

50-2370 FAST GELLING THERMALLY CONDUCTIVE POLYURETHANE POTTING COMPOUND

DESCRIPTION:

50-2370 is a new thermally conductive polyurethane potting compound. This system is designed for low stress on sensitive components during and after cure. It is formulated for applications requiring low exotherm, low shrinkage, excellent electrical properties and a rapid 5 minute gel time.

This system is a good choice for potting applications containing surface mount components or any application requiring low stress, thermal conductivity and flame retardancy and is suitable for outdoor use.

FEATURES:

- Low viscosity
- Excellent electrical insulation
- Low shrinkage
- Thermally conductive
- Rapid Gel and Cure
- Low stress on sensitive components
- Excellent water resistance
- Thermal shock resistance
- Flame retardant

TYPICAL SPECIFICATIONS:

Standard Color	Black
Viscosity, cps	
(R) Polyol	17,000
(C) Isocyanate	150
Specific Gravity, 25 °C	
(R Polyol)	1.56
(C) Isocyanate	1.21
Hardness, Shore D	65
Tensile strength, psi	2,200
Elongation, %	35
Thermal Shock, -65 °C to + 130 °C	Passes
Linear shrinkage, %	0.5
Linear Thermal Expansion, in/in/°C	16.2 x 10 ⁻⁵
Thermal conductivity, W/m- °K	1.15
Water Absorption, %	
24 hours immersion	0.074
7 days immersion	0.18
Fungus Resistant	Non – Nutrient
Dielectric constant, 100 Hz	4.3
Dielectric Strength, Volts/mil	540

**TYPICAL SPECIFICATIONS (continued):**

Volume Resistivity, ohm-cm	2.1×10^{14}
Surface Resistivity, ohms	6.0×10^{17}
Operating temperature range, °C	-65 to + 135 °C

INSTRUCTIONS FOR USE:

- 1) Agitate Polyol thoroughly to re-disperse fillers. Some settling during transit or storage is common.
- 2) By weight mix 100 parts 50-2370 Polyol (resin) to 20 parts Isocyanate. By volume 100 to 26 (R:C). Avoid using paper cups & wooden stirrers. Use glass or metal containers and stirrers.
- 3) Pour and cure, this product gels within 5 minutes and is fully cured within 20 minutes.

STORAGE & HANDLING:

50-2370 should be stored at 65 – 85°F in original tightly sealed containers. If containers are opened and the contents partially used, the material left in the container should be blanketed with dry nitrogen before sealing. Expected shelf life is 12 months in original unopened containers.

This product does not contain TDI or MOCA. It also has a low vapor pressure which greatly reduces the vapor hazard and toxicity associated with other commercially available urethanes.

Please read SDS (Safety Data Sheet) before using this or any other chemical.

IMPORTANT:

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