

ELASTOSIL[®] RT 685 A/B



Room Temperature Curing Silicone Rubber (RTV-2)

ELASTOSIL[®] RT 685 A/B is a free-flowing, additioncuring silicone rubber. After mixing of the components, it yields a ready-to-use product which cures rapidly at high temperatures.

Properties

- solvent-free
- processing viscosity suitable for silk-screen printing
- long-term flexibility over a temperature range from -50 °C to +200 °C
- good resistance to water and mineral oil
- long pot life of ready-to-use mixture
- can be colored with 3 - 5 % Pigment Paste FL

Technical data

Properties Uncured

Property	Condition	A	B	Method
Color	-	cream white	colorless	-
Density	23.0 °C	1.49 g/cm ³	1.04 g/cm ³	DIN EN ISO 2811-1
Viscosity, dynamic	23 °C	35000 mPa·s	15000 mPa·s	DIN EN ISO 3219

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

Catalyzed

Property	Condition	Value	Method
Viscosity, dynamic	23 °C	40000 mPa·s	DIN EN ISO 3219
Mix ratio ⁽¹⁾	-	9 : 1	-
Pot life ⁽²⁾	-	2 d	-

¹pbw
²23°C

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Properties Cured

2 mm sheet after curing for 15 min at 165 °C, postcuring for 2h at 200 °C.

Property	Condition	Value	Method
Color	-	cream white	-
Tear strength	-	5 N/mm	ASTM D 624 B
Hardness Shore A	-	40	DIN ISO 48-4
Tensile strength	-	4 N/mm ²	ISO 37 type 1
Elongation at break	-	250 %	ISO 37 type 1
Compression Set	24 h 150 °C	10 %	DIN ISO 815-1 type B method B

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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

- Cured-In-Place-Gaskets (Dry Type)
- Fiber Gaskets
- Screen Printing
- Transportation

Application details

ELASTOSIL® RT 685 A/B may be used for applications which require a high and low temperature-resistant flexible coating.

A typical application in the automotive industry is silkscreen printing on selected areas of cylinder head gaskets.

Processing

Some fillers may settle during transport and storage. To ensure a uniform mix, the component A should be stirred thoroughly prior to use.

To prepare ready-to-use mixtures, the components should be mixed well.

Small amounts can be mixed by hand or mechanically (e. g. power tool fitted with mixing blade) for at least 30 seconds.

Colours may be obtained by addition of 3-5 % Pigment Paste FL if desired. After addition the material has to be mixed carefully.

Note:

Certain substances can inhibit the curing process to a greater or lesser extent. The most notable include:

- Sulphur and sulphur-containing materials (e. g. vulcanizing agents in natural and synthetic rubbers)
- Amines, urethanes and amine-containing materials (e. g. amine-cured epoxy resins)
- Unsaturated hydrocarbons (e. g. certain plasticizers)
- Organo-metallic compounds, particularly organo-tin compounds and materials containing such substances (e. g. curing agents and condensation-cured RTV-2 silicone rubbers).

If in doubt carry out preliminary tests to ascertain the compatibility of all materials in contact with the catalysed mix. Liquid product or sticky surfaces indicate cure inhibition. Our technical service will be glad to give you information on how to prevent such problems.

Packaging and storage

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>.

Temperature	Curing time
150 °C	3 - 5 min
180 °C	1 - 3 min

QR Code ELASTOSIL® RT 685 A/B



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

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