

# LUMISIL<sup>®</sup> 307 IM UV A/B



## Room Temperature Curing Silicone Rubber (RTV-2)

LUMISIL<sup>®</sup> 307 IM UV is a 2-part transparent optically clear resin(OCR) and DAM that is cured by UV condition for displays.

### Properties

- Customized DAM grade to match with LUMISIL 203 IM UV
- 1:1 mixing ratio for processability
- No oxygen inhibition
- Excellent stress relaxation with high elongation and damping factor by long chain structure
- Stable bonding for various substrates with stable cohesive failure mode
- Excellent optical stability
- Low shrinkage

### 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	-
Density	-	approx. 0.97 g/cm <sup>3</sup>	approx. 0.97 g/cm <sup>3</sup>	-
Viscosity	-	15,500 ± 1,500 mPa.s	3,400 ± 300 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	-	7,500 ± 500 mPa.s	ISO 3219
Platinum catalyst in component	-	B	-
Mix ratio	-	1 : 1	A : B
Pot Life <sup>(1)</sup>	23 °C	> 24 h	-

<sup>1</sup>Time to double viscosity up

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## Properties Cured

Property	Condition	Value	Method
Density	-	approx. 0.97 g/cm <sup>3</sup>	-
Hardness Shore 00	-	17 - 23	ASTM 2240 / Type 00
Dielectric constant	-	2.7 - 3.0 $\epsilon$ r	-
180° peel strength(Glass/PET) <sup>(1)</sup>	-	≥ 50 N/mm	-
Light Transmittance (T=300 $\mu$ m)	-	> 99.0 %	-
Pull test (Glass/Glass)	-	> 0.4 MPa	-
Refractive index	-	1.405	-

<sup>1</sup>T=0.3mm

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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.

## 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

### Packaging

LUMISIL 307 IM UV (DAM) A 1KG BOTTLE PE

LUMISIL 307 IM UV (DAM) A 9KG BOTTLE PE

LUMISIL 203 IM UV B (common B) 1KG BOTTLE PE

LUMISIL 203 IM UV B (common B) 9KG BOTTLE PE

### 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® 307 IM UV, an addition-curing silicone gel, 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® 307 IM UV A/B



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

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