SEMICOSIL® 989/1K

SEMICOSIL®

1-part heat-curing silicone rubber

SEMICOSIL® 989/1K is a non-slump, thermally curable, addition curing one-part silicone rubber.

Properties

- one-part, ready-to-use
- thixotropic
- transparent
- medium hardness
- high flexibility
- rapid heat curing
- primerless adhesion to many substrates

Technical data

General Characteristics

Property	Condition	Value	Method
Density	23 °C	approx. 1.1 g/cm^3	DIN 53479
Viscosity, dynamic	25 °C | 0.5 1/S	300000 mPa·s	DIN EN ISO 3219
Viscosity, dynamic	25 °C | 25 1/S	30000 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	Value	Method
Viscosity, dynamic (shear rate = 0,5 s^{-1})	25 °C	300000 mPa·s	DIN EN ISO 3219
Viscosity, dynamic (shear rate = 25 s^{-1})	25 °C	30000 mPa·s	DIN EN ISO 3219
Color	-	transparent	-
Density	-	approx. 1.07 g/cm^3	DIN EN ISO 1183-1

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Properties Cured

Cured for 30 min at 150 °C in a circulating air oven

Property	Condition	Value	Method
Hardness Shore A	-	55	ISO 868
Tensile strength	-	5 N/mm^2	DIN 53504 S2
Elongation at break	-	200 %	DIN 53504 S2
Color	-	transparent	-
Density	23 °C	approx. 1.07 g/cm^3	DIN EN ISO 1183-1 A

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Applications

- Automotive Electronics
- Bonding & Sealing
- Electronics
- Power Electronics

Application details

- general purpose adhesive for the electronics industry
- FIPG applications

Processing

Surface preparation
All surfaces must be clean and free of contaminants that will inhibit the cure of SEMICOSIL® 989/1K. 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.

Temperature	Curing time, thickness 1 cm
100 °C	6 h
130 °C	1 h
150 °C	10 min

Dispensing
Because of the thixotropy (shear thinning effect) SEMICOSIL® 989/1K can be dispensed easily with all dispensing equipments.

To eliminate any air introduced during dispensing or trapped under components or devices a vacuum encapsulation is recommended.

SEMICOSIL® 989/1K shows good primerless adhesion to many substrates. We recommend running preliminary tests to optimize conditions for the particular application.

Curing
SEMICOSIL® 989/1K works best when cured at 115 °C or more depending on the size and heat sink properties of the components.

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, the addition-curing silicone rubber SEMICOSIL® 989/1K contains neither toxic or corrosive substances which would require special handling precautions.

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® 989/1K

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

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