

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
- 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	Black
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
<u>,</u>	

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

- Thermal cycling stability
- Chemical resistance
- Hydrolytic stability
- No shrinkage



Coefficient of thermal expansion, 1/°C	2.28 x 10 ⁻⁴
Tensile strength, psi	150
Elongation, %	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 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 to 8 Hours
45°C	1.5 Hour
65°C	1 Hour
85°C	15 Minutes
	45°C 65°C

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:

EPOXIES, ETC. MAKES NO EXPRESS OR IMPLIED WARRANTIES OR MERCHANTABILITY, FITNESS OR OTHERWISE WITH RESPECT TO ITS PRODUCTS. The information in this brochure is based on data obtained by our own research and is considered reliable. However, no warranty is expressed or implied regarding the accuracy of these data, the results to be obtained from the use thereof, or that any such use will not infringe any patent. The properties given are typical values and are not intended for use in preparing specifications. This information is furnished upon the condition that the person receiving it shall make his own tests to determine the suitability thereof for his particular purpose.

06/2025

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