50-3152 FR
FLAME RETARDANT THERMALLY CONDUCTIVE
UL 94 V-0 LISTED

DESCRIPTION:
50-3152 FR Potting and Encapsulating Compound has been formulated to meet the stringent non-burning requirements of UL 94 V-0. 50-3152FR Epoxy is listed with Underwriter’s Laboratories for passing UL 94 V-0. It also has a Comparative Tracking Index (CTI) of >600 Volts (PLC 0).

50-3152 FR is a two component epoxy potting and encapsulating system. This semi-rigid epoxy has excellent shock and vibration resistance along with good thermal conductivity.

50-3152 FR is designed for ease of use. It has a convenient 1:1 mix ratio and is low in viscosity.

FEATURES:
• Thermally conductive
• Easy 1:1 ratio
• Shock and vibration resistant

BENEFITS:
• Protects electronics by quickly transferring heat
• Simple to use in production
• Will not damage electronic components

TYPICAL SPECIFICATIONS:
Viscosity @ 25°C cps
Resin 20,000
Hardener 64,000
Mixed 31,000

Color
Resin Black
Hardener Beige
Mixed Black

Specific Gravity, 25°C
Resin 1.55
Hardener 1.49

Pot Life, 100 grams, 25°C, minutes 100

Hardness, Shore D
@ 25°C 80
@ 65°C 50

Lap Shear Strength, psi (Al to Al) 2,500
Dielectric Constant, 25°C, 100 Hz 5.0
Dielectric Strength, V/mil 400
TYPICAL SPECIFICATIONS (continued):
Volume Resistivity, ohm-cm, 25°C  7.6 x 10^13
Thermal Conductivity, W/m·°K  1.01
Operating Temperature, °C  -40 to +135
Compressive Strength, psi  7,500
Comparative Tracking Index (CTI), Volts  600

INSTRUCTIONS FOR USE:
1) The 50-3152 FR Epoxy and 50-3152 hardener contain fillers. Both components should be mixed well prior to use to ensure fillers are uniformly dispersed.

2) Mix equal parts resin to hardener by weight.

3) To ensure void free castings material can be vacuum degassed.

4) Pour and cure according to one of the following cure schedules:
   - 25°C  24-48 Hours
   - 65°C  2-3 Hours
   - 100°C  30 Minutes

IMPORTANT:
EPOXIES, ETC. MAKES NO EXPRESS OR IMPLIED WARRANTIES OR MERCHANTABILITY, FITNESS OR OTHERWISE WITH RESPECT TO ITS PRODUCTS. The information in this brochure is based on data obtained by our own research and is considered reliable. 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. The properties given are typical values and are not intended for use in preparing specifications. 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.

02/15