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♦ TECHNICAL BULLETIN ♦ TECHNICAL BULLETIN ♦ TECHNICAL BULLETIN ♦

EPOXY RESIN RBC #5520

RBC #5520 is a thixotropic, room temperature cure epoxy designed for use as a protective coating where good chemical resistance, and excellent thermal and mechanical shock resistance are required. It is identical to Resin #5500 except it is lower in thixotropy. It lends itself to adhesive applications such as bonding glass, wood, aluminum, polyethylene, nylon, nickel, and steel to themselves or each other.

HANDLING PROPERTIES:

Mixed Viscosity @ 25°C, cps	Thixotropic
Pot Life	90 Minutes
Shelf Life, (closed Container @ 25°C)	12 Months

PHYSICAL PROPERTIES (CURED):

Color	Translucent
Specific Gravity @ 25°C	1.10
Hardness, Shore D	80
Linear Shrinkage, in./in.	0.006
Moisture Absorption 10 Days @ 25°C, %	0.05
Izod Impact Strength, ft. lbs./in. of notch	1.30
Tensile Strength @ 25°C, psi	9,000
Compressive Strength @ 25°C, psi	12,000

THERMAL PROPERTIES (CURED):

Thermal Conductivity, cal/sec/cm ² /°C/cm X 10 ⁻⁴	5.00
Thermal Stability, 1000 Hrs. @ 175°C, % Wt. Loss	0.30
Coefficient of Thermal Expansion, in./in./°C X 10 ⁻⁶	51.0
Heat Distortion Temperature, °C	85
Operating Temperature Range, °C	-65 to 100

ELECTRICAL PROPERTIES (CURED):

Volume Resistivity @ 25°C, ohm-cm	8 x 10 ¹⁴
Dielectric Strength, volts/mil	450
Dielectric Constant @ 25°C, 100 KC	3.8
Dissipation Factor @ 25°C, 100 KC	0.020

The above properties are typical of a semi-flexible formulation cured for 1 hour @ 150°F and 1 hour @ 248°F.

Page 2
RBC # 5520 Continued

Recommended Cure Schedule: Pot life ranges from 1 to 2 hours depending on batch size and hardener ratio. Cure for 24 hours at room temperature (77°F) or 1 hour at 150°F.

Mixing Instructions: Weigh the desired amount of #5520 Resin into a clean container and combine with #AB-532 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 resistant 100 parts RBC #5520
 50 parts Hardener #AB-532

Semi-flexible, impact and shock resistant 100 parts RBC #5520
 100 parts Hardener #AB-532

Flexible, excellent peel strength 100 parts RBC #5520
 200 parts Hardener #AB-532