

# UNFILLED LOW DUROMETER CLEAR URETHANE ELASTOMER

## 20-2356

### Shore A - 45

#### DESCRIPTION:

This two-component urethane is a low durometer (45 Shore A), potting, casting, and encapsulating compound. It is an unfilled material engineered to provide excellent hydrolytic stability and low moisture permeability. It has outstanding thermal cycling properties, a low glass transition temperature and low embedment stress to sensitive electronic components.

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

This is a faster curing version of the 20-2350.

#### FEATURES

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

#### TYPICAL SPECIFICATIONS:

Viscosity, 25°C, cps	
Resin	4500
Catalyst	20
Mixed	1600
Mix Ratio, (Resin:Catalyst)	
By Weight	100:10
By Volume	100:7.5
Color	Clear
Hardness, Shore A	45
Operating Temperature range, °C	-40 to +125
Glass Transition Temperature, °C	-72
Pot Life, 100 grams, 25°C	15 minutes
Specific Gravity, 25°C	
Resin	0.90
Catalyst	1.2



Coefficient of thermal expansion, 1/°C	2.28 x 10 <sup>-4</sup>
Tensile strength, psi	150
Elongation, %	50
Dielectric constant, 25°C, 1kHz	4.5
Surface resistivity, 25°C, ohm	1x10 <sup>16</sup>
Volume resistivity, ohm-cm	6x10 <sup>16</sup>

**INSTRUCTIONS FOR USE:**

1. By weight, thoroughly mix according to mix ratio provided in above specifications. 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 1 to 5 mm 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 6 to 8 Hours
  - b) 45°C 1.5 Hour
  - c) 65°C 1 Hour
  - d) 85°C 15 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 gallon and 5-gallon containers.

**IMPORTANT:**

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