

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**

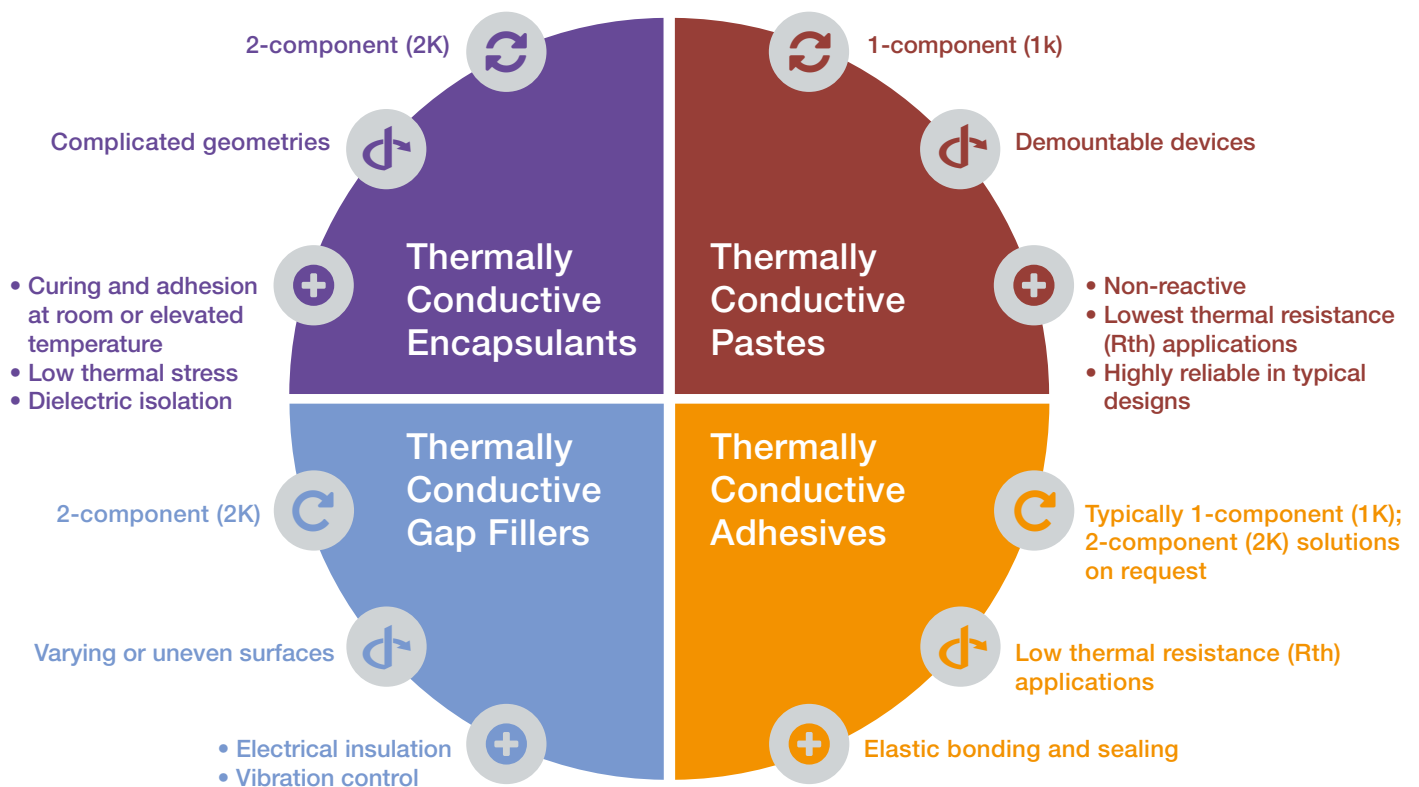
- Soft, flexible gap filling between uneven surfaces
- Thermal conductivity: 2 to 7 W/mK, more in development
- Remains soft and tacky between -50 °C to +180 °C
- Low volatiles, D4-D8 < 350 ppm, UL94-V0
- Room-temperature-curing and heat-curing grades available
- Low-density grades available
- Processing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

