

# UNFILLED LOW DUROMETER CLEAR URETHANE ELASTOMERS

<b>20-2310</b>	<b>Shore A 30</b>
<b>20-2350</b>	<b>Shore A 35</b>
<b>20-2360</b>	<b>Shore A 90</b>

## DESCRIPTION:

This two component urethane series are low durometer (30-90 Shore A), potting, casting, and encapsulating compounds. They are unfilled materials engineered to provide excellent hydrolytic stability and low moisture permeability. They have outstanding thermal cycling properties, low glass transition temperatures and low embedment stress to sensitive electronic components.

These unique urethane formulations maintain their integrity over a wide operating temperature range, -40°C to 125°C. The low glass transition temperature of -72°C makes these urethanes ideal for low temperature potting applications.

## FEATURES

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

## TYPICAL SPECIFICATIONS:

	20-2310	20-2350	20-2360
Standard color (Available Clear)	Black	Black	Black
Specific gravity @ 25°C Resin	.91	.90	.90
Specific gravity @ 25°C Catalyst	1.2	1.2	1.2
Mix Ratio, by weight (A:B)	100:10	100:10	100:40
Mix Ratio, by volume (A:B)	100:7.5	100:7.5	100:31
Hardness, Shore A	30	35	90
Mixed viscosity, 25°C, cps	3,000	1,600	1,600
Coefficient of thermal expansion, per °C	2.28x10 <sup>-4</sup>	2.28x10 <sup>-4</sup>	2.28x10 <sup>-4</sup>
Tensile strength, PSI	110	150	400
Elongation, %	60	50	40
Glass transition temperature, °C	-72	-72	-72
Pot life, 100 gram mass, 25°C	1.5 hours	1 hour	40 minutes
Dielectric constant, 25°C, 1Khz	4.5	4.5	4.5
Surface resistivity, 25°C, ohm	1x10 <sup>16</sup>	1x10 <sup>16</sup>	1x10 <sup>16</sup>
Volume resistivity, ohm-cm	6x10 <sup>16</sup>	6x10 <sup>16</sup>	6x10 <sup>16</sup>
Operating temperature range, °C	-40 to 125	-40 to 125	-40 to 125

### **INSTRUCTIONS FOR USE:**

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.

Mixed material can be degassed at 1 to 5 mm Hg to ensure bubble free castings. Containers should be large enough to allow frothing.

Cure according to one of the following cure schedules:

25°C	24 Hours
45°C	2.5 Hours
65°C	1.5 Hours
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. Carefully read Safety Data Sheet (SDS) before using.

### **IMPORTANT:**

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