

SEMICOSIL® 972 TC

Thermally conductive interface material

Characteristics

SEMICOSIL® 972 TC is a non-slump, addition-curing, two component silicone rubber that cures at room temperature to a soft rubber with excellent thermal conductivity.

Special characteristics

- Two-component
- High thermal conductivity
- Almost constant properties between – 50 °C and + 180 °C
- Low modulus
- Low bleeding, low volatile

Product data (uncured)

Property	Test method	Unit	Value	
Component			A	B
Color			White	White
Viscosity at 23 °C, Cone-plate-viscosimeter	ISO 3219, D = 10 1/s	[mPa s]	120,000	120,000
Density at 23 °C		[g/cm³]	2.9	2.9

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

Product data (catalyzed A+B)

Property	Test method	Unit	Value
Mixing ratio (parts by weight)		A : B	1 : 1
Viscosity catalyzed, at 23 °C	ISO 3219, D = 10 1/s	[mPa s]	120,000
Pot life (up to 1,000,000 mPas), at 23 °C		[min]	30
Platinum-catalyst in component			A

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

Product data (cured)

Property	Test method	Unit	Value
Color			White
Density at 23 °C, in water	DIN 53 479 A / ISO 2781	[g/cm³]	2.9
Hardness Shore A	DIN 53 505 / ISO 868		25
Hardness Shore 00	DIN 53 505 / ISO 868		80
Thermal conductivity		[W/mK]	2.3
Heat Capacity at 30 °C		[J/gK]	0.95
Volume resistivity	IEC 93	[Ohm.cm]	10^{15}
Dielectric strength	IEC 93	[kV/mm]	12
Thermal coefficient of linear expansion		[ppm]	95

Cured for 1 h at 100 °C.

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Application

- Interface material for heat sink applications for the electronics industry

Processing

Important!

The platinum catalyst is contained in component A.

Caution

Only components A and B with the **same lot number** may be processed together !

To ensure homogeneity of the material, the components must be stirred thoroughly before they are removed or processed in the their containers, in order to uniformly disperse any fillers that might have settled during storage.

Temperature	Curing time, thickness 1 cm
25 °C	300 min
100 °C	10 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® 972 TC has a shelf life of at least 6 months when stored between 5 °C and 30 °C 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.

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.

Safety information

According to the latest findings, addition curing SEMICOSIL® 972 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 management system has been certified according to DIN EN ISO 9001 and DIN EN ISO 14001. The Business Unit Elastomers of the Division Silicones is ISO TS 16949 certified.

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

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