

50-2368 FR THERMALLY CONDUCTIVE POLYURETHANE POTTING COMPOUND

DESCRIPTION:

50-2368 FR is a thermally conductive polyurethane potting compound. This is a faster gelling version of 50-2366 FR. 50-2368 FR polyurethane resin system is formulated for applications requiring low exotherm, low shrinkage, and excellent electrical properties.

This system is a good choice for potting applications containing surface mount components or any application requiring low stress, thermal conductivity, and flame retardancy. 50-2368 FR is suitable for outdoor use.

For a very fast curing version of this product consider 50-2370 FR with a tack free time of 20 minutes.

FEATURES:

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

TYPICAL SPECIFICATIONS:

Viscosity, cps	
Part A Polyol	17,000
Part B Isocyanate	150
Mixed	4,000
Color	Black
Hardness, Shore D	65
Mix Ratio, by weight	100:20
Operating Temperature, °C	-65 to +135
Gel Time, minutes	30
Specific Gravity, 25°C	
Part A Polyol	1.56
Part B Isocyanate	1.21
Elongation, %	35
Tensile Strength, psi	2,200
Dielectric Constant, 100 Hz	4.3
Dielectric Strength, Volts/mil	540
Surface Resistivity, ohms	6.0×10^{17}
Volume Resistivity, ohm-cm	2.1×10^{14}



Linear Shrinkage, %	0.5
Linear Thermal Expansion, in/in/°C	16.2 x 10 ⁻⁵
Thermal Conductivity, W/m- °K	1.15
Thermal Shock, -65°C to + 130°C	Passes
Water Absorption, %	
24 hours immersion	0.074
7 days immersion	0.18

INSTRUCTIONS FOR USE:

- 1) Agitate Part A thoroughly to re-disperse fillers. Some settling during transit or storage is common.
- 2) By weight mix 100 parts 50-2368 FR Part A to 20 parts Part B. By volume 100 Parts A to 26 Parts B. Avoid using paper cups & wooden stirrers. Use glass or metal containers and stirrers.
- 3) Pour and cure according to one of the following schedules:

A.	25°C	12-18 hours
B.	60°C	30-45 minutes

STORAGE & HANDLING:

50-2368 FR 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.

50-2368 FR 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.

PACKAGING:

Available in bulk packaging - quarts, gallons, and 5-gallon pails.

IMPORTANT:

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