

LUMISIL[®] 100 A/B

LUMISIL®

Room Temperature Curing Silicone Rubber (RTV-2)

LUMISIL® 100 A/B is a 2-part silicone gel(1:1) that is cured by heat conditions for displays.

Properties

- Self-leveling with low viscosity
- Fast cure at low temperature (under 70°C)
- Good optical performance
- Remarkable high reliability
- Excellent thermal stability
- Low shrinkage

Specific features

- Addition Curing
- fast curing at moderate temperatures
- Fast curing under heat
- Flowable
- Highly transparent
- No chemical shrinkage
- Two-component

Technical data

Properties Uncured

| Property | Condition | A | В | Method |
|-----------|-----------|------------------------|------------------------|----------|
| Color | | Clear | Clear | - |
| Density | - | 0.97 g/cm ³ | 0.97 g/cm ³ | - |
| Viscosity | - | 500 ± 100 mPa.s | 400 ± 100 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 of mix | - | 450 ± 100 mPa.s | ISO 3219 |
| Platinum catalyst in component | - | В | - |
| Mix ratio | - | 1:1 | A : B |
| Pot Life | 23 °C | 3 h | - |
| Gel time | 65 °C | 11 - 15 min | - |

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

Properties Cured

| Property | Condition | Value | Method |
|--|-----------|--------------------------|-----------|
| Density | - | 0.97 g/cm ³ | - |
| Volume resistivity | - | > 10 ¹⁵ Ohmcm | IEC 60093 |
| Dielectric constant | - | 2.7 - 3.0 εr | - |
| Penetration | - | 40 - 60 1/10mm | SEQ170 |
| Pull test (Glass/Glass, Test speed: 300mm/min) | - | > 0.2 MPa | - |
| Refractive index | - | 1.40 | - |
| Transmission | - | > 99.0 % | - |

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.

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.

Applications

- Automotive Electronics
- Automotive, Aerospace & Railway
- Displays & Optical Bonding
- E-Mobility
- Electrics & Electronics
- Electronics

Application details

- Encapsulation of optical & electronic components
- Optical bonding for touch screen panel
- Production of damping elements

Processing

Surface preparation

All surfaces must be clean and free of contaminants that will inhibit the cure of the product

Examples of inhibiting contaminants are sulfer 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.

Degassing before Mixing

In mass production, Degassing is essentional process before mixing of materials.

Mixing

Part A : Part B = 1 : 1

Curing

Curing speed can be adjusted by temperature and time. Heat can accelerate curing process. We recommend running preliminary tests to optimize conditions for particular application.

Packaging and storage

Storage

The 'Best use before end' date of each batch appears 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, LUMISIL® 100 A/B, 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.

QR Code LUMISIL® 100 A/B



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

Wacker Chemie AG, Gisela-Stein-Strasse 1, 81671 Munich, Germany productinformation@wacker.com, 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.