

SEMICOSIL[®] 830 A/B



Room Temperature Curing Silicone Rubber (RTV-2)

SEMICOSIL[®] 830 is a non-slump silicone adhesive that is cured by heating conditions with stable adhesion to plastics with cohesive failure mode for automotive.

This is designed for fast cure processing or wet bonding during processing with fast adhesion built-up at oven processing.

Properties

Special characteristics

- Stable cohesive failure mode with Plastic substrates (PC, PMMA, PET, etc.)
- Fast curing and adhesion built-up at minimum energy input (e.g. 60°C/15min)
- Primerless adhesion to many substrates
- Excellent stress relaxation characteristics
- Thixotropic for non-slump
- Medium viscosity at the dynamic condition for dispensability

Specific features

- Addition Curing
- Fast curing under heat
- Non-slump
- Two-component

Technical data

Properties Uncured

Property	Condition	Value	Method
Viscosity of mix at 0,5/s	25 °C	200,000 ± 20,000 mPa.s	ISO 3219
Viscosity of mix at 25/s	25 °C	45,000 ± 5,000 mPa.s	ISO 3219
Pot life ⁽¹⁾	-	15 - 25 min	Brookfield

¹Time to double viscosity up

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

Properties Uncured

Property	Condition	A	B	Method
Color	-	White - White	Dark gray - Black	-
Density	25 °C	approx. 1.7 g/cm ³	approx. 1.7 g/cm ³	-
Viscosity at 25/s	25 °C	20,000 ± 5,000 mPa.s	54,000 ± 5,000 mPa.s	ISO 3219

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

Catalyzed

Property	Condition	Value	Method
Tack-free time	-	approx. ≥ 30 min	-
Thermal cure	60 - 85 °C	10 - 30 min	-
Time to 90% cure degree (MDR)	60 °C	≤ 140 s	-

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

Properties Catalyzed A+B

Property	Condition	Value	Method
Mix ratio	-	1 : 1	A : B

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

Properties Cured

Cure conditions: 190°C 10min

Property	Condition	Value	Method
Hardness Shore A	-	(± 5) 30	ASTM D 2240 Type A
Tensile strength	-	2 - 5 MPa	DIN ISO 37
Lap shear strength to Al ⁽¹⁾	-	≥ 3 MPa	-
Lap shear strength to Glass ⁽²⁾	-	≥ 3 MPa	-
Lap shear strength to Mg ⁽³⁾	-	≥ 3 MPa	-
Lap shear strength to Polycarbonate ⁽⁴⁾	-	≥ 3 N/mm ²	-

¹Cohesive failure mode with Polycarbonate

²Cohesive failure mode with glass

³Cohesive failure mode with Mg

⁴Cohesive failure mode with Polycarbonate

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

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

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

Application details

Bonding material or sealing agent in electronics, automotives and other industrial applications
Assembly glue for various substrates such as polycarbonate, metal, glass etc.

Packaging and storage

Packaging

30KG filling in 18KG WACKER Standard HOBBOCK with 1.7~1.8 g/cm³ density
1.7KG filling in 1KG WACKER Standard bottle with 1.7~1.8 g/cm³ density

Storage

SEMICOSIL 830 A and SEMICOSIL 830 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 of each batch appears on the product label.

• Shelf life

SEMICOSIL 830 A : 1 year

SEMICOSIL 830 B : 1 year

Storage beyond the date specified on the label does not necessarily mean that the product is no longer usable

Safety notes

SEMICOSIL 830, 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® 830 A/B



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

Wacker Chemie AG, Hanns-Seidel-Platz 4, 81737 Munich, Germany
productinformation@wacker.com, www.wacker.com

The data presented in this medium are in accordance with the present state of our knowledge but do not absolve the user from carefully checking all supplies immediately on receipt. We reserve the right to alter product constants within the scope of technical progress or new developments. The recommendations made in this medium should be checked by preliminary trials because of conditions during processing over which we have no control, especially where other companies' raw materials are also being used. The information provided by us does not absolve the user from the obligation of investigating the possibility of infringement of third parties' rights and, if necessary, clarifying the position. Recommendations for use do not constitute a warranty, either express or implied, of the fitness or suitability of the product for a particular purpose.