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## **POLYCAST 290** **Epoxy Casting Compound** **Room Temperature Cure**

**DESCRIPTION:**

Polycast 290 is a 100% solids epoxy system. It is a filled, low cost, general purpose encapsulant. Polycast 290 is designed for room temperature cure, and has excellent moisture resistance. It is also available as a fast cure system. PC 290 is machine dispensible.

**PROPERTIES – UNCURED**

	<b>(Part A)</b>	<b>Part B</b>
Color , visual .....	Orange	Clear
Viscosity, ASTM-D-2393 (c.p.s. @ 25° C)..	7-10,000	5-700
Specific Gravity .....	3.63	0.96
Mixed Specific Gravity.....	2.77	
Mix Ratio (weight).....	100:3	
Mixed Viscosity, ASTM-D-2393 (@ 25° C)	5-8000	
Pot Life @ 25°C (100 grams) .....	40 minutes	

**PROPERTIES – CURED**

**PHYSICAL**

Hardness, ASTM-D-2240 (Durometer).....	Shore D 82
Tensile Strength, ASTM-D-638 .....	8,500 psi
Tensile Elongation, ASTM-D-638 .....	2 %
Flexural Strength, ASTM-D-790.....	9,500 psi
Coefficient of Thermal Expansion .....	20 x 10 <sup>-5</sup>
Heat Distortion Point.....	80°C
Water Absorption.....	0.08%
Dielectric Strength, ASTM-D-149 (volts/mil) .....	419
Dielectric Constant, ASTM-D-150 .....	3.5
Dissipation Factor, ASTM-D-150.....	0.035
Volume Resistivity, ASTM-D-257 (ohm-cm).....	1 x 10 <sup>14</sup>
Thermal Conductivity, BTU's.....	2

**MIXING INSTRUCTIONS**

Pre-mix Part A and Part B separately. Then measure 100:7.5 by weight (A to B). Mix thoroughly scraping the sides and bottom of the container. Evacuate and then pour into mold or cavity.

**CURE SCHEDULE**

Room temperature cure @75°F with full properties after 24 hours.

To accelerate cure, allow 2 hours @ room temperature, then 2 hours @ 125°F.