

ELASTOSIL[®] RT 675 A/B



Room Temperature Curing Silicone Rubber (RTV-2)

ELASTOSIL[®] RT 675 A/B is a pourable, addition-curing RTV-2 silicone rubber.

Properties

- two-part, 1 : 1 mixing ratio
- very high hardness Shore A
- excellent heat stability
- high thermal conductivity

Specific features

- Addition Curing
- Flowable
- Thermally conductive
- Two-component

Technical data

Properties Uncured

| Property | Condition | A | B | Method |
|--------------------|-----------|-------------------------|-----------------------|-------------------|
| Color | - | white / very light gray | reddish brown | - |
| Density | 23 °C | 2.3 g/cm ³ | 2.3 g/cm ³ | DIN EN ISO 2811-1 |
| Viscosity, dynamic | 23 °C | 50000 mPa·s | 50000 mPa·s | ISO 3219 |

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

Properties Catalyzed A+B

| Property | Condition | Value | Method |
|--------------------------------|-----------|-------------|-----------------|
| Viscosity, dynamic of mix | - | 50000 mPa·s | ISO 3219 |
| Platinum catalyst in component | - | A | - |
| Mix ratio ⁽¹⁾ | - | 1 : 1 | A : B |
| Pot Life | 23 °C | 150 min | DIN EN ISO 2555 |

⁽¹⁾(pbw)

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Properties Cured

Cured for 30 min at 150 °C in a circulating air oven

| Property | Condition | Value | Method |
|---------------------|-----------|------------------------|---------------------|
| Color | - | reddish brown | - |
| Density | 23 °C | 2.3 g/cm ³ | DIN EN ISO 1183-1 A |
| Hardness Shore A | - | 80 | DIN ISO 48-4 |
| Tensile strength | - | 2 N/mm ² | ISO 37 type 1 |
| Elongation at break | - | 20 % | ISO 37 type 1 |
| Volume resistivity | - | 10 ¹⁵ Ohmcm | IEC 62631-3-1 |
| Permittivity | - | 5 | IEC 62631-2-1 |

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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

- Battery
- Thermal Interface Management

Application details

- encapsulation of electronic components

Processing

Caution:

Only components A and B with the same lot number may be processed together!

To ensure homogeneity of the material, the components must be stirred thoroughly before they are removed or processed in their containers, in order to uniformly disperse any filler that might have settled during storage.

Surface preparation:

All surfaces must be clean and free of contaminants that will inhibit the cure of ELASTOSIL® RT 675 A/B. 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.

Mixing: Component A of ELASTOSIL® RT 675 contains the platinum catalyst, component B the crosslinker. Even traces of the platinum catalyst may cause gelling of the component containing the crosslinker. Therefore tools (spatula, stirrers, etc.) used for handling the platinum-containing component or the catalyzed compound must not come into contact with this component.

The two components should be thoroughly mixed at a 1 : 1 ratio by weight or volume.

To eliminate any air introduced during dispensing or trapped under components or devices a vacuum encapsulation is recommended.

Curing:

Curing time of addition curing silicone rubber is highly dependent on temperature, size and heat sink properties of the component being potted.

The reactivity can be adjusted within wide limits by adding Catalyst EP or Inhibitor PT 88 to suit the processing requirements of the particular application.

Catalyst EP increases the reactivity, i. e., pot life and curing time are reduced. Inhibitor PT 88 is a pot life extender and prolongs pot life and curing time. Further information is given in our leaflet "Catalyst EP/Inhibitor PT88".

We recommend running preliminary tests to optimize conditions for the particular application.

Please check also our brochures and info sheets.

Packaging and storage

Storage

The 'Best use before end' date of each batch is shown on the product label.

| Temperature | Curing time, thickness 1 cm |
|-------------|-----------------------------|
| 23 °C | 24 h |
| 70 °C | 60 min |
| 100 °C | 30 min |
| 150 °C | 10 min |

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® RT 675 A/B



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

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