

WACKER SilGel® 612 EH A/B

Silicone Gels

WACKER SilGel® 612 EH A/B is a pourable, addition-curing RTV-2 silicone rubber. WACKER SilGel® 612 EH A/B is a modification of WACKER SilGel® 612 with higher hardness and reactivity.

Properties

- two-part, 1 : 1 mixing ratio
- rapid cure
- low hardness (silicone gel)

Technical data

Properties Uncured

| Property | Condition | A | B | Method |
|--------------------|-----------|------------------------|------------------------|-------------------|
| Color | - | transparent | transparent | - |
| Density | 23 °C | 0.97 g/cm ³ | 0.97 g/cm ³ | DIN EN ISO 2811-1 |
| Viscosity, dynamic | 25 °C | 1000 mPa·s | 1000 mPa·s | DIN EN 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 | 25 °C | 1000 mPa·s | DIN EN ISO 3219 |
| Platinum catalyst in component | - | B | - |
| Mix ratio | - | 1 : 1 | A : B |
| Pot Life ⁽¹⁾ | 23 °C | 10 - 25 min | - |
| Gel time ($\tan \delta < 1$) ⁽²⁾ | 23 °C | 18 - 50 min | - |

¹according to ISO 6721-10

²according to ISO 6721-10

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Properties Cured

Cured for 30 min at 150 °C

| Property | Condition | Value | Method |
|----------------------------|-----------|------------------------|---------------------|
| Color | - | transparent | - |
| Density | 23 °C | 0.97 g/cm ³ | DIN EN ISO 1183-1 A |
| Penetration ⁽¹⁾ | - | 150 1/10mm | DIN ISO 2137 |
| Volume resistivity | - | 10 ¹⁵ Ohmcm | IEC 62631-3-1 |

¹150 g hollow cone, 1 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.

Comprehensive instructions are given in the corresponding Material Safety Data Sheets. They are available on request from WACKER subsidiaries or may be downloaded via WACKER web site <http://www.wacker.com>.

Application details

encapsulation of electronic components

Processing

surface preparation

All surfaces must be clean and free of contaminants that will inhibit the cure of WACKER SilGel® 612 EH. 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

Caution

Only components A and B with the same lot number may be processed together! Component B of WACKER SilGel® 612 EH contains the platinum catalyst, component A the crosslinker. Even traces of the platinum catalyst may cause gelling of the component containing the crosslinker. To eliminate any air introduced during dispensing or trapped under components or devices a vacuum encapsulation is recommended.

curing

The curing time is highly dependent on temperature, size and heat sink properties of the component being potted.

| Temperature | Curing time, layer thickness 1 cm |
|-------------|-----------------------------------|
| 23 °C | 2 h |
| 70 °C | 10 min |
| 120 °C | 3 min |

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

According to the latest findings WACKER SilGel® 612 EH A/B being an addition-curing silicone rubber contains neither toxic nor aggressive substances which might require special handling precautions. General industrial hygiene regulations should be observed. 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 SilGel® 612 EH A/B



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

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