RBC INDUSTRIES, INC.

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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^2/°C/CM X 10^{-4}	5.8
Thermal Stability, 1000 Hrs. @ 175°C, % Wt. Loss	0.40
Coefficient of Thermal Expansion, in./in./°C X 10^{-6}	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^{16}
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