**Packaging**

- Cartridges
- 30 L pails
- 200 L drums

**Typical Industries**

- Automotive (electronics)
- Power electronics
- Consumer electronics
- Telecommunications
- Microelectronics
- Lighting
- Aerospace
- Energy



Thermally Conductive Encapsulants	Thermal Conductivity [W/mK]	Type	Density [g/cm <sup>3</sup> ]	Viscosity D=10 1/s [Pa-s]	Shore	Curing	Special Features
ELASTOSIL® RT 733 TC (KR)	3.0	2-part, 1:1	2.9	13,000	45 (00)	60 min/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)	60 min/120 °C	Low-viscosity, self-leveling, self-adhesive, addition-curing encapsulant
ELASTOSIL® RT 7612 F TC CN	1.0	2-part, 1:1	2.0	1,300	25 (00)	30 min/80 °C	Low-viscosity encapsulant
ELASTOSIL® RT 7612 AD TC	1.3	2-part, 1:1	2.4	2,500	60 (00)	90 min/25 °C	Room-temperature-curing, self-adhesive
ELASTOSIL® RT 7620 TC CN	2.0	2-part, 1:1	2.6	7,000	50 (00)	30 min/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 Gap Filler	Thermal Conductivity [W/mK]	Type	Density [g/cm <sup>3</sup> ]	Viscosity D=10 1/s [Pa-s]	Hardness, Shore 00	Curing [h] at 23 °C	Special Features
SEMICOSIL® 961 TC	2.3	2-part, 1:1	2.9	130	25	4–6	GEN1: sedimentation-free, easy to process
SEMICOSIL® 962 TC	3.0	2-part, 1:1	3.1	150	50	4–6	GEN1: sedimentation-free, easy to process
SEMICOSIL® 9629 TC CN	2.0	2-part, 1:1	1.9	200	60	12	Electronics gap filler
SEMICOSIL® 963 TC**	3.0	2-part, 1:1	3.1	160	Pen 20 mm/10	4–6	GEN1: sedimentation-free, easy to process
SEMICOSIL® 9620 EV TC	2	2-part, 1:1	1.9	200	60	12	Next-generation, low-density, high-volume grade
SEMICOSIL® 967X TC series	2.5–3.2	2-part, 1:1	2.0–2.2	160–200	60–80	12	Next-generation, low-density, high-volume grades

Thermally Conductive Adhesives	Thermal Conductivity [W/mK]	Type	Density [g/cm <sup>3</sup> ]	Viscosity D=10 1/s [Pa-s]	Hardness, Shore A	Tensile Strength [mPa-s]	Special Features
ELASTOSIL® TC 9800 CN	0.85	1-part	1.6	120	73	2.8	Excellent primerless adhesion, neutral-curing system (alkoxy)
SEMICOSIL® 971 TC**	2	1-part	2.7	100	80	5	Only in cartridges, re-homogenization necessary
SEMICOSIL® 975x TC series*	3–3.5	1-part	3.1–3.3	150–300	75–95	2.8	Developmental series, tailor-made to specific needs


  

Thermally Conductive Pastes & Greases	Thermal Conductivity [W/mK]	Type	Density [g/cm <sup>3</sup> ]	Viscosity D=10 1/s [Pa-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 30 TC**	3.2	1-part	3.2	150	Non-curing	High-performance grease
SEMICOSIL® Paste 40 TC	4.0	1-part	3.27	250	Non-curing	Exceptional thermal conductivity of 4.0 W/mK; low BLT of 60 µm

\* in development \*\* only upon request and reasonable volumes

ELASTOSIL® SEMICOSIL®

Wacker Chemie AG, 81737 Munich, Germany  
[www.wacker.com/contact](http://www.wacker.com/contact), [www.wacker.com](http://www.wacker.com)

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