

WACKER® CATALYST T 79

Room Temperature Curing Silicone Rubber (RTV-2)

WACKER® CATALYST T 79 is the standard curing agent for the WACKER silicone rubber ELASTOSIL® RT 779. The shear-thinning paste provides excellent adhesion properties and improves the oil resistance of ELASTOSIL® RT 779.

Properties

- Non-slump paste
- To be processed with base compound ELASTOSIL® RT 779 (recommended mixing ratio: 10:1)
- Very fast curing at room temperature
- Curing speed tunable by mixing ratio
- Provides excellent adhesion to many substrates (glass, ceramics, wood, metals, plastics and powder coatings)

Specific features

- Condensation-curing
- Robust curing
- Self-adhesive
- Shear thinning
- Thixotropic

Technical data

General Characteristics

| Property | Condition | Value | Method |
|--------------------|-----------------|------------------------|-----------------|
| Colour | - | black | - |
| Density | 25 °C | 1.28 g/cm ³ | DIN 53479 |
| Viscosity, dynamic | 25 °C 0.5 1/S | 120000 mPa·s | DIN EN ISO 3219 |
| Viscosity, dynamic | 25 °C 25 1/S | 10000 mPa·s | DIN EN ISO 3219 |

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

Catalyzed

Processing with base compound ELASTOSIL® RT 779 (curing conditions: 23 °C, 50 % rel. humidity; all mixing ratios by weight)

| Property | Condition | Value | Method |
|-----------------------|-----------|----------------|--------|
| Pot Life (10:1) | 23 °C | 7 - 10 min | - |
| Pot Life (12:1) | 23 °C | 10 - 15 min | - |
| Pot Life (8:1) | 23 °C | 5 - 8 min | - |
| Tack-free time (10:1) | 23 °C | approx. 45 min | - |
| Tack-free time (12:1) | 23 °C | approx. 60 min | - |
| Tack-free time (8:1) | 23 °C | approx. 30 min | - |

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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

- Automotive & Transport

Application details

- Curing agent for condensation curing RTV-2 silicone rubber ELASTOSIL® RT 779
- Typical fields of application: automotive, mechanical engineering.

Processing

WACKER® CATALYST T 79 is used as standard curing agent for the base compound ELASTOSIL® RT 779. The shear-thinning paste provides excellent adhesion properties and improves oil resistance.

The crosslinking reaction of condensation curing RTV-2 silicones is relatively robust in regard to curing inhibition. Amine containing materials, urethanes, organic compounds with sulfur-containing groups, organometallic compounds, plasticizers, lubricants, oils and grease usually do not impair the curing process itself. Nevertheless, for optimum adhesion results all substrates used should be clean, dry and free from grease, waxes, dust or other surface contaminations.

Mixing and curing:

To ensure uniform curing both components (i.e. rubber base ELASTOSIL® RT 779 and curing agent WACKER® CATALYST T 79) have to be thoroughly mixed, either manually or by automatic metering lines equipped with static or dynamic mixing devices. The recommended mixing ratio is 10:1 by weight.

Potlife and curing speed can be modified within limits by adjusting the ratio of base compound to curing agent. Varying the mixing ratio between 8:1 and 12:1 usually has a small effect on the properties of the cured rubber. However, if the mixing ratio differs substantially from the recommended scope, preliminary tests should be carried out to check the cured material's suitability. General information about pot life and resulting curing times is given in the table "Catalyzed".

Moreover curing speed can be slightly accelerated by raising the temperature. Heating, however, must not exceed 60 °C before curing is completed.

After completion of the vulcanization process the product may continuously be exposed to constantly changing climatic conditions, UV radiation and high temperature without damage. ELASTOSIL® RT 779, cured with WACKER® CATALYST T 79, usually shows good primerless adhesion to many substrates, even when continuously exposed to motor oil and lubricants.

Removal:

If removal of silicone rubber 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 removed mechanically, if necessary in combination with a swelling agent (solvent).

Detailed information about processing RTV-2 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.

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

While curing WACKER® CATALYST T 79 releases a total of approx. 1.5 - 2 wt.% alcohol. These vapors should not be inhaled for long periods or in high concentrations. Hence ventilation of the work place is recommended.

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 WACKER® CATALYST T 79



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

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