

# LUMISIL<sup>®</sup> 105 FC A/B



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

LUMISIL<sup>®</sup> 105FC A/B is 2-part silicone gel(1:1) that cured by heat condition 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
- No chemical shrinkage
- Two-component

## 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	-	5,000 ± 500 mPa.s	5,000 ± 500 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	-	5,000 ± 500 mPa.s	ISO 3219
Platinum catalyst in component	-	B	-
Mix ratio	-	1 : 1	A : B
Pot Life	23 °C	20 - 40 min	-
Gel time	65 °C	3.5 - 5.5 min	-

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## Properties Cured

Property	Condition	Value	Method
Density	-	0.97 g/cm <sup>3</sup>	-
Volume resistivity	-	> 10 <sup>15</sup> Ohmcm	IEC 60093
Dielectric constant	-	2.7 - 3.0 ε	-
Penetration	-	30 - 50 1/10mm	SEQ170
Pull test (Glass/Glass, Test speed: 300mm/min)	-	> 0.2 MPa	-
Refractive index	-	1.40	-
Transmission	-	> 99.0 %	-

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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

- 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 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.

## Degassing before Mixing

In mass production, Degassing is essential 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 SEMICOSIL<sup>®</sup> 105 FC 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<sup>®</sup> 105 FC A/B



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

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