

SEMICOSIL® 971 TC

Thermally conductive adhesive

Characteristics

SEMICOSIL® 971 TC is a non-slump, thermally curable, addition-curing, one part silicone adhesive with excellent thermal conductivity.

Application

- Bonding of electronic parts with heat sinks
- Fixing electronic parts to circuit boards
- Heat transmission glue for ECUs and power modules

Special characteristics

- Ready-to-use, one-part system
- High thermal conductivity
- Thixotropic
- Rapid heat cure
- Primerless adhesion to many substrates
- Controlled volatility
- Almost constant properties between -50°C and +180°C

Product data (uncured)

Property	Test method	Unit	Value
Appearance			White
Viscosity at 25°C	ISO 3219, D = 10 1/s	[mPa s]	120,000
Density at 23°C		[g/cm³]	2.75

Product data (cured)

Property	Test method	Unit	Value
Appearance			White
Density at 23°C, in water	DIN 53 479 A / ISO 2781	[g/cm³]	2.75
Hardness Shore A	DIN 53 505 / ISO 868		80
Elongation at break	DIN 53 504 S 1 / ISO 37	[%]	50
Tensile strength	DIN 53 504 S 1 / ISO 37	[N/mm²]	5.0
Thermal conductivity		[W/mK]	2.0
Volume resistivity	IEC 93	[Ohm.cm]	10 ¹⁵
Dielectric strength	IEC 93	[kV/mm]	12

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.

Processing

Temperature	Curing time
130°C	60 min
150°C	30 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".

Storage

SEMICOSIL® 971 TC has a shelf life of at least 3 months when stored cool and dry in the originally sealed container. The 'Best use before end' date of each batch appears 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 information

According to the latest findings, addition curing SEMICOSIL® 971 TC 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.

The data presented in this leaflet 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 leaflet 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 recommendations do 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 products 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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