

### CONAPOXY® RN-1200

**CONAPOXY® RN-1200** is an undiluted, epoxy potting and casting resin. When cured with any of the hardeners presented below, these systems possess low viscosity, low shrinkage, low exotherm, excellent resistance to thermal shock, good electrical properties and hardnesses of 75-85 Shore D are obtained.

- CONACURE® EA-02** provides: Room temperature cure, low viscosity, pot life (30 minutes), rigid.
- CONACURE® EA-028** provides: Limited flexibility, pot life (40 minutes), low viscosity. Will cure in thin films at room temperature. Very good thermal shock resistance.
- CONACURE® EA-87** provides: Limited flexibility, pot life (60 minutes), low viscosity. EA-87 requires heat to cure in thin films. Less expensive than EA-028.
- CONACURE® EA-117** provides: High operating temperature (to 155°C), medium/high viscosity, long pot life (8 hours), high temperature cure, rigid.

### TYPICAL PRODUCT CHARACTERISTICS

	<b>CONAPOXY® RN-1200</b>	<b>CONACURE® EA-02</b>	<b>CONACURE® EA-028</b>	<b>CONACURE® EA-87</b>	<b>CONACURE® EA-117</b>
Color	Amber	Clear Amber	Clear Amber	Light Amber	Dark Amber
Specific Gravity @ 25°C	1.15 - 1.17	0.980	1.00	0.960	1.15
Viscosity, cps	10,000	55	40	55	300

### TYPICAL CURED PROPERTIES

CONAPOXY® RN-1200 Cured with:	<b>CONACURE® EA-02</b>	<b>CONACURE® EA-028</b>	<b>CONACURE® EA-87</b>	<b>CONACURE® EA-117</b>
<b><u>PHYSICAL PROPERTIES</u></b>				
Hardness, Shore D	84	84	85	85
Tensile Strength, psi	10,000	7,600	8,100	9,000
Compressive Strength, psi	18,000	12,000	13,500	19,000
Flexural Strength, psi	15,000	8,100	9,000	13,000
Linear Shrinkage, %	1.1	1.2	0.8	1.2
Glass Transition Temp., °C	85-90	70-75	85-90	155-165
Coefficient of Thermal Expansion, in/in/°C	55 x 10 <sup>-6</sup>	55 x 10 <sup>-6</sup>	55 x 10 <sup>-6</sup>	55 x 10 <sup>-6</sup>
Thermal Conductivity (CAL x CM/SEC x Sqcm x °C)	4-5 x 10 <sup>-4</sup>	4-5 x 10 <sup>-4</sup>	4-5 x 10 <sup>-4</sup>	4-5 x 10 <sup>-4</sup>
<b><u>ELECTRICAL PROPERTIES</u></b>				
Dielectric Strength, vpm	350	350	350	380
Dielectric Constant @ 1 Khz, 25°C	3.5	4.7	4.2	4.1
Dissipation Factor @ 1 Khz, 25°C	0.017	0.001	0.035	0.008
Volume Resistivity, ohm-cm @ 25°C	2.0 x 10 <sup>14</sup>	4.0 x 10 <sup>13</sup>	4.2 x 10 <sup>15</sup>	4.0 x 10 <sup>14</sup>
Surface Resistivity, ohms @ 25°C	2.4 x 10 <sup>15</sup>	1.0 x 10 <sup>15</sup>	8.8 x 10 <sup>15</sup>	7.5 x 10 <sup>16</sup>
<b><u>RECOMMENDED PROCESSING PROCEDURE</u></b>				
Mix Ratio by weight, Resin/Hardener	100/11	100/28	100/37	100/20
Mixed Viscosity @ 25°C, cps	3,000	1,500	1,500	2,000
Specific Gravity	1.10	1.20	1.05	1.20
Gel Time @ 25°C	30 minutes	40 minutes	60 minutes	8 hours
Cure Schedule @ 25°C, hours	24	24	24	---
Alternate Cure @ 60°C, hours	2	2	2	---
@ 150°C, hours	---	---	---	2

### **STORAGE AND HANDLING**

The shelf life CONAPOXY® RN-1200 resin and hardeners is 18 months from date of manufacture when in the original unopened container at temperatures of 65-85°F.

\*CONACURE EA-117 may crystallize, heat to 60°C to re-melt and mix thoroughly.

**CAUTION:** Avoid contact with skin and eyes. If contact occurs wash with soap and water. Use only in well-ventilated areas and avoid prolonged or repeated breathing of fumes.

### **AVAILABILITY**

CONAPOXY® RN-1200 is available in gallon, 5-gallon and 55-gallon containers.

CONACURE® hardeners are available in pint, quart, gallon and 5-gallon containers.

An EVALUATION KIT of CONAPOXY® RN-1200 and hardener of your choice is available at a nominal fee.

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The information presented here is based on carefully conducted laboratory tests and is believed to be accurate. However, results cannot be guaranteed and it is suggested that customers confirm results in their own laboratory before plant tests are made. Nothing contained in this bulletin shall be construed as a recommendation to use any product or process in violation of the claims of any patent now in effect.

NOTICE: Precautionary labels and Materials Safety Data Sheet(s) for all materials referred to, whether the materials are produced by CYTEC INDUSTRIES, INC. or other manufacturers, should be fully read and understood by all supervisory personnel and employees before using. For additional safety and health information, contact CYTEC INDUSTRIES INC. Purchaser has the responsibility for determining any applicability of and compliance with federal, state, and local laws and/or regulations involving labeling, use, and waste disposal, particularly in making consumer products.