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102-12/B187

THERMAL-CYCLE RESISTANT, BLACK, EPOXY COMPOUND

DESCRIPTION: 102-12/B187 is a black, two component thermally conductive epoxy potting and encapsulating compound. Product is designed to release entrapped air rapidly during cure, resulting in a smooth, pinhole free surface. 102-12 is an improved, crack-resistant version of F947. Use with B187 for longer pot life and better resistance to thermal shock.

MIXING INSTRUCTIONS: Premix Part A in original container prior to adding the curing agent. Add Part B 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 its 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.

TYPICAL PROPERTIES:

| | |
|-----------------------------------------------------|----------------------------------------------------------------------|
| Viscosity (cps) | 16,000 |
| Mix Ratio | 100 / 2.5 |
| Pot Life (hour) | > 4 |
| Cure Schedule | 4 hrs. @ 65°C <u>or</u> 1 hr. @ 80°C, <u>or</u> 30 mins.@100°C |
| Specific Gravity | 1.61 |
| Hardness (Shore D) | > 85 |
| Coef. of Therm. Exp. (in/in/°C x 10 ⁻⁶) | 14.5 |
| Thermal Cond. (W/mK) | 2.30 |
| Cure Shrinkage (%) | 0.171 |
| Heat Distortion Temp. (°C) | 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) | 4.4 |

SAFETY & HANDLING: Use with adequate ventilation. Keep away from sparks and open flames. Avoid prolonged contact with skin and breathing of vapors. Wash with soap and water to remove from skin.

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.

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