



ISO-9001-2015 Certified

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# TECHNICAL BULLETIN

## URACAST™ UC-2356 UNFILLED URETHANE POTTING COMPOUND

UC-2356 is a two-part urethane resin system, which combines good handling characteristics with excellent cured properties. Its low viscosity allows for easy flow and air release and excellent hydrolytic stability.

The cured elastomer has excellent water resistance and is exceptionally resistant to thermal shock.

It is useful for general purpose casting, potting or encapsulating intricate circuits, operational amplifiers, transformers, and other electric/electronic components.

### TYPICAL HANDLING PROPERTIES:

Polyol	PART B
Isocyanate	PART A
Mix ratio by weight (A:B)	45:100
Viscosity at 25°C, cps	
Mixed	400-800
Pot life at 25°C (100 gram), minutes	30-60

### **Recommended cure schedules to obtain optimum properties:**

Recommended: 2 hrs @ 80°C  
Alternate: 24-48 hrs @ 25°C

### TYPICAL CURED PROPERTIES:

Color	Black
Specific Gravity	1.2
Hardness, Shore A	70
Water Absorption (24 hr at RT), %	0.15
Weight Loss @ 120°C (7 days), %	0.2
Thermal Conductivity, W/mK	0.3
Service temperature range, °C	-55 to 120
Glass Transition Temperature (Tg), °C	<10
Coefficient of Thermal Expansion (ppm/°C)	120
Dielectric Strength, Volts/mil (0.125 inch)	420
Dielectric Constant at 1 kHz	4.2
Dissipation Factor at 1 kHz	0.02
Volume Resistivity, ohm-cm	2x10 <sup>14</sup>

### INSTRUCTIONS FOR USE:

1. To each 100 grams of Part B, add 45 grams of Part A and mix it well preferably using a mechanical mixer.
2. Vacuum degas for about five minutes to remove any dissolved or entrapped air.
3. Proceed with the casting or potting application and cure as recommended.

### FOR INDUSTRIAL USE ONLY:

These materials are intended for industrial use only, and the practices of good housekeeping, safety and cleanliness should be followed before, during and after use.

### WARNING!

Although the system contains low volatility materials, care should be taken in handling. Adequate ventilation of work place and ovens is essential.

These materials may cause injury to the skin following prolonged or repeated contact and dermatitis in susceptible individuals. In case of skin contact, wash thoroughly with soap and water.

For eyes, flush immediately with plenty of water for at least 10 minutes and seek medical attention. Refer to Safety Data Sheet (SDS) for additional health and safety information.

### SHELF LIFE:

The shelf life of these materials is six months when stored in unopened containers at an average temperature of 25°C. If containers are opened and the contents only partially used, the container should be flushed with dry nitrogen before being resealed.

**DISCLAIMER:** All data given here is offered as a guide to the use of these materials and not as a guarantee of their performance. The user should evaluate their suitability for own purposes. Properties are typical and should not be used in preparing specifications. Statements are not to be construed as recommendations to infringe any patent.