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116-04A / B-187

EXTREMELY THERMALLY CONDUCTIVE, EPOXY POTTING COMPOUND

DESCRIPTION: 116-04A 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. Use B-187 when long pot life and higher heat resistance is desired. 116-04A is a more thermally conductive version of F940A.

	<u>Part A</u>	<u>Part B-187</u>	<u>Mixture</u>
Appearance:	Grey	Amber	Grey
Viscosity (cps):	3600	500	3100
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 to Part A and mix until uniform. Use with Part B-187 when high temperature performance is desired. **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 min @ 80°C
Full Cure:	1 hr @ 80°C or 30 min @ 100°C

TYPICAL CURED PROPERTIES:

Specific Gravity	1.63
Hardness (Shore D)	> 85
Coef. of Thermal Exp. (in/in/°C x 10 ⁻⁶)	22
Therm. Cond. (W/mK)	2.63
Cure Shrinkage (%)	0.189
Heat Distortion Temp. (°C)	115
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: 10/9/07 REVISION: C