

Product
Bulletin**E30-101****Thermally Conductive Epoxy Rubber for Casting and Encapsulation of Electrical Packages.****GENERAL DESCRIPTION**

E30-101 is a high performance, thermally conductive, epoxy rubber formulation designed for those applications requiring excellent electrical insulation, and heat transfer.

E30-101 has been used extensively as a heat sink for bonding heat sensitive components for large casting of power supplies and coils as well as the encapsulation of components that generate heat. This new formulation has also been used successfully for power supplies, transformers, regulators, PCB's, etc.

E30-101 is an ideal resin system for encapsulation of electrical packages with delicate components and will not crush or stress during and after cure. The resin has a rubber consistency and retains its properties and flexibility on long-term aging. This allows pottings and castings to be probed for detection of electrical failures.

E30-101 is a repairable system. After defective components have been located, the probe path can be totally sealed by applying fresh resin with a hypodermic syringe. E30-101 will bond to itself, forming a totally sealed system.

APPLICATION

Mix 8 parts catalyst to 100 parts resin, by weight. Allow to cure at room temperature for 24 hours or for 2-4 hours at 150°F.

SPECIFICATIONSHANDLING CHARACTERISTICS

Catalyst Number: Catalyst E30-101
Mix Ratio, Catalyst to Resin, by Weight: 8:100
Workable Pot Life, 100 g @ 25°C: 3 hrs.
Mixed Viscosity @ 25°C cps: 6,000
Recommended Cure: 24 hrs. @ room temp.
Color: brick red

PHYSICAL CHARACTERISTICS

Shrinkage Linear, in / in: 0.001
Hardness, Shore A: 22
Specific Gravity, 25°C / 25°C: 1.35
Tensile Strength, psi: 120
Compressive Strength, psi: 60

THERMAL CHARACTERISTICS

Thermal Conductivity, btu / hr / ft² / °F / in: 8.0
Heat Distortion, °C: 80
Operating Temperature Range, °C: -50 to +150

ELECTRICAL CHARACTERISTICS

Dielectric Strength, volts / mil: 480
Dielectric Constant, 60 Hz: 3.4
Dissipation Factor, 60 Hz: 0.2
Volume Resistivity, ohm · cm: 0.4 x 10⁹