



Epoxy, Urethane & Silicone Formulations

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 105 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, Volts/Mil	485	
Dielectric Constant at 60 Hz	5.6	
Volume Resistivity, Ohm cm at 25°C	1.5×10^{15}	
Dissipation Factor, 60 Hz	.015	
Thermal Conductivity, btu/hr/ft ² /°F/in.	15	
Compressive strength, psi	15,000	
Coefficient of expansion, in/in °F	1.4×10^{-5}	
Heat distortion, °C	155	*over

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INSTRUCTIONS FOR USE:

A. With catalyst 190 (room temperature curing):

1. By weight, thoroughly mix 5 parts catalyst 190 to one hundred parts 50-3150 FR resin.
2. Degas and pour. Cure at room temperature for 12-24 hours at 25°C ambient.

B. With catalyst 105 (heat curing):

1. By weight, thoroughly mix 6 parts catalyst 105 to one hundred parts 50-3150 FR resin.
2. Degas and pour. Cure at 100°C for two hours.

C. With catalyst 150 (room temperature/heat curing):

1. By weight, thoroughly mix 17 parts catalyst 150 to one hundred 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:

The information in this brochure is based on data obtained by our own research and is considered accurate. However, no warranty is expressed or implied regarding the accuracy of these data, the results to be obtained from the use thereof, or that any such use will not infringe any patent. This information is furnished upon the condition that the person receiving it shall make his own tests to determine the suitability thereof for his particular purpose.

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