

# TIM-PC 8006M-4

## Flexible Thermally Conductive Potting Compound

### DESCRIPTIONS

**TIM-PC 8006M-4** is a low viscosity, easily pourable, filled epoxy resin system featuring high thermal conductivity, good electrical insulation, and low shrinkage during cure. It is useful for potting and encapsulating components and modules where removal of heat and resistance to mechanical and thermal shock are prime considerations.

**Applications:** Typical Applications includes potting or encapsulating densely packaged power supplies, integrated circuits, small transformers, capacitors bushings etc.

### 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.

Typical Properties	Test Method	Value
Hardener		Part-B
Mix Ratio (By weight)		100/12
Special Future		Flame Retardant. Excellent Adhesion. Flexible impact resistance.
Viscosity (Mixed) cps	Brookfield	4,000
Pot Life @ 25°C. (100 grams) Minutes		120
Cure Schedule		2hr/100°C
Alternate Cure		24-48 hr/25°C
Shelf Life, 25C		12 months
<b>Cured Properties</b>		
Color	Visual	Black
Specific Gravity	ASTM D792	1.62
Hardness, Shore D	ASTM D2240	85
Glass Transition Temperature.°C	DSC	28
Thermal Conductivity (W/m-K)	ASTM D5470	0.7
Linear Shrinkage %		0.31
Coefficient of Thermal Expansion, 10-6/°C (Below Tg)	ASTM E831	28
Water absorptions (24hrs immersion/25°C)	ASTM D150	0.12
Dielectric Strength (Volts/mil))	ASTM D149	480
Dielectric constant , 1kHz	ASTM D149	4.8
Volume Resistivity (Ohm-cm)	ASTM D257	1.0x10 <sup>14</sup>
Flammability UL-94 (3mm) Internal Data		V-0

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