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♦ TECHNICAL BULLETIN ♦ TECHNICAL BULLETIN ♦ TECHNICAL BULLETIN ♦

Epoxy Resin RBC #3910

RBC-3910 epoxy system is a filled version of the RBC-3900 that offers higher thermal conductivity and improved electrical properties. It is relatively low in viscosity and its mix ratio of 1:1 adds to its convenient handling properties. Like RBC-3900, it is an epoxy system primarily designed for epoxy potting electrical and electronic components.

HANDLING PROPERTIES:

Mixed Viscosity @ 25°C, cps	5,000
Shelf Life, (closed Container @ 25°C)	12 months

PHYSICAL PROPERTIES (CURED):

Color	Black
Specific Gravity @ 25°C	1.60
Hardness, Shore D	85
Linear Shrinkage, in./in.	0.001
Moisture Absorption 10 Days @ 25°C, %	0.01
Izod Impact Strength, ft. lbs./in. of notch	0.65
Tensile Strength @ 25°C, psi	12,500
Compressive Strength @ 25°C, psi	20,900

THERMAL PROPERTIES (CURED):

Thermal Conductivity, cal/sec/cm ² /°C/cm X 10 ⁻⁴	8.2
Thermal Stability, 1000 Hrs. @ 175°C, % Wt. Loss	2.1
Coefficient of Thermal Expansion, in./in./°C X 10 ⁻⁶	38
Heat Distortion Temperature, °C	85
Operating Temperature Range, °C	-65 to 140

ELECTRICAL PROPERTIES (CURED):

Volume Resistivity @ 25°C, ohm-cm	9x10 ¹⁴
Dielectric Strength, volts/mil	485
Dielectric Constant @ 25°C, 100 KC	4.4
Dissipation Factor @ 25°C, 100 KC	0.055

MIXING INSTRUCTIONS:

Weigh the desired amount of #3910 Epoxy Resin into a clean container and combine with recommended amount of #3910 Epoxy Hardener. Mix thoroughly. Entrapped air may be removed by vacuum.

RECOMMENDED CURE SCHEDULE:

Mix Ratio by weight:	100 parts resin to 100 parts hardener
Mix Ratio by volume:	100 parts resin to 100 parts hardener
Pot Life @ 25°C:	50-60 MINS.
Cure Time @ 25°C:	72 HRS.
Cure Time @ 65°C:	1-2 HRS.