SEMICOSIL® 988 TIC

SEMICOSIL®

1-part heat-curing silicone rubber

SEMICOSIL® 988 TIC is a non-slump, thermally curable, addition-curing, one-part silicone rubber with excellent insulation properties. This product is optimized for insulation coating applications for disk power semiconductors.

Properties

- Ready-to-use, one-part system
- Thixotropic
- Transparent
- Medium hardness
- High flexibility (low-stress adhesive)
- Rapid heat cure
- Excellent primerless adhesion on many substrates
- Excellent insulation properties
- Low ion content

Technical data

Properties Uncured

Property	Condition	Value	Method
Viscosity, dynamic Rot. dyn.	25 °C | 0.5 1/s	480000 mPa·s	ISO 3219
Viscosity, dynamic Rot. dyn.	25 °C | 25 1/s	37000 mPa·s	ISO 3219
Color	-	Transparent	-
Density	23 °C	1.1 g/cm^3	DIN EN ISO 1183-1 A

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

Properties Cured

cured for 30 min. at 150°C

Property	Condition	Value	Method
Hardness Shore A	-	36	DIN ISO 48-4
Tensile strength	-	≥ 3 N/mm^2	ISO 37 type 1
Elongation at break	-	350 %	ISO 37 type 1
Tear strength	-	≥ 20 N/mm	ASTM D 624 B
Color	-	Transparent	-
Density	23 °C	1.1 g/cm^3	DIN EN ISO 1183-1 A
Dielectric strength	-	23 kV/mm	IEC 60243-1
Modulus at 100 % elongation	-	0.5 N/mm^2	ISO 37
Tracking resistance	-	> 600 CTI	IEC 60587
Volume resistivity	-	10^15 Ohmcm	IEC 62631-3-1

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Application details

- General-purpose adhesive for the electronics industry
- FIPG and CIPG applications
- Power semiconductor insulation coating

Processing

Surface Preparation

All surfaces must be clean and free of contaminants that will inhibit the cure of SEMICOSIL® 988 TIC.
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 high thixotropy (shear thinning effect) SEMICOSIL® 988 TIC can be dispensed easily with all dispensing equipments.

Curing

SEMICOSIL® 988 TIC works best when cured at 125 °C or more, depending on the size and heat sink properties of the components. SEMICOSIL® 988 TIC shows good primerless adhesion to many substrates. We recommend running preliminary tests to optimize conditions for the particular application.

Temperature	Curing time, thickness 5 mm
125 °C	3 h
150 °C	1 h
180 °C	20 min

Packaging and storage

Storage

SEMICOSIL® 988 TIC should be stored between 5 °C and 25 °C in the tightly closed original container. The 'Best use before end' date of each batch is displayed 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 as-surance reasons.

Safety notes

According to the latest findings, addition-curing RTV-2 silicone rubber SEMICOSIL® 988 TIC contains neither toxic nor aggressive substances that require special handling precautions. General industrial hygiene regulations should be observed.
Detailed safety information is contained in each Material Safety Data Sheets which can be obtained form our sales offices.

QR Code SEMICOSIL® 988 TIC

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

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