



80 Cypress Street, Warwick, RI 02888 ♦ U.S.A.
401-941-3000 ♦ 800-272-7752 ♦ Fax: 1-401-941-0150
info@rbcepoxy.com ♦ www.rbcepoxy.com

♦ TECHNICAL BULLETIN ♦ TECHNICAL BULLETIN ♦ TECHNICAL BULLETIN ♦

EPOXY RESIN RBC #3200

RBC #3200 is a modified, low-viscosity resin offering excellent wettability and air release. It is similar to #3100 in versatility, but by comparison offers longer pot life, greater impact resistance, and improved handling characteristics. #3200 Resin can be used for potting, casting, impregnation and other applications where a low viscosity system is desirable.

HANDLING PROPERTIES:

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

PHYSICAL PROPERTIES (CURED):

| | |
|---|--------|
| Color | Clear |
| Specific Gravity @ 25°C | 1.12 |
| Hardness, Shore D | 90 |
| Linear Shrinkage, in./in. | 0.012 |
| Moisture Absorption 10 Days @ 25°C, % | 0.19 |
| Izod Impact Strength, ft. lbs./in. of notch | 0.65 |
| Tensile Strength @ 25°C, psi | 9,900 |
| Compressive Strength @ 25°C, psi | 18,600 |

THERMAL PROPERTIES (CURED):

| | |
|---|------------|
| Thermal Conductivity, cal/sec/cm ² /°C/cm X 10 ⁻⁴ | 5.10 |
| Thermal Stability, 1000 Hrs. @ 175°C, % Wt. Loss | 0.55 |
| Coefficient of Thermal Expansion, in./in./°C X 10 ⁻⁶ | 52.0 |
| Heat Distortion Temperature, °C | 125 |
| Operating Temperature Range, °C | -55 to 130 |

ELECTRICAL PROPERTIES (CURED):

| | |
|------------------------------------|----------------------|
| Volume Resistivity @ 25°C, ohm-cm | 4 x 10 ¹⁵ |
| Dielectric Strength, volts/mil | 465 |
| Dielectric Constant @ 25°C, 100 KC | 4.3 |
| Dissipation Factor @ 25°C, 100 KC | 0.03 |

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-122 | 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. |

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Epoxy #3200 Continued

MIXING INSTRUCTIONS: Weigh the desired amount of #3200 Resin into a clean container and combine with recommended hardener in one of the ratios shown below.

| Hardeners | Parts by wght. per 100 pts. resin | Pot Life 100 grms. @ 25°C |
|------------------|--|--------------------------------------|
| A-110 | 14 | 35-40 mins. |
| A-122 | 30 | 40-50 mins. |
| AB-312 | 32 | 3 hrs. |

RECOMMENDED CURE SCHEDULE:

| Hardener | Cure @ 25°C | Cure @ 65°C | Cure @ 100°C | Cure @ 130°C |
|-----------------|--------------------|--------------------|---------------------|---------------------|
| A-110 | 24 hrs. | 2 hrs. | - | - |
| A-122 | 24 hrs. | 2 hrs. | - | - |
| AB-312 | - | 6 hrs. | 3 hrs. | 2 hrs. |