

ELASTOSIL[®] LR 3671/40 A/B



Liquid Silicone Rubber (LSR)

Self-adhesive liquid silicone rubbers of the ELASTOSIL[®] 3671 series are paste-like, easily-pigmentable two-component compounds with a very short curing time and good mechanical and electrical properties. Their vulcanizates are noted for their self-adhesive properties to various substrates combined with a low coefficient of friction.

Properties

ELASTOSIL[®] 3671 series are primerless selfbonding grades that adhere to various thermoplasts (e.g. PA, PBT) and metals, but not to the mold (adhesive adherence, protects against loss prior to assembly). The bonding is improved by an ageing process (e.g. one hour at 100°C) or by a longer storage at room temperature. Because of the individual surface properties each substrate must be tested before mass production. If necessary, one has to check the development of adhesive properties over time and/or in an environment relevant to the application.

Compared to the ELASTOSIL[®] 3071/40 series the coefficient of friction of an article of ELASTOSIL[®] 3671/40 is reduced by 50 - 70 %.

Specific features

- Regulation: Food-contact
- Specific Features: Food-contact
- Specific Features: Less self-healing
- Specific Features: Low coefficient of friction
- Specific Features: Reduced volatile content
- Specific Features: Self-adhesive
- Vulcanizate: Self-adhesive

Technical data

Properties Uncured

Property	Condition	Value	Method
Viscosity, dynamic (1 s ⁻¹)	-	1000000 mPa·s	DIN EN ISO 3219
Viscosity, dynamic (10 s ⁻¹)	-	350000 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	-	transparent	-
Hardness Shore A	-	40	DIN ISO 48-4
Density	-	1.12 g/cm ³	DIN EN ISO 1183-1 A
Tensile strength	-	8.8 N/mm ²	ISO 37 type 1
Elongation at break	-	680 %	ISO 37 type 1
Tear strength	-	25 N/mm	ASTM D 624 B
Compression Set	22 h 125 °C	30 %	DIN ISO 815-1 type B method A

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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

- Baby Care
- Dairy Applications
- Molded Parts
- Sanitary

Application details

Note: Start-up of new molds should be supported by use of ELASTOSIL® AUX Mold Release Agent 32.

ELASTOSIL® LR 3671 series are particularly suitable for the economical production of large series of overmolded parts (thermoplastic/elastomer), even in a comolding process (shuttle mold) under standard conditions, without any special treatment of the mold surface.

Parts made from ELASTOSIL® LR 3671/40 can be used for technical applications. These articles are also suitable for use in conjunction with foodstuffs.

ELASTOSIL® LR 3671/40 is suitable for use under the Recommendation XV. Silicones of the BfR and FDA 21 CFR §177.2600 "Rubber Articles Intended for Repeated Use" provided that the product is appropriately cured/ post-cured and the respective limits for extractable/migrating or volatile components are met.

Processing

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 3671/40 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.