EPOXIES
INNOVATIVE BONDING SOLUTIONS ETC.

TECHNICAL BULLETIN

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:

Standard color(Available Clear)	Black
Specific gravity @ 25°C Resin	.90
Specific gravity @ 25°C Catalyst	1.2
Mix Ratio, by weight (A:B)	100:10
Mix Ratio, by volume (A:B)	100:7.5
Hardness, Shore A	45
Viscosity, Resin	4,500
Catalyst	20
Mixed viscosity, 25°C, cps	1,600
Coefficient of thermal expansion, per °C	2.28×10^{-4}
Tensile strength, psi	150
Elongation, %	50
Glass transition temperature , °C	-72
Pot life, 100 gram mass, 25°C	15 minutes
Dielectric constant, 25°C, 1Khz	4.5
Surface resistivity, 25°C, ohm	$1x10^{16}$
Volume resistivity, ohm-cm	$6x10^{16}$
Operating temperature range, °C	-40 to 125

epoxies.com
21 Starline Way
Cranston, RI 02921 USA
t 401.946.5564
f 401.946.5526

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:

25°C	6 – 8 Hours
45°C	1.5 Hour
65°C	1 Hour
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. Carefully read Safety Data Sheet (SDS) before using.

IMPORTANT:

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