates are noted for their high transparency and excellent mechanical and electrical properties. When heat stabilizers are added, the products can be used within a temperature range of -55 °C to +230 °C, and for a short time up to +300 °C.

Application

These grades are particularly suitable for the economical production of large series of injection-moulded articles.

Parts made from ELASTOSIL® LR 3003/20 - 80 can be used for technical and pharmaceutical applications. These articles are also suitable for use in conjunction with foodstuffs.

For further information, please refer to our brochure "The Grades and Properties of ELASTOSIL® LR Liquid Silicone Rubber".

Postcured parts can be used for applications in the pharmaceutical and food industries and comply with the recommendations "XV. Silicone" of the BfR and FDA § 177.2600.

Processing

The A and B components are delivered ready to use in

20 and 200 litre drums. 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 "Processing ELASTOSIL® LR Liquid Silicone Rubber".

Storage

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>.

Product data

Typical general characteristics	Inspection Method	Value
Hardness Shore A	DIN 53505	30
Appearance		transparent
Density	ISO 1183-1 A	1,11 g/cm ³
Viscosity (shear rate 0.9 s ⁻¹)	DIN 53 019	230000 mPa s
Viscosity (shear rate 10 s ⁻¹)	DIN 53 019	100000 mPa s
Tensile strength	DIN 53504 S 1	7,6 N/mm ²
Elongation at break	DIN 53504 S 1	640 %
Tear strength	ASTM D 624 B	19 N/mm
Rebound resilience	DIN 53512	60 %
Compression set *	DIN ISO 815-B (22 h / 175 °C)	11 %
Dielectric strength (1-mm-sheet)	DIN IEC 243-2	23 kV/mm
Volume resistivity	DIN IEC 93	5 x 10 ¹⁵ Ω cm
Dielectric constant at 50 Hz	DIN VDE 0303	3,1 εr
Dissipation Factor (50 Hz)	DIN VDE 0303	30 x 10 ⁻⁴ tan δ
Tracking resistance	DIN 53 480	KA 3 c

Cure conditions: 5 min / 165 °C in press; postcuring for 4 h / 200 °C in ventilated air

* Postcuring for DVR: 6 h / 200 °C

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

The data presented in this leaflet 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 leaflet 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 recommendations do 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 products for a particular purpose.

The management system has been certified according to DIN EN ISO 9001 and DIN EN ISO 14001

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

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