

LUMISIL[®] 409 UV A/B



Room Temperature Curing Silicone Rubber (RTV-2)

LUMISIL[®] 409 UV is 2-part transparent silicone elastomer that cured by UV condition and specially designed for optical molding with excellent optical stability in Mini-LED application

Properties

- Middle viscosity for various dispensing availability
- Excellent Optical Stability under Harsh condition
- Excellent Colorless Clear Transparency
- No oxygen inhibition
- Low tackiness for easy alignment
- Low shrinkage
- High Adhesion to various substrates

Specific features

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

Technical data

Properties Uncured

Property	Condition	A	B	Method
Color	-	Clear	Clear	-
Density	-	0.97 g/cm ³	0.97 g/cm ³	-
Viscosity	-	13,000 ± 1,300 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 of mix	-	9,000 ± 900 mPa.s	ISO 3219
Platinum catalyst in component	-	B	-
Mix ratio	-	10 : 1	A : B
Pot Life	23 °C	> 24 h	-
Gel time after 3,000 mJ/cm ² UV exposure (365nm LED)	-	20 - 40 s	-

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Properties Cured

Property	Condition	Value	Method
Density	-	0.97 g/cm ³	-
Hardness Shore A	-	45	-
Haze (T=300µm)	-	< 0.1	-
Light Transmittance (T=300µm)	-	> 99.0 %	-
Pull test (Glass/Glass)	-	> 0.5 MPa	-
Refractive index	-	1.405	-
Yellowness index (T=300µm)	-	< 0.2	-

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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 molding for MiniLED backlight unit
- Encapsulation of optical & electronic components
- Optical bonding, Sealing for Solar, Automotives, Electronics, Industry etc.

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

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® 409 UV, an addition-curing silicone rubber, contains neither toxic nor aggressive substances that 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® 409 UV A/B



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

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