ELASTOSIL® LR 3003/70 US A/B

Liquid Silicone Rubber (LSR)

Liquid silicone rubbers of the ELASTOSIL® LR 3003/70 US A/B series are paste-like, easily pigmentable two-component compounds. They are noted for their high transparency, excellent mechancal and electrical properties and their ability to be molded into intricately-shaped, precision parts. This series is used for health care applications, including short-term implants. Very brief molding cycles for intricately-shaped and flash-free parts are possible.

Properties

- ELASTOSIL® LR 3003/70 US A/B has been tested according to the recommendations of the US Pharmacopoeia and meets the requirements of Class VI.
- ELASTOSIL® LR 3003/70 US A/B contains only those ingredients1 which are suitable for food contact.
- Excellent mechanical properties
- Excellent clarity
- Excellent molding qualities
- Excellent pot life after mixing parts A & B

Technical data

Properties Cured

Properties obtained after mixing Part A and Part B in a ratio of 1 : 1; press cured 5 min/166 °C, post cure 4 hrs/200 °C.

Property	Condition	Value	Method
Appearance	-	transparent	DIN ISO 2137
Hardness Shore A	-	68	ASTM D 2240 Type A
Viscosity, dynamic Component A	-	190000 mPa·s	-
Viscosity, dynamic Component B	-	190000 mPa·s	-
Specific gravity	25 °C	1.11 g/cm^3	-
Tensile strength	-	11 mPa	-
Tensile strength	-	1600 psi	-
Tear strength	-	31 kN/m	ASTM D 624, Die B
Tear strength	-	180 ppi	ASTM D 624, Die B
Compression Set	22 h | 177 °C	18 %	WSTM 1114
Modulus at 100 % elongation	-	3.3 mPa	-
Modulus at 100 % elongation	-	480 psi	-
Pot life[1]	-	At least 48 h	WSTM 2299

[1]<HG>4</>, at 25°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.

Application details

- Medical devices
- Needle-free IV valves
- Drink valves
- Diaphragms
- Soft-Touch handles and buttons
- Organic rubber replacement

Fabricating Liquid silicone rubbers of the ELASTOSIL® LR 3003/70 US A/B series can be processed using standard liquid rubber injection molding techniques. Vulcanization Liquid silicone rubbers of the ELASTOSIL® LR 3003/70 US A/B series are vulcanized by mixing part A with part B in a ratio of 1:1 with the application of heat. Mold temperatures are usually in the range of 160 °C (320 °F) to 210 °C (410 °F). Actual mold temperature and cycle times will be dependent upon a number of factors. Cycles times may be as little as 15 seconds for small parts.

Processing

ELASTOSIL® LR 3003/70 can be fabricated using standard liquid rubber injection molding techniques. The product is delivered equal parts A/B and designed for a 1:1 (A;B) mix ratio. With proper lmetering equipment, it can be pumped directly through a statixc mixer into the injection molding machine.

Packaging and storage

Storage

The "Best use before end date" of each batch is shown on the Certificate of Analysis. Storage beyond the date specified on the Certificate of Analysis 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

For specific information regarding safe handling of this material, please refer to the Safety Data Sheet.

QR Code ELASTOSIL® LR 3003/70 US A/B

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

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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.