

SEMICOSIL® 989/1K

SILICONE ADHESIVE

Product description

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

Special features

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

Application

- general purpose adhesive for the electronics industry
- FIPG and CIPG 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.

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.

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

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>.

Product data

Typical general characteristics	Inspection Method	Value
Product data (uncured)		
Color		transparent
Density at 23 °C	DIN 53479	approx. 1,1 g/cm ³
Viscosity, dynamic at 25 °C (shear rate = 0,5 1/S)	DIN EN ISO 3219	300000 mPa.s
Viscosity, dynamic at 25 °C (shear rate = 25 1/S)	DIN EN ISO 3219	30000 mPa.s
Product data (cured)		
Color		transparent
Density at 23 °C	ISO 2781	approx. 1,1 g/cm ³
Hardness Shore A	ISO 868	55
Elongation at break	ISO 37	200 %
Tensile strength	ISO 37	5,00 N/mm ²

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

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

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.

The management system has been certified according to DIN EN ISO 9001 and DIN EN ISO 14001

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

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