

EPOXY RESIN RBC #3600

RBC #3600 is a low-viscosity, low density, filled potting compound used where lightweight castings are necessary without the loss of acceptable physical and electrical properties. RBC #3600 possesses excellent air release and good flowability producing void-free castings. It is especially useful in the aerospace and automotive industries where increased emphasis is placed on high performance from lightweight components.

HANDLING PROPERTIES:

Mixed Viscosity @ 25°C, cps	1,300
Shelf Life, (closed Container @ 25°C)	12 Months

PHYSICAL PROPERTIES (CURED):

Color	Black
Specific Gravity @ 25°C	0.80
Hardness, Shore D	80
Linear Shrinkage, in./in.	0.004
Moisture Absorption 10 Days @ 25°C, %	0.21
Izod Impact Strength, ft. lbs./in. of notch	0.24
Tensile Strength @ 25°C, psi	3,800
Compressive Strength @ 25°C, psi	11,000

THERMAL PROPERTIES (CURED):

Thermal Conductivity, cal/sec/cm ² /°C/cm X 10 ⁻⁴	3.5
Thermal Stability, 1000 Hrs. @ 175°C, % Wt. Loss	0.50
Coefficient of Thermal Expansion, in./in./°C X 10 ⁻⁶	40
Heat Distortion Temperature, °C	130
Operating Temperature Range, °C	-55 to 140

ELECTRICAL PROPERTIES (CURED):

Volume Resistivity @ 25°C, ohm-cm	7x10 ¹⁵
Dielectric Strength, volts/mil	450
Dielectric Constant @ 25°C, 100 KC	2.80
Dissipation Factor @ 25°C, 100 KC	0.004

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 #3600 Resin into a clean container and combine with recommended hardener in the proper ratio as shown below:

Hardener	Parts by wt. per 100 pts. resin	Pot Life 100 grms. @ 25°C.
A-110	11.2	45-50 Minutes
A-120	24.0	60-65 Minutes
AB-312	26.0	3-4 Hours

RECOMMENDED CURE SCHEDULE:

Hardener	Cure @ 25°C	Cure @ 65°C	Cure @ 100°C	Cure @ 130°C
A-110	24 Hrs.	2 Hrs.	-	-
A-120	24 Hrs.	2 Hrs.	-	-
AB-312	-	6 Hrs.	3 Hours	2
Hours				