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♦ TECHNICAL BULLETIN ♦ TECHNICAL BULLETIN ♦ TECHNICAL BULLETIN ♦

## EPOXY RESIN RBC #3300

RBC #3300 is a filled, medium-viscosity, general-purpose potting and casting resin which offers low shrinkage, good air release, and excellent physical and electrical properties. It can be cured at room temperature or at elevated temperatures depending upon the hardener selected and the heat resistance of the part.

### HANDLING PROPERTIES:

Mixed Viscosity @ 25°C,cps	3,600
Shelf Life, (closed Container @ 25°C)	12 Months

### PHYSICAL PROPERTIES (CURED):

Color	Black
Specific Gravity @ 25°C	1.50
Hardness, Shore D	90
Linear Shrinkage, in./in.	0.19
Moisture Absorption 10 Days @ 25°C, %	0.29
Izod Impact Strength, ft. lbs./in. of notch	0.28
Tensile Strength @ 25°C, psi	5,800
Compressive Strength @ 25°C, psi	25,200

### THERMAL PROPERTIES (CURED):

Thermal Conductivity, Cal/Sec/CM <sup>2</sup> /°C/CM X 10 <sup>-4</sup>	7.8
Thermal Stability, 1000 Hrs. @ 175°C, % Wt. Loss	0.50
Coefficient of Thermal Expansion, in./in./°C X 10 <sup>-6</sup>	36
Heat Distortion temperature, °C	145
Operating Temperature Range, °C	-55 to 155

### ELECTRICAL PROPERTIES (CURED):

Volume Resistivity @ 25°C, OHM-CM	8 x 10 <sup>16</sup>
Dielectric Strength, Volts/Mil	475
Dielectric Constant @ 25°C, 100 KC	4.0
Dissipation Factor @ 25°C, 100 KC	0.022

*The above properties are typical of a system cured with hardener #AB-312.*

### RECOMMENDED HARDENERS:

A-110	A rigid, room temperature curing system with limited pot life and fast cure.
A-120	A resilient, low viscosity system with slightly longer pot life, that exhibits excellent resistance to thermal shock.
AB-312	Good resistance to heat, chemicals, thermal and mechanical shock, and good electrical properties at high humidity.

**MIXING INSTRUCTIONS:** Weigh the desired amount of #3300 Resin into a clean container and combine with recommended hardener in one of the ratios shown below.

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**RBC #3300 Continued**

<b>Hardeners</b>	<b>Parts by wt. per 100 pts. resin</b>	<b>Pot Life 100 grms. @ 25°C</b>
A-110	7	1 hr.
A-120	15	2 hrs.
AB-312	16	4 hrs.

**RECOMMENDED CURE SCHEDULE:**

<b>Hardener</b>	<b>Cure @ 25°C</b>	<b>Cure @ 65°C</b>	<b>Cure @ 100°C</b>	<b>Cure @ 130°C</b>
A-110	24 hrs.	2 hrs.	-	-
A-120	24 hrs.	2 hrs.	-	-
AB-312	-	6 hrs.	3 hrs.	2 hrs.

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