

Key Features and Benefits:

- 2-parts thermally conductive compound
- Ultra-conforming, designed for fragile and low-stress applications
- Room and accelerated curing
- 100% solids – no cure by-products
- Excellent low & high temperature resistance
- mechanical & chemical stability

PAKCOOL® TC-225 is a high performance, thermally conductive, liquid TIM material, supplied as two-component, room or elevated temperature curing system. It is a soft, form-in-place elastomer, ideal for coupling “hot” electronic components and heat sink. Before cure, it flows under pressure like grease. After cure, it won't be pumped out during thermal cycling. The liquid offer infinite thickness with little or no stress during displacement and assembly. It also eliminates the need for specific pad thickness and die-cut shapes for individual applications.

TC-225 consists with liquid A and B. The A component is white, the B component is the colored liquid so as to distinguish A and B are evenly mixed. TC-225 is intended for use in thermal interface applications when a strong structural bond is not required. TC-225 is formulated for low-modulus properties.

Application:

- LED
- Power semiconductors/Power supplies
- Automotive electronics
- Motion control
- Telecommunications
- Computer and peripherals
- Between heat-generating semiconductors or magnetic components and a heat sink
- Area where heat needs to be transferred to a frame, chassis, or other type of heat spreader

Matters needing attention:

Thermal conductive sealants may not solidify or completely solidify when exposed to some substances, such as sulfur, phosphorus and nitrogen compounds and polysulfone, polysulfide, polyurethane, substances containing amides and amines, Tin, arsenic, antimony, selenium and tellurium, unsaturated hydrocarbons and plasticizers.

Typical Properties	TC-225	Test Methods
Base material	Silicone	--
Color	A-White B-Blue	Visual
Mix ratio	1:1	--
Viscosity (cP@25±2°C)	300,000± 100,000	Brookfield
Pot life (min at 25°C)	>30	--
Thermal conductivity (W/m·K)	2.5	ASTM D5470
Hardness(Shore 00 @150°C,15min)	50±10	ASTM D2240
Density(g/ cm ³)	2.95±0.1	ASTM D792
Dielectric strength (KV/mm)	≥10	ASTM D149
Shelf life(@0°C)	6 months	--
Continuous Use Temperature (°C)	-50~150	--

Storage and Transportation

PAKCOOL® thermal compounds are non-toxic, non-flammable materials. All the products should be stored horizontally. Before use, allow the product to warm at room temperature for no less than 4 hours.

. Packaging:

50ml, 200ml and 400ml cartridge kits are supported. Custom packaging options are also available based on customer requirements. The plastic mixers are supported to mix the A&B compounds.

. Curing time :

This product can naturally cure after being stored at room temperature for 12 to 48 hours. The cross-linking time decreases with increasing temperature (see table below).

25°C	24 h
70°C	40 min