

SEMICOSIL[®] 831 A/B



Room Temperature Curing Silicone Rubber (RTV-2)

SEMICOSIL[®] 831 is a 2-part(1:1) transparent silicone bonding material that cured by heat

Properties

- Applicable to various processes. (molding, dispensing, etc.)
- High viscosity for less flowability
- Excellent transparency
- Low shrinkage
- Wide cure temperature range
- No Oxygen inhibition

Specific features

- Addition Curing
- Fast curing under heat
- Highly transparent
- No chemical shrinkage
- Two-component

Technical data

Properties Uncured

Property	Condition	Value	Method
Viscosity of mix at 10/s	-	120,000 ± 10,000 mPa.s	ISO 3219
Mix ratio	-	1 : 1	A : B

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

Properties Uncured

Property	Condition	A	B	Method
Viscosity at 10/s	25 °C	90,000 ± 10,000 mPa.s	125,000 ± 10,000 mPa.s	ISO 3219

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Catalyzed

Property	Condition	Value	Method
Pot life	-	≥ 8 h	Brookfield
Curing time	60 - 150 °C	≤ 30 min	-
Time to 50% cure degree at 150°C	150 °C	≤ 60 s	ISO 6502

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Properties Cured

Property	Condition	Value	Method
Appearance	-	Colorless transparent	-
Density	-	approx. 0.99 g/cm ³	-
Hardness Shore A	-	(± 5) 60	ASTM D 2240 Type A
Lap shear strength to glass ⁽¹⁾	-	≥ 2 MPa	-

¹T=0.3mm, Test speed = 300mm/min

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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.

Applications

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

Application details

- Sealing or Dam material for optical bonding
- Prevent spreading out of bonding material
- Maintain thickness of bonding material
- Encapsulation of optical & electronic components

Processing

Surface preparation

All surfaces must be clean and free of contaminants that will inhibit the cure of SEMICOSIL® 831.

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 ratio

Part A (SEMICOSIL® 831 A) : Part B (SEMICOSIL® 831 B) = 1 : 1

Curing

Curing speed can be adjusted by temperature and time.

We recommend running preliminary tests to optimize conditions for a particular application. Comprehensive processing instructions are given in below.

- 30 min at 70°C

- 10 min at 150°C

Cure time can be increased or decreased depending on the applied temperature.

Packaging and storage

Packaging

1KG BOTTLE PE
18KG HOBBOCK PE

Storage

SEMICOSIL® 831 A/B 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;

- SEMICOSIL® 831 A : 1 year
- SEMICOSIL® 831 B : 1 year

Safety notes

According to the latest findings SEMICOSIL® 831 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 SEMICOSIL® 831 A/B



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

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