

LUMISIL[®] 245 UV P



Room Temperature Curing Silicone Rubber (RTV-2)

LUMISIL[®] 245 UV P is a 2-part transparent silicone elastomer that is cured by UV condition for displays.

Properties

Specific features

- Addition Curing
- Flowable
- Highly transparent
- No chemical shrinkage
- Two-component
- UV curing

Technical data

Properties Uncured

| Property | Condition | A | B | Method |
|-----------|-----------|-----------------------|-------------------|----------|
| Color | - | Clear | Clear | - |
| Viscosity | - | 65,000 ± 10,000 mPa.s | 1,000 ± 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 | - | 45,000 ± 10,000 mPa.s | ISO 3219 |
| Platinum catalyst in component | - | B | - |
| Mix ratio | - | 10 : 1 | A : B |
| Pot Life | 23 °C | > 24 h | - |

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Properties Cured

| Property | Condition | Value | Method |
|-------------------------------|-----------|--------------|--------|
| Hardness Shore 00 | - | 47 | - |
| Dielectric constant | - | 2.7 - 3.0 εr | - |
| Light Transmittance (T=300µm) | - | > 99.0 % | - |
| Pull test (Glass/Glass) | - | > 0.4 MPa | - |
| Refractive index | - | 1.405 | - |

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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>.

Applications

- Automotive Electronics

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

Application details

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

Part A : Part B (ELASTOSIL® CAT UV) = 10 : 1

Curing

Curing speed can be adjusted by UV power and time.

Also heating after UV exposure can accelerate curing process.

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

- Recommend Lamp type: UV-A (ex. Mercury, Metal Halide etc.), 365 nm LED (If the applies lamp is 365nm LED lamp, the higher UV irradiance would be better)

Packaging and storage

Storage

LUMISIL® 245 UV P A and ELASTOSIL® Cat UV should be stored between 5 °C and 30 °C and below 60%RH in the tightly closed original container.

The 'Best use before end' date (Shelf life) 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.

Shelf life

- LUMISIL® 245 UV P A : 1year
- ELASTOSIL® Cat UV : 6 month

Safety notes

According to the latest findings, LUMISIL® 245 UV P, 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® 245 UV P



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

Wacker Chemie AG, Hanns-Seidel-Platz 4, 81737 Munich, Germany
productinformation@wacker.com, www.wacker.com

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