PROTAVIC METRETHANE™ 4734
FLEXIBLE URETHANE ELASTOMER

PRODUCT DESCRIPTION

PROTAVIC Metrethane 4734 is a part of a new class of PROTAVIC flexible urethane elastomers specifically designed for demanding electronic applications. Metrethane 4734 is a two-component, low viscosity system that provides excellent protection of electronic components ranging from transducers, sensors, load cells, delicate magnetic coils and bobbins to power supply applications where minimal inductance drop after potting is required.

TYPICAL PROPERTIES

Should not be used for specification purposes:

Composition: Urethane resin
Color: Translucent/Opaque
Any requested

Mixed Viscosity:
Brookfield # 3 spindle (25°C), centipoise

<table>
<thead>
<tr>
<th>Product</th>
<th>20 RPM</th>
<th>50 RPM</th>
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<tr>
<td>4734</td>
<td>1920</td>
<td>1650</td>
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Specific Gravity: 1.39
Flash Point, Activator, °C: 93 (200°F)
Flash Point, Base, °C: 204 (400°F)
Working Life, 100 grams: 0.5 hours
Shelf Life: 6 months
Mix ratio, parts by weight: 1: 5
Mix ratio, parts by volume: 1: 4

Cured Resin Properties

Mechanical
Tensile Strength, psi: 850
Lap shear Strength, psi: 120
Aluminum to Aluminum: 400-900
Elongation at Break, %: 80 +/- 5
Glass Transition Temp. Tg: 10°C (50°F)

Electrical
Volume Resistivity: 5.4 X 10^13 ohms-cm
Dielectric Constant, 1MHz: 3.40
Dielectric Strength: 400 volts/mil

Thermal
Operating Temperature °C: -70 to 105

PRODUCT BENEFITS

⇒ Quick cure at common processing temps.
⇒ Can be designed with any color
⇒ Low-cost replacement for silicone RTV
⇒ Excellent damping properties
⇒ Good coefficient of thermal expansion
⇒ Protects components from internal stresses
⇒ Prevents inductance drop after potting

Recommended Time/Temperature Exposure to Achieve Cure in Infrared or Convection Oven

<table>
<thead>
<tr>
<th>Hours</th>
<th>Temp. °C</th>
<th>Temp. °F</th>
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<tr>
<td>2 hrs</td>
<td>65</td>
<td>149</td>
</tr>
<tr>
<td>24 hrs</td>
<td>25</td>
<td>77</td>
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Preparation of Mixture

For product purchased in two-component kits, mix the entire contents of Metrethane 4734 base and activator in their original shipping containers to a uniform consistency and color, each time, before dispensing. Take care to incorporate all material adhering to the bottom, sides and corners of the containers. Mechanical mixing of the components for two to three minutes is satisfactory. Measure only the approximate amount that can be applied in 0.5 hours. Blanket containers of unused base and activator with nitrogen prior to re-sealing for storage.

Air Removal

Air entrapment during mixing may be removed in vacuum (5 mm of mercury). The holding container should be no more than one-third full. Allow the mixture to foam and then subside. Maintain the low pressure for several more minutes, at which point most of the large bubbles will have broken.
Application
The material can be poured in the required thickness after which the parts are set aside to cure using the recommended cure schedules listed on the first page.

STORAGE AND HANDLING
PROTAVIC Metrethane 4734 is a blend of urethane resins and curing agents. Keep stored in the original container at temperatures from 0°C to 25°C. The product is uniform when packaged. Read material safety data sheets before handling. Keep containers closed when not in use. Effective ventilation is necessary. Goggles, gloves and protective clothing should be worn during handling or exposure. Refer to the product MSDS for more information.

Availability and Order Information
Metrethane 4734 is available as a two-component kit consisting of separate containers of urethane resin and curing agent. Metrethane 4734 is available in pint, quart, one gallon, and five gallon kits.

Packaging Sizes & Types
Pints, Quarts, Gallons, 5 Gallons, 55 Gallon Drums

Ordering Information
When ordering, specify the name, number, letter designation, color, quantity, container size and packaging form. The order should be placed with the PROTAVIC order entry department. The minimum order size is $100.00. Evaluation kits are available for $40.00. The $40.00 fee will be credited against the first order for the product.