

THERMAL INTERFACE MATERIALS (TIMs) | ELASTOSIL® TC & SEMICOSIL® TC

## PRODUCT OVERVIEW

WACKER'S ELASTOSIL® and SEMICOSIL® thermally conductive silicone products provide efficient and reliable thermal heat control in many different applications. We offer silicone-based products in a variety of viscosities, curing speeds and thermal conductivities to meet requirements for thermal heat management in virtually every industry.

## **Key Features**

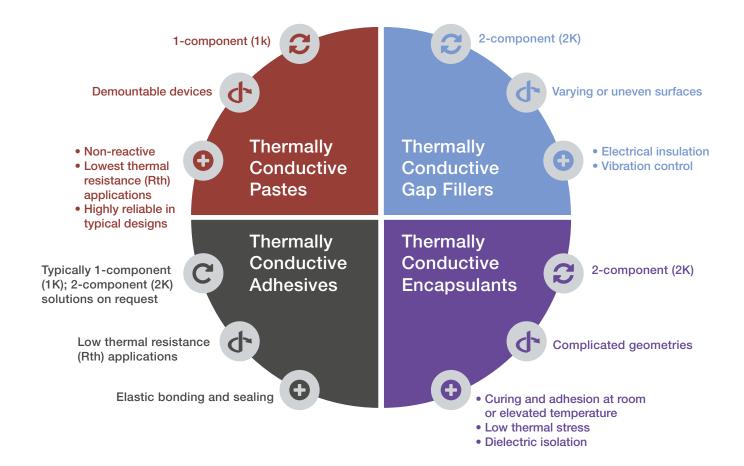
- Soft, flexible gap filling between uneven surfaces
- Thermal conductivity: 2 to 7 W/mK, more in development
- Remains soft and tacky between -50 °C to +180 °C
- Low volatiles, D4-D8 < 350 ppm, UL94-V0
- Room-temperature-curing and heatcuring grades available
- Low-density grades available
- Processing approved by leading equipment manufacturer

## Packaging

- Cartridges
- 30 L pails
- 200 L drums

## Typical Industries

- Power electronics
- Automotive (electronics)
   e.g. ECU, ADAS, Sensors





Thermally Conductive Gap Fillers	Thermal Conductivity [W/mK]	Туре	Density [g/cm³]	Viscosity D=10 1/s [mPa-s]	Hardness, Shore 00	Curing [h] at 23 °C	Special Features
SEMICOSIL® 961 TC	2.3	2-part, 1:1	2.9	130,000	25	4-6	GEN1: sedimentation-free, easy to process
SEMICOSIL® 962 TC	3.0	2-part, 1:1	3.1	150,000	50	4-6	GEN1: sedimentation-free, easy to process
SEMICOSIL® 966x TC series	3.0	2-part, 1:1	2.6	<200,000	n.a.	>24	Next-generation, injectible gapfiller
SEMICOSIL® 9671 TC4	2.3	2-part, 1:1	2.1	200,000	60 –70	12	Next-generation, low-density, shear thinning
SEMICOSIL® 9673 TC	3.6	2-part, 1:1	2.75	600,000	65	12	Next-generation, low-density, shear thinning
SEMICOSIL® 937 TC (KR)	7.4	2-part, 1:1	3.3	180,000	65	12	High TC gapfiller for ADAS applications
Thermally Conductive Encapsulants	Thermal Conductivity [W/mK]	Туре	Density [g/cm <sup>3</sup> ]	Viscosity D=10 1/s [mPa-s]	Shore	Curing [h] at 23 °C	Special Features
ELASTOSIL® RT 7331 TC (KR)	3.0	2-part, 1:1	2.9	13,000	45 (00)	1 /120 °C	Low-viscosity, self-leveling encapsulant, self-adhesive
ELASTOSIL® RT 739 TC (KR)	2.0	2-part, 1:1	2.7	7,000	40 (A)	1 /120 °C	Low-viscosity, self-leveling, self-adhesive, addition-curing encapsulant
ELASTOSIL® RT 7612 AD TC	1.3	2-part, 1:1	2.4	2,500	60 (00)	2/25 °C	Room-temperature-curing, self-adhesive
ELASTOSIL® RT 7620 TC CN	2.0	2-part, 1:1	2.6	7,000	50 (00)	0.5/80 °C	Low-viscosity encapsulant
ELASTOSIL® RT 7640 TC CN*	4.0	2-part, 1:1	2.8	13,000	55 (00)	N/A	High-TC encapsulant
Thermally Conductive Adhesives	Thermal Conductivity [W/mK]	Туре	Density [g/cm³]	Viscosity D=10 1/s [mPa-s]	Hardness, Shore A	Tensile Strength [mPa·s]	Special Features
SEMICOSIL® 971 TC*	2	1-part	2.7	100,000	80	5	Only in cartridges, re-homogenization necessary
Thermally Conductive Pastes & Greases	Thermal Conductivity [W/mK]	Туре	Density [g/cm³]	Viscosity D=10 1/s [mPa-s]	Curing [h] at 23 °C		Special Features
WACKER® Paste P12	0.81	1-part	2.1	Pasty	Non-curing		Electrically insulating heat paste
SEMICOSIL® Paste 40 TC	4.0	1-part	3.27	250,000	Non-curing		Exceptional thermal conductivity of 4.0 W/mK; low BLT of 60 µm

\*only upon request and reasonable volumes



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