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♦ TECHNICAL BULLETIN ♦ TECHNICAL BULLETIN ♦ TECHNICAL BULLETIN ♦

EPOXY RESIN RBC #2500

RBC #2500 is a thixotropic epoxy adhesive developed for high temperature bonding, offering excellent chemical resistance, and formulated for ease in handling and application. This two-part, solvent-free system cures at room temperature, and when cured at higher temperatures, maintains a non-sag consistency even on vertical surfaces.

HANDLING PROPERTIES:

Mixed Viscosity @ 25°C, cps	Thixotropic
Shelf Life, (Closed Container @ 25°C)	12 Months

PHYSICAL PROPERTIES (CURED):

Color	Translucent
Specific Gravity @ 25°C	1.18
Hardness, Shore D	85
Linear Shrinkage, in./in.	0.011
Moisture Absorption 10 Days @ 25°C, %	0.20
Izod Impact Strength, ft. lbs./in. of notch	0.60
Bond Shear Strength, psi Al/Al @ 25°C	4,850
Tensile Strength @ 25°C, psi	13,000
Compressive Strength @ 25°C, psi	19,000

THERMAL PROPERTIES (CURED):

Thermal Conductivity, cal/sec/cm ² /°C/cm X 10 ⁻⁴	5.2
Thermal Stability, 1000 Hrs. @ 175°C, % Wt. Loss	0.40
Coefficient of Thermal Expansion, in./in./°C X 10 ⁻⁶	50
Heat Distortion Temperature, °C	90
Operating Temperature Range, °C	-65 to 155

ELECTRICAL PROPERTIES (CURED):

Volume Resistivity @ 25°C, ohm-cm	7x10 ¹⁵
Dielectric Strength, volts/mil	450
Dielectric Constant @ 25°C, 100 KC	4.3
Dissipation Factor @ 25°C, 100 KC	0.030

The above properties were determined using Hardener #B-130 cured for 2 hours @ 100°C.

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.
- B-130 A long pot life system with good resistance to heat, chemicals, thermal and mechanical shock, and excellent retention of mechanical properties at elevated temps.

MIXING INSTRUCTIONS: Weigh the desired amount of #2500 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	14	35-40 mins.
A-120	30	40-50 mins.
B-130	3.5	12 hrs.

RECOMMENDED CURE SCHEDULE:

Hardener	@ 25°C. (77°F.)	@65°C. (149°F.)	100°C.
A-110	24 hrs.	2 hrs.	-
A-120	24 hrs.	2 hrs.	-
B-130	-	-	2 hrs.