

ELASTOSIL® LR 3071/40 US A/B

Liquid Silicone Rubber (LSR)

ELASTOSIL® LR 3071 A&B US series is a primerless, self-bonding liquid silicone rubber (LSR) grade that bonds to various plastic substrates (e. g. PA, PBT) and metals, but not to the mold.

Properties

- Suitable for food contact applications¹
- Excellent mechanical properties
- Excellent clarity
- Excellent pot life
- Fast cure

Technical data

Properties Cured

Mechanical properties are based on press cure 5 minutes at 166 °C (330 °F) and post cured 4 hours at 204 °C (400 °F).

Property	Condition	Value	Method
Appearance	-	Translucent	-
Hardness Shore A	-	39	-
Viscosity, dynamic A Side	-	550000 mPa·s	Brookfield
Viscosity, dynamic B Side	-	750000 mPa·s	Brookfield
Specific gravity	25 °C	1.11 g/cm ³	-
Tensile strength	-	8.8	WSTM 1160
Tensile strength	-	1250	WSTM 1160
Elongation at break	-	640 %	WSTM 1160
Compression Set	22 h 125 °C	15 %	WSTM 1114
Modulus at 100 % elongation	-	0.7 mPa	-
Modulus at 100 % elongation	-	110	-
Pot Life	25 °C	48 h	-
Tear resistance	-	22 N/mm	-
Tear resistance	-	125	-

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

The bonding is improved by an ageing process (e. g. one hour at 100 °C) or by longer storing at room temperature. The individual surface properties each substrate must be tested before mass production. If necessary, check the development of adhesive properties over time and/or in an environment relevant to the application. ELASTOSIL® LR 3071/40 A&B US is noted for its' ability to be molded into intricately-shaped, precision parts. Very brief molding cycles for intricately-shaped and flash-free parts are possible.

- Food contact applications: +- FDA 21CFR177.2600
- BfR Recommendation XV, Silicones
- Soft-Touch handles and buttons

Processing

ELASTOSIL® LR 3071/40 US A/B can be processed using standard liquid rubber injection molding techniques.

Vulcanization

ELASTOSIL® LR 3071/40 US A/B is 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. Cycle times may be as little as 20 seconds for small parts.

Packaging and storage

Packaging

ELASTOSIL® LR 3071/40 US A/B is available in 40 kg. (88 lb.) pail kits and 380 kg (838 lb.) drum kits.

Storage

ELASTOSIL® LR 3071/40 US A/B has a shelf life of at least 3 months when stored below 32 °C (90 °F) in the tightly closed original container.

Storage beyond the recommended shelf-life does not necessarily mean that the product is no longer usable. However, the properties required for the intended use must be checked for quality assurance reasons.

Once opened, containers should always be resealed to prevent catalyst poisoning by amines, sulfur compounds, and other substances.

QR Code ELASTOSIL® LR 3071/40 US A/B



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

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