



50-3170 EPOXY RUBBER

DESCRIPTION:

50-3170 is a high performance, thermally conductive epoxy rubber formulation designed for applications requiring excellent electrical insulation and low stress during cure.

50-3170 can be used for bonding sensitive components or for potting power supplies, coils, glass diodes, and other delicate assemblies.

50-3170 is an ideal resin system for encapsulation of electronic packages with low stress requirements. The resin has a rubber consistency and retains its properties and flexibility on long term aging.

50-3170 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. 50-3170 will bond to itself forming a totally sealed system.

This product is also available as the premixed and frozen F50-3170BK.

TYPICAL PROPERTIES:

Viscosity, cps, 25 °C	
Resin 50-3170RBK	15,000
Catalyst 50-3170CCL	600
Mixed	13,000
Color	Black
Hardness, Shore A	90
Mix Ratio, Resin:Catalyst, by Weight	100:4
Operating Temperature Range, °C	-70 to +150
Pot Life, 100-gram Mass, 25 °C	3 Hours
Gel Time	24 Hours
Specific Gravity, 25 °C	1.90
Elongation at Failure, %	24
Dielectric Strength, V/mil	480
Dielectric Constant, 60 Hz	3.4
Dissipation Factor, 60 Hz	0.2
Volume Resistivity, ohm-cm, 25 °C	1.5 x 10 ¹⁴
Thermal Conductivity, W/m·°K	1.73

**INSTRUCTIONS FOR USE:**

1. Mix 100 parts 50-3170RBK resin to 4 parts 50-3170CCL catalyst by weight.
2. Pour and cure according to one of the following recommended cure schedules:
 - a) 25 °C 24 hours
 - b) 65 °C 2-4 hours

If using as a premixed frozen syringe, follow our [Freezebond Handling Guide](#).

STORAGE, HANDLING, & SAFETY:

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

F50-3170 premixed frozen syringes should be stored in a -40°C (±3) freezer. Shelf life in these conditions is 3 months.

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

AVAILABILITY:

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

The premixed frozen F50-3170BK is available in 10 mL syringes.

IMPORTANT:

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