



ISO-9001-2015 Certified

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# TECHNICAL BULLETIN

## EPOXICAST-1006M-4 FLEXIBLE THERMALLY CONDUCTIVE POTTING COMPOUND

EC-1006M-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. Typical Applications includes potting or encapsulating densely packaged power supplies, integrated circuits, small transformers, capacitors bushings etc.

**UL File No: E198161 under “Plastic – Components” for 94V0 Flame Retardant**

### TYPICAL HANDLING PROPERTIES:

Epoxicast	PART-A
Hardener	PART-B
Mix ratio by weight, (Resin/Hardener)	100/12
Compound viscosity at 25°C, cp	6000-8000
Mixed viscosity at 25°C, cp	4000
Pot life at 25°C (100 gram), hrs	5-6
Recommended Cure	1-2 hrs @ 100°C
Alternate Cure	24 to 48 hrs @ 25°C

### TYPICAL CURED PROPERTIES:

(Tested @ 25°C unless otherwise indicated)

Color	Black
Specific Gravity	1.62
Hardness, Shore A	85
Linear Shrinkage, %	0.31
% Water Absorption % (24 hrs @ RT)	0.12
Service Temperature, °C	-55 to 120
Thermal Conductivity, W/mK	0.8
Glass Transition Temperature, °C	28
Dielectric Strength, Volts/mil	480
Dielectric Constant at 1 kHz	4.8
Dissipation Factor at 1 kHz	0.14
Volume Resistivity, ohm-cm	1x10 <sup>14</sup>
<b>Flammability, UL-94 (3 mm)</b>	<b>V-0</b>

### INSTRUCTIONS FOR USE:

Stir well the contents of each container every time before removing material. If the contents are hard or lumpy, warm to 80°C and mix thoroughly before removing material.

1. Weigh each 100 grams of PART-A to 12 grams of Hardener PART-B
2. Mix until uniform. Scrape the sides and bottom of container repeatedly during mixing.
3. Proceed with potting application. Vacuum degas 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.

### AVAILABILITY:

**2 parts Kit** - Packaged in Gallon, and 5-Gallon size.

### FOR INDUSTRIAL USE ONLY:

Practices of good housekeeping, safety and cleanliness should be followed before, during and after use.

### WARNING!

Adequate ventilation of work place and ovens is essential. These materials may cause injury to the skin following prolonged or repeated contact and dermatitis in susceptible individuals. In case of skin contact, wash thoroughly with soap and water. For eyes, flush immediately with plenty of water for at least 10 minutes and seek medical attention. Refer to Material Safety Data Sheet (MSDS) for additional health and safety information.

**DISCLAIMER:** All data given here is offered as a guide to the use of these materials and not as a guarantee of their performance. The user should evaluate their suitability for own purposes. Properties are typical and should not be used in preparing specifications. Statements are not to be construed as recommendations to infringe any patent.