

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 PROPERTIES:

Viscosity, cps, 25 °C	
50-3152RFRBK Resin	20,000
50-3152CFRTA Catalyst	64,000
Mixed	31,000
Color	31,000
50-3152RFRBK Resin	Black
50-3152CFRTA Catalyst	Beige
Mixed	Black
Hardness, Shore D	Diack
25 °C	80
65 °C	50
Mix Ratio, By Weight	1:1
Operating Temperature Range, °C	-40 to +135
Pot Life, Minutes, 100 grams, 25 °C	100
Specific Gravity, 25 °C	
50-3152RFRBK Resin	1.55
50-3152CFRTA Catalyst	1.49
30 0 10 <u>2</u> 0. 1 111 1 3 3 3 3 3	
Compressive Strength, psi	7,500
Lap Shear Strength, psi (Al to Al)	2,500
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Comparative Tracking Index (CTI), Volts	600
Dielectric Constant, 25 °C, 100 Hz	5.0
Dielectric Strength, V/mil	400
Volume Resistivity, ohm-cm, 25 °C	7.6×10^{13}

Thermal Conductivity, W/m·K 1.01

INSTRUCTIONS FOR USE:

- 1. 50-3152RFRBK resin and 50-3152CFRTA catalyst contain fillers. Both components should be mixed well prior to use to ensure fillers are uniformly dispersed.
- 2. By weight, thoroughly mix equal parts 50-3152RFRBK resin and 50-3152CFRTA catalyst.
- 3. Degas, pour, and cure according to one of the following recommended cure schedules:
 - a) 25 °C
 b) 60 °C
 c) 100 °C
 24-48 Hours
 2-3 Hours
 30 Minutes

STORAGE, HANDLING, & SAFETY:

Store both components at 25 °C in original containers. The expected shelf life is 12 months in original containers.

Please read the Safety Data Sheet before using this or any other chemical.

AVAILABILITY:

This product is available in quarts, gallons, 5-gallon pails, and 55-gallon drums.

IMPORTANT:

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