

TIM-PC 8018

Thermally Conductive Potting Compound

DESCRIPTIONS

TIM-PC 8018 is a **Non-Corrosive and Non-Hazmat**, pourable filled epoxy resin system featuring high thermal conductivity, good electrical insulation, and low shrinkage during cure. It offers the excellent heat transfer, high voltage insulation and dimensional stability over a wide temperature range. As an encapsulant for power devices it distributes heat evenly throughout the casting, providing greater efficiency and longer working life.

Applications: Flip chip under fill & glob top encapsulant. Heat sinking; thermally conductive potting for PCB, SMDs, and thermistors into cavities; potting and protection of resistor coils. Potting power modules found in electronics such as cockpit, aerospace and RF/Microwave devices.

INSTRUCTION FOR USE

1. Weigh each 100 grams of Resin (Part-A), add amount of required hardener
2. Mix until uniform preferably using mechanical mixer. Vacuum to remove entrapped air
3. Apply to clean bonding surfaces and cure as recommended to achieve the desired properties.
4. Typical cured properties were determined using recommended cure schedule. Some difference in properties may occur with the alternate or other cure schedules.

Note: Refer to Safety Data Sheet (**SDS**) for additional health and safety information.

AVAILABILITY

2 Parts Kits: 1 Quart, 1 gallon & 5 gallon pail.

Property	Results
Special Future	DOT/IATA Non-Hazmat. High Thermal Conductivity
Type	Two Parts
Hardener	TH-22
Mix Ratio by Wt (A/H)	100/8
Color	Gray
Shelf Life	12 months@ 25°C
Mixed Viscosity @25°C cp	40,000
Gel Time (Pot Life) (100 grams)	1 hr @ 25°C
Cure Schedule	24 hrs@ 25°C or 2 hrs@ 100°C
Cured Properties	
Hardness (Shore D)	D-91
Glass Transition Temperature	>80°C
Flexural Strength	12,300psi
Service Temperature Range	-55°C to 150°C
THERMAL	
Thermal Conductivity (W/m-K)	2.5
ELECTRICAL	
Dielectric Strength (Volts/Mil)	473
Volume Resistivity (Ohm-cm)	10 ¹⁵

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