

# LUMISIL<sup>®</sup> 101RT A/B

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

LUMISIL<sup>®</sup> 101RT A/B is a 2-part silicone gel(1:1) that is cured by room temperature conditions for displays.

### Properties

- Self-leveling with low viscosity
- Self-cure at room temperature.
- Good optical performance
- Remarkable high reliability
- Excellent thermal stability
- Low shrinkage

### Technical data

#### Properties Uncured

Property	Condition	A	B	Method
Color	-	Clear	Clear	-
Density	-	0.97 g/cm <sup>3</sup>	0.97 g/cm <sup>3</sup>	-
Viscosity	25 °C	1000 - 1200	1000 - 1200	ISO 3219

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

## Catalyzed

Property	Condition	Value	Method
Viscosity	25 °C	1000 - 1200	ISO 3219
Platinum-catalyst in component	-	B	-
Mix ratio	-	1 : 1	A : B
Pot life	23 °C	2.5 - 3.5 min	-
Gel time at room temperature	25 °C	7 - 13 min	-
Skin forming at room temperature	25 °C	25 - 30 min	-

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## Properties Cured

Property	Condition	Value	Method
Color	-	Clear	-
Density	-	0.97 g/cm <sup>3</sup>	-
180° Peel strength (Glass to PET film)	-	> 0.5 N/mm	-
Pull strength (Glass to glass) <sup>(1)</sup>	-	> 0.35 N/mm <sup>2</sup>	-
Volume resistivity	-	≥ 10 <sup>15</sup> Ohmcm	IEC 60093
Dielectric constant	-	2.7 - 3.0	-
Hardness (Penetration, 9.38g hollow cone) <sup>(2)</sup>	-	35 - 45 1/10mm	SEQ170
Haze	-	< 0.1 %	-
Refractive index	23 °C	1.405	-
Transmittance <sup>(3)</sup>	550 nm	> 99 %	-
Yellowness index	-	< 0.2	-

<sup>1</sup>Test condition: T=300 um, Test speed = 300 mm/min

<sup>2</sup>Test condition: 24hr at room temperature or 30min at 50°C (for fast QC) in circulating air oven

<sup>3</sup>Double sided with 0.7mm LCD bare glass

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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.

## Application details

- Optical bonding in displays
- Bonding, sealing, encapsulant of optical and electronic components
- Optical bonding for touch screen panel
- Production of damping elements

## Processing

### LUMISIL 101RT A/B

#### Surface preparation

All surfaces must be clean and free of contaminants that will inhibit the cure of LUMISIL® 101RT A/B.

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

LUMISIL® 101RT A/B can be mixed through a 24 or 32 elements static mixer as a standard.

#### Curing

Curing speed can be adjusted by temperature and time.

Heat can accelerate the curing process.

We recommend running preliminary tests to optimize conditions for particular applications. Comprehensive processing instructions are given in below. 24hr at room temperature or 30min at 50°C (for fast QC) in a circulating air oven.

## Packaging and storage

### Packaging

- 1 KG Bottle PE
- 9 KG Bottle PE
- 20 KG Hobbok

### Storage

The 'Best use before end' date of each batch appears on the product label.

Shelf life

LUMISIL® 101RT A : 1 year

LUMISIL® 101RT B : 1 year

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® 101RT 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.

### QR Code LUMISIL® 101RT A/B



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

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