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116-03A / B-187

HIGHLY THERMALLY CONDUCTIVE, EPOXY POTTING COMPOUND

DESCRIPTION: 116-03A is a nitride filled, two component, epoxy potting and encapsulating compound. Product is designed to release entrapped air rapidly during cure, resulting in a smooth, pinhole free surface. When used with curing agent B-187, cured product retains mechanical and electrical properties at operating temperatures up to 155°C. 116-03A is version of F947A that provides increased thermal conductivity.

	<u>Part A</u>	<u>Part B-187</u>	<u>Mixture</u>
Appearance:	Grey	Amber	Grey
Viscosity (cps):	20,000	500	18,000
Mix Ratio (By Weight):	100	3	----
Pot Life:	---	---	> 4 hrs.

MIXING INSTRUCTIONS: Premix Part A in original container prior to adding curing agent. Add Part B-187 to Part A and mix until uniform. **NOTE:** It is not unusual for crystallization of the B-187 to occur. Warm to 40-45°C in a water bath to return the material to it's original viscosity. The crystallization of the catalyst does not affect the performance of the product in any way. To prevent re-crystallization, store the B-187 at temperatures between 35-45°C.

CURING INSTRUCTIONS:

Handling Properties:	30 mins @ 80°C
Full Cure:	1 hr @ 80°C or 1/2 hr @ 100°C

TYPICAL CURED PROPERTIES:

Specific Gravity	1.65
Hardness (Shore D)	> 85
Coef. of Therm. Exp. (in/in/°C x 10 ⁻⁶)	22
Therm. Cond. (W/mK)	1.73
Cure Shrinkage (%)	0.189
Heat Distortion Temp. (°C) with B-187	148
Fungus Resistance	Non-nutrient
Tensile Strength (psi)	9600
Water Absorption (%)	< 0.22
Dielectric Strength (volts/mil)	475
Volume Resistivity (Ω-cm)	1 x 10 ¹⁵
Power Factor (60 HZ)	0.028
Dielectric Constant (@ 60 Hz)	4.3

STORAGE: Shelf Life: 12 months at 20-25°C in original sealed containers.

All technical information is based on data obtained by CMI personnel and is believed to be reliable. No warranty is either expressed or implied with respect to results or possible infringements on patents.

REVISION DATE: 2/25/08 REVISION: C