50-2366 FR
THERMALLY CONDUCTIVE POLYURETHANE POTTING COMPOUND

DESCRIPTION:
50-2366FR is a new thermally conductive polyurethane potting compound. This flexible system is designed for low stress on sensitive components during and after cure. 50-2366FR 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. 50-2366FR is suitable for outdoor use.

For a very fast curing version of this product consider the 50-2370FR. This product will be tack free in 20 minutes.

50-2366FR is fungus resistant and passes Fungus Resistance Testing (MIL-STD-810F, Method 508.5).

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

TYPICAL SPECIFICATIONS:
Standard Color  Black
Viscosity, cps
  Part A Polyol  17,000
  Part B Isocyanate  150
Specific Gravity, 25°C
  Part A Polyol  1.56
  Part B 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
TYPICAL SPECIFICATIONS (continued):

- Water Absorption, %
  - 24 hours immersion: 0.074
  - 7 days immersion: 0.18
- Fungus Resistant: Non – Nutrient, Passes MIL-STD-810F
- Dielectric constant, 100 Hz: 4.3
- Dielectric Strength, V/mil: 540
- Volume Resistivity, ohm-cm: $2.1 \times 10^{14}$
- Surface Resistivity, ohms: $6.0 \times 10^{17}$
- Operating temperature range, °C: -65 to + 135 °C

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 50-2366FR 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 24 hours
   B. 60 °C 2 hours
   C. 100 °C 20-30 minutes

STORAGE & HANDLING:

50-2366FR 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.

50-2366FR 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 Safety Data Sheet before using this or any other chemical.

IMPORTANT:

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