50-3150 FR
FLAME RETARDANT THERMALLY CONDUCTIVE EPOXY RESIN; UL94 V-O LISTED

DESCRIPTION:
50-3150 FR has been formulated to meet the stringent non-burning requirements of UL94 V-O. 50-3150 FR Black Epoxy with Catalyst 190 and Catalyst 30 are listed with Underwriter’s Laboratory for passing UL94 V-O. This system offers excellent heat transfer, low shrinkage, and outstanding insulation properties.

Typical applications for 50-3150 FR include encapsulating power supplies, transformers, coils, insulators, sensors, etc... This system is an excellent choice for applications requiring high thermal conductivity and flame retardancy.

TYPICAL SPECIFICATIONS:
Viscosity @ 25°C cps 60,000
Specific Gravity, 25°C/25°C 1.6
Hardness, Shore D 90
Color Black
Tensile Strength, psi 9850
Linear shrinkage, in/in .002
Operating Temp. Range, °C 60 to +200
Dielectric Strength, V/mil 485
Dielectric Constant at 60 Hz 5.6
Volume Resistivity, ohm cm, 25°C 1.5 x 10^15
Dissipation Factor, 60 Hz .015
Thermal Conductivity, btu-in/hr·ft·°F 15
Compressive strength, psi 15,000
Coefficient of expansion, in/in °F 1.4 x 10^-5
Heat distortion, °C 155
INSTRUCTIONS FOR USE:

A. With Catalyst 190 listed with UL 94 V-0 (room temperature curing):
   1. By weight, thoroughly mix 5 parts Catalyst 190 to 100 parts 50-3150 FR resin.
   2. Degas and pour. Cure at room temperature for 12-24 hours at 25°C ambient.

B. With Catalyst 30 listed with UL 94 V-0 (Heat curing - Recommended for higher operating temperature and physical property applications):
   1. By weight, thoroughly mix 10 parts Catalyst 30 to 100 parts 50-3150 FR resin.
   2. Pour and cure according to one of the following recommended cure schedules:
      a) 85°C (185°F)  3-4 hours
      b) 100°C (212°F)  2-3 hours
      For optimum performance, an additional 2 hours @ 365°F (185°C) is recommended.

C. With Catalyst 150 (room temperature/heat curing):
   1. By weight, thoroughly mix 17 parts Catalyst 150 to 100 parts 50-3150 FR resin.
   2. Degas and pour. Cure at room temperature for 24 hours or for 2-3 hours at 35-40°C.

IMPORTANT:
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