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♦ TECHNICAL BULLETIN ♦ TECHNICAL BULLETIN ♦ TECHNICAL BULLETIN ♦

EPOXY RESIN RBC #4800

RBC #4800 is a medium viscosity, filled casting resin offering low shrinkage and good machinability. It can be cured at room temperature or elevated temperatures depending upon the hardener selected and the properties required. The resin itself can be warmed slightly before the addition of hardener to facilitate mixing and flowability. With proper hardener selection, #4800 Resin can be used for very large as well as very small, intricate castings where good flowability and excellent air release are required.

HANDLING PROPERTIES:

Mixed Viscosity @ 25°C,cps 50,000
Shelf Life, (closed Container @ 25°C) 12 Months

PHYSICAL PROPERTIES (CURED):

Color Grey
Specific Gravity @ 25°C 1.60
Hardness, Shore D 90
Linear Shrinkage, in./in. 0.002
Moisture Absorption 10 Days @ 25°C, % 0.20
Izod Impact Strength, ft. lbs./in. of notch 0.40
Tensile Strength @ 25°C, psi 10,200
Compressive Strength @ 25°C, psi 25,000

THERMAL PROPERTIES (CURED):

Thermal Conductivity, cal/sec/cm²/°C/cm X 10⁻⁴ 20.0
Thermal Stability, 1000 Hrs. @ 175°C, % Wt. Loss 0.50
Coefficient of Thermal Expansion, in./in./°C X 10⁻⁶ 27.0
Heat Distortion temperature, °C 165
Operating Temperature Range, °C -65 to 165

ELECTRICAL PROPERTIES (CURED):

Volume Resistivity @ 25°C, ohm-cm 4x10¹⁴
Dielectric Strength, volts/mil 475
Dielectric Constant @ 25°C, 100 KC 3.90
Dissipation Factor @ 25°C, 100 KC 0.018

MIXING INSTRUCTIONS: Weigh the desired amount of #4800 Resin into a clean container and combine with AB-530 Hardener in one of the ratios shown below. Mix thoroughly for a minimum of three minutes by hand, or one minute by machine.

Rigid, Heat Resistance	100 parts RBC #4800 20 parts Hardener AB-530
Semi-Flexible, Impact and Shock Resistant	100 parts RBC #4800 30 parts Hardener AB-530
Flexible, Excellent Peel Strength	100 parts RBC #4800 40 parts Hardener AB-530

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RECOMMENDED CURE STRENGTH: Pot life ranges from 1 - 2 hours depending on batch size and hardener ratio. Cure for 72 hours at room temperature (25°C) or 2 hours at 65°C. For optimum properties, cure 1 hour at 65°C followed by 1 hour at 120°C.

The manufacturer, RBC Industries, Inc., hereby gives notice that any statement or representation made by the manufacturer in the sales of any and all of its products shall not create any warranty of merchantability expressed or implied. Statements or descriptions are informational only and the purchaser shall not be solely responsible for determining the adequacy of the product for any and all uses.