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### EPOXY RESIN RBC #3700

RBC #3700 System is a semi-flexible, unfilled epoxy system offering excellent shock resistance and electrical properties. Its low viscosity and long pot life lend to its excellent handling properties. RBC #3700 is an elevated cure system which makes it an excellent impregnating, potting, and encapsulating system for transformers, coils, and other components requiring excellent physical shock resistance.

**HANDLING PROPERTIES:**

Mixed Viscosity @ 25°C,cps 4,500  
Shelf Life, (closed Container @ 25°C) 12 Months

**PHYSICAL PROPERTIES (CURED):**

Color Translucent  
Specific Gravity @ 25°C 1.07  
Hardness, Shore D 60  
Linear Shrinkage, in./in. 0.010  
Moisture Absorption 10 Days @ 25°C, % 0.50  
Izod Impact Strength, ft. lbs./in. of notch 1.24  
Tensile Strength @ 25°C, psi 7,000  
Compressive Strength @ 25°C, psi 13,000

**THERMAL PROPERTIES (CURED):**

Thermal Conductivity, Cal/Sec/CM<sup>2</sup>/°C/CM X 10<sup>-4</sup> 5.8  
Thermal Stability, 1000 Hrs. @ 175°C, % Wt. Loss 0.40  
Coefficient of Thermal Expansion, in./in./°C X 10<sup>-6</sup> 55  
Heat Distortion Temperature, °C 40  
Operating Temperature Range, °C -65 to 155

**ELECTRICAL PROPERTIES (CURED):**

Volume Resistivity @ 25°C, OHM-CM 6 x 10<sup>16</sup>  
Dielectric Strength, Volts/Mil 475  
Dielectric Constant @ 25°C, 100 KC 4.10  
Dissipation Factor @ 25°C, 100 KC 0.008

**MIXING INSTRUCTIONS:** Weigh the desired amount of #3700 Resin into a clean container and combine with recommended amount of #3700 Hardener. Mix thoroughly. Entrapped air may be removed by vacuum.

**RECOMMENDED CURE SCHEDULE:**

Mix Ratio by weight: 100 parts resin to 165 parts hardener  
Pot Life @ 25°C 3 weeks  
@ 65°C 12 hours  
@100°C 30 minutes  
Cure Time @ 60°C 24 hours  
@100°C 2 - 3 hours

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