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♦ TECHNICAL BULLETIN ♦ TECHNICAL BULLETIN ♦ TECHNICAL BULLETIN ♦

Epoxy Resin RBC #3215

RBC-3215 epoxy resin is a modified, low-viscosity epoxy resin offering excellent wettability and air release. It is used both as an epoxy adhesive and epoxy potting resin (epoxy potting compound). It exhibits high peel strength, excellent shock and vibration resistance. Cured properties can be varied with the amount of epoxy hardener used, allowing a wide range of resiliency. It is ideal for bonding materials with different coefficients of thermal expansion and in addition, it bonds well to nickel, aluminum, nylon, polypropylene, glass and wood. As a room temperature epoxy potting compound, it offers long pot life, low exotherm, and good thermal and mechanical shock resistance.

HANDLING PROPERTIES:

Mixed Viscosity @ 25°C, cps	6,000
Pot Life, (100 grms. @ 25°C)	2 hours
Shelf Life, (closed Container @ 25°C)	12 months

PHYSICAL PROPERTIES (CURED):

Color	Light Amber
Specific Gravity @ 25°C	1.07
Hardness, Shore D	84 to 86
Linear Shrinkage, in./in.	0.005
Moisture Absorption 10 Days @ 25°C, %	0.55
Izod Impact Strength, ft. lbs./in. of notch	1.35
Tensile Strength @ 25°C, psi	9,300
Compressive Strength @ 25°C, psi	11,500

THERMAL PROPERTIES (CURED):

Thermal Conductivity, cal/sec/cm ² /°C/cm X 10 ⁻⁴	5.2
Thermal Stability, 1000 Hrs. @ 175°C, % Wt. Loss	1.20
Coefficient of Thermal Expansion, in./in./°C X 10 ⁻⁶	50
Heat Distortion Temperature, °C	85
Operating Temperature Range, °C	-55 to 100

ELECTRICAL PROPERTIES (CURED):

Volume Resistivity @ 25°C, ohm-cm	8x10 ¹²
Dielectric Strength, volts/mil	430
Dielectric Constant @ 25°C, 100 KC	3.3
Dissipation Factor @ 25°C, 100 KC	0.018

(Note: The above properties are typical of a semi-flexible cure cured for 1 hour @ 65°C followed by 1 hour @ 120°C.)

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MIXING INSTRUCTIONS: Weigh the desired amount of RBC-3215 Epoxy Resin into a clean container and combine with AB-530 Epoxy Hardener in one of the ratios shown below. Mix thoroughly for a minimum of three (3) minutes by hand or one (1) minute by machine.

Rigid, Heat Resistance	100 parts RBC-3215 50 parts Epoxy Hardener AB-530
Semi-Flexible, Impact and Shock Resistant	100 parts RBC-3215 75 parts Epoxy Hardener AB-530
Flexible, Excellent Peel Strength	100 parts RBC-3215 100 parts Epoxy Hardener AB-530

RECOMMENDED CURE STRENGTH: Pot life ranges from 1-3 hours depending upon 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.