

UNFILLED FAST CURING URETHANE 20-2354R (Formerly Lab# 102203A)

DESCRIPTION:

20-2354 R is a two component, low durometer, potting, casting, and encapsulating compound. This unfilled system provides excellent hydrolytic stability and low moisture permeability. It has outstanding thermal cycling properties, low glass transition temperatures and low embedment stress on sensitive electronic components.

This unique formulation maintains its integrity over a wide temperature range, -40°C to 125°C. The low glass transition temperature of -72°C makes this urethane ideal for low temperature potting applications.

20-2354R should be used with 20-2350C Isocyanate.

FEATURES

- Maintains flexibility at low temperatures
- Excellent electrical insulation
- Low stress on sensitive components
- Hydrolytic stability
- Unaffected by moisture at high temperatures
- No shrinkage
- Thermal cycling stability
- · Chemical resistance
- Hydrolytic stability

TYPICAL SPECIFICATIONS:

Viscosity, 25°C, cps
Resin
Catalyst
Mixed
Mix Ratio, (20-2354R:20-2350C)

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1.600

By Weight 100:10 Color Clear Hardness, Shore A 50

Operating Temperature Range, °C -40 to 125 Glass Transition Temperature, °C -72

Pot Life, 100 grams, 25°C 2 Hours
Specific Gravity, 25°C 0.90



| Coefficient of Thermal Expansion, 1/°C Tensile Strength, psi Elongation, °10 | 2.28 x 10 ⁻⁴ 150 50 |
|--|--------------------------------------|
| Dielectric Constant, 25°C, 1kHz | 4.5 |
| Surface Resistivity, 25°C, ohm | 1x10 ¹⁶ |
| Volume Resistivity, ohm-cm | 6x10 ¹⁶ |

INSTRUCTIONS FOR USE:

- 1. By weight, thoroughly mix 10 parts 20-2350C Isocyanate to 100 parts 20-2354R. Two components should be carefully weighed in metal, plastic, or glass containers. Avoid using paper cups and wooden stirrers.
- 2. Mixed material can be degassed at 29 in Hg to ensure bubble free castings. Containers should be large enough to allow frothing.
- 3. Cure according to one of the following cure schedules:

| a) | 25°C | 24 Hours |
|----|------|------------|
| b) | 45°C | 2.5 Hours |
| c) | 65°C | 1.5 Hours |
| d) | 85°C | 40 Minutes |

STORAGE, HANDLING & SAFETY:

Store both components at 75-85°F in original containers. If the containers are opened and the contents partially used, the material left in the container should be blanketed with dry nitrogen before sealing.

Please read the Safety Data Sheet before using this or any other chemical.

AVAILABILITY:

This product is available in quarts and 5-gallon containers.

IMPORTANT:

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