



POLYCAST INDUSTRIES, INC.
 130 South 2nd Street • N. Bay Shore, NY 11706
 631-595-2530 • Fax: 631-595-2537 • 800-486-3512
 www.polygonindustries.com • info@polygonindustries.com

POLYCAST- 250

FLEXIBLE, LOW CTE, SHOCK RESISTANT EPOXY COMPOUND

DESCRIPTION

PC 250 is a flexible, non-abrasive filled 100% solids epoxy system. It is a resin which exhibits low coefficient of thermal expansion and exceptional shock resistance. PC 250 is designed in such a way that the mix ratio is 1:1 by volume. It is a room temperature cure, has excellent moisture resistance, and is also machine dispensable.

PROPERTIES – UNCURED

| | Part A | Part B |
|---|---------------|----------------|
| Color , visual | Clear | Black or White |
| Viscosity, ASTM-D-2393 (c.p.s. @ 25° C).. | 600 | 2500 |
| Specific Gravity | 1.12 | 1.29 |
| Mix Ratio (volume) | 1:1 | |
| Mixed Viscosity, ASTM-D-2393 (@ 25° C) | 900-1500 | |
| Pot Life @ 25°C (100 grams) | 15-20 minutes | |
| Shelf Life @ 70° F | 12 months | |

PROPERTIES – CURED

| | |
|--|----------------------|
| Hardness, ASTM-D-2240(Durometer)..... | Shore A 70 |
| Tensile Strength, ASTM-D-638 | 3,500 psi |
| Tensile Elongation, ASTM-D-638 | 25% |
| Coefficient of Thermal Expansion | 7 x 10 ⁻⁶ |
| Water Absorption..... | 0.1% |
| Dielectric Strength, ASTM-D-149 (volts/mil) | 370 |
| Dielectric Constant, ASTM-D-150 | 4.5 |
| Dissipation Factor, ASTM-D-150..... | 0.08 |
| Volume Resistivity, ASTM-D-257 (ohm-cm)..... | 7 x 10 ¹² |
| Thermal Conductivity, (BTU*in)/(hr*ft ² *°F)..... | 3.5 |
| Temperature Class..... | B |

MIXING INSTRUCTIONS

Pre-mix Part A and Part B separately. Then measure 1:1 by volume (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.
 Demold time @ 75°F - 4 hours