

SEMICOSIL® 911 A/B



Thermally Curing Silicone Rubber (RTV-2)

SEMICOSIL® 911 A/B is a pourable, addition-curing, two-part silicone rubber that cures to a soft silicone gel.

Properties

- two-part, 1 : 1 mixing ratio
- thixotropic
- rapid heat cure
- forms a soft gel on vulcanization
- low content of volatiles
- low content of uncured polymer
- almost constant properties between -40 °C and +180 °C
- low ion content

Technical data

Properties Uncured

Property	Condition	Value	Method
Viscosity A [D=0,5 s ⁻¹]	25 °C	8000 mPa·s	DIN EN ISO 3219
Viscosity A [D=100 s ⁻¹]	25 °C	1600 mPa·s	DIN EN ISO 3219
Viscosity B [D=0,5 s ⁻¹]	25 °C	8000 mPa·s	DIN EN ISO 3219
Viscosity B [D=100 s ⁻¹]	25 °C	1600 mPa·s	DIN EN ISO 3219

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

Properties Uncured

Property	Condition	A	B	Method
Color	-	translucent	translucent	-
Density	23 °C	0.99 g/cm ³	0.99 g/cm ³	-

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

Catalyzed

Property	Condition	Value	Method
Viscosity, dynamic [D=0,5 s ⁻¹]	25 °C	8000 mPa·s	DIN EN ISO 3219
Viscosity, dynamic [D=100 s ⁻¹]	25 °C	1600 mPa·s	DIN EN 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
Platinum catalyst in component	-	A	-
Mix ratio	-	1 : 1 pbw	-
Pot Life	25 °C	70 min	-

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Properties Cured

Cured for 60 min at 150°C

Property	Condition	Value	Method
Color	-	translucent	-
Density	23 °C	0.99 g/cm ³	-
Penetration (quarter cone, 9.38 g) ⁽¹⁾	-	60 1/10mm	DIN ISO 2137

⁽¹⁾Cure: 150°C / 1h

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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

- Automotive Electronics
- Power Electronics
- Electrics & Electronics
- Potting & Encapsulation with Soft Gels

Application details

Because of the thixotropic behaviour, SEMICOSIL® 911 A/B is specially recommended for local encapsulation of delicate electronic components.

Processing

Surface preparation:

All surfaces must be clean and free of contaminants that will inhibit the cure of SEMICOSIL® 911 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

Component A of SEMICOSIL® 911 A/B contains the platinum catalyst, component B the crosslinker. Even traces of the platinum catalyst may cause gelling of the component containing the crosslinker. Therefore tools (spatula, stirrers, etc.) used for handling the platinum-containing component or the catalyzed compound must not come into contact with this component. The two components should be thoroughly mixed at a 1 : 1 ratio by weight or volume. To eliminate any air introduced during mixing or trapped under components or devices a vacuum de-airing under a vacuum of 10 - 20 mm mercury for 5 - 10 min is recommended.

Curing

Curing time of addition-curing silicone rubber is highly dependent on temperature, size and heat sink properties of the component being potted.

Temperature Curing time

100 °C	5 min
130 °C	2 min

We recommend running preliminary tests to optimize conditions for the particular application. Comprehensive processing instructions are given in our leaflet "Wacker RTV-2 Silicone Rubber - Processing".

Packaging and storage

Storage

The 'Best use before end' date of each batch is shown 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 addition curing SEMICOSIL® 911 A/B silicone rubber contains neither toxic nor corrosive substances which might require special handling precautions. General hygiene regulations should be observed.

Comprehensive instructions are given in the corresponding Material Safety Data Sheets. They are available on request from WACKER subsidiaries or may be printed via WACKER web site <http://www.wacker.com>.

QR Code SEMICOSIL® 911 A/B



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

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