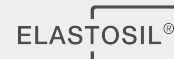


# ELASTOSIL<sup>®</sup> RT 703



## 1-part heat-curing silicone rubber

ELASTOSIL<sup>®</sup> RT 703 is a self-levelling, slightly thixotropic, one-part heat-curing silicone adhesive. When applied by serigraphy, it also can be used for surface printing purposes.

Cured ELASTOSIL<sup>®</sup> RT 703 shows very good adhesion to many substrates and long-term stability against weathering, moisture and UV light. The cured silicone rubber may continuously be exposed to constantly changing climatic conditions, UV radiation and temperatures as high as 200 °C (392 °F) without damage.

## Properties

Uncured:

- Slightly self-levelling to non-slump
- Suitable for silk-screen printing
- Fast curing at elevated temperature

Cured:

- Suitable for FIPG and, to a certain degree, for CIPG applications
- recommended service temperature range: -50 °C to +200 °C

## Specific features

- Electrically insulating
- One-component
- Self-adhesive
- Thixotropic
- UV & weathering-resistant

## Technical data

### Properties Uncured

Property	Condition	Value	Method
Colour	-	colourless dark	-
Density	23 °C   1019 hPa	1.07 g/cm <sup>3</sup>	DIN 53217
Pot Life (approximately)	-	6 month	-
Viscosity, dynamic	25 °C   0.5 1/S	200000 mPa·s	DIN EN ISO 3219
Viscosity, dynamic	25 °C   25 1/S	22500 mPa·s	DIN EN ISO 3219

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

### Properties Cured

Curing conditions: 10 min. at 165 °C in a circulating air oven, 2 mm sheet, pressed, no post-curing.

Property	Condition	Value	Method
Hardness Shore A	-	35	DIN ISO 48-4
Tensile strength	-	4.0 N/mm <sup>2</sup>	ISO 37 type 1
Elongation at break	-	300 %	ISO 37 type 1
Tear strength	-	9.0	ASTM D 624 B
Color	-	translucent	-
Density (in water)	23 °C	1.08 g/cm <sup>3</sup>	DIN EN ISO 1183-1 A

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

- Appliances Industry
- Lighting
- Machine Building

## Application details

- Multipurpose glue

- Suitable for silk-screen printing
- Typical fields of application: household appliances, mechanical engineering, glassware and tableware industry.

## Processing

### Preparation:

All surfaces must be clean and free of contaminants that will inhibit the cure of ELASTOSIL® RT 703. Examples of inhibiting contaminants are sulfur containing materials, plasticizers, urethanes, amine containing materials and organometallic compounds – especially organotin compounds. If a substrate's ability to inhibit cure is unknown, a small scale test should be run to determine compatibility.

Temperature	Curing rate, 3 mm
140 °C	20 min
200 °C	3 min

To reduce the risk of bubbles or void formation during curing, ELASTOSIL® RT 703 can be de-aerated prior to use by applying a vacuum of 25-50 mbar for 10-15 min.

### Curing:

ELASTOSIL® RT 703 is a one-part heat-curing silicone, the curing time of which is highly dependent on temperature and on both the size and the heat sink properties of the parts to be bonded. ELASTOSIL® RT 703 is usually cured between 140 °C and 200 °C in order to secure a quick build-up of adhesion to the respective substrates. Typical curing temperatures and resulting curing times are given in adjacent table.

Detailed information about processing one-part heat-curing silicones is given in our brochure "ROOM TEMPERATURE VULCANIZING (RTV) SILICONES - MATERIAL AND PROCESSING GUIDELINES". We recommend running preliminary tests to optimize conditions for the particular application.

### Pigmentation:

ELASTOSIL® RT 703 is colourless translucent. If necessary, the product can be pigmented by adding up to 2 wt. % of ELASTOSIL® COLOR PASTE FL via a mixing section of the automatic metering and dispensing equipment.

### Removal:

If removal of the silicone from machines or dispensing equipment is necessary, white spirit or similar nonpolar solvents are recommended. However, cleaning ideally should take place before the silicone is fully vulcanized. Cured silicone rubber needs to be rubbed off or removed mechanically, if necessary in combination with a swelling agent (solvent) or a chemical silicone remover.

## Packaging and storage

### Storage

Store in a dry and cool place.

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

According to the latest findings, the addition-curing silicone rubber ELASTOSIL® RT 703 contains neither toxic or corrosive substances which would require special handling precautions.

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® RT 703



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

**Wacker Chemie AG**, Hanns-Seidel-Platz 4, 81737 Munich, Germany  
[info@wacker.com](mailto:info@wacker.com), [www.wacker.com](http://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.