

U RESIN 83D



U RESIN 83D is a high performance cold castable polyether based 83 Shore D polyurethane Elastomer system that produces a tough machinable rigid polyurethane. The two components can be mixed using conventional urethane mixing equipment or by hand casting techniques.

It offers advantages in that it can be readily processed and cured at room temperature. The convenient mix ratio and low viscosity allow easy processing.

PROFILE:

	PART A	PART B
Specific Gravity @ 25°C	1.23	1.04
Viscosity (cps)	200-400	300-500
Appearance	Light Amber	Clear

	ISOCYANATE PREPOLYMER (A)	POLYOL CURATIVE (B)	MIXED
Ratio (weight)	100	83	
Temperature (°C)			25-30
Mixed Viscosity @ 25°C (cps)			300
Pot Life (mins) @25°C			15-20
Recommended Cure	24hrs @25°C will result in an 80% cure. Fully cured at 7 days @25°C. Alternatively a 70°C cure for 30-40mins will result in 80% cure.		
Shore Hardness (D)			83 ± 3
Tensile Strength (MPa)			63
Elongation (%)			5
Heat Distortion Temp			65-70
Rebound Resilience (%)			51
Izod Impact Strength (kJ/m ²)			31
Linear Shrinkage % @ 23 (500mm L x 46mm W x 16mm H)			1.3
Flexural Strength (MPa)			70.6
Flexural Modulus (MPa)			20

PROCESSING PROCEDURE

1. Carefully weigh the correct proportions of the two components together in one container, mix thoroughly. Be careful not to entrap air whilst mixing.
2. Pour the mixed material into moulds that have been prepared with release agent, being careful to avoid trapping air.
3. Allow casting to cure before de-moulding.
4. Both the Isocyanate (Part A) and Polyol (Part B) are sensitive to moisture. Once opened the containers should be purged with dry nitrogen to protect against moisture contamination.

HANDLING PRECAUTIONS

U RESIN 83D should be used in well-ventilated areas. Avoid breathing in vapours and protect skin and eyes from contact.

In case of skin contact, immediately remove excess, wash with soap and water. For eye contact, immediately flush with water for at least 15 minutes. Call a physician.

If nose, throat or lungs become irritated from breathing in vapours, remove exposed person to fresh air. Call a physician.

The information contained herein is true and accurate, based on laboratory conditions. It is recommended that the user contact the manufacturer to confirm suitability as field conditions may vary and yield different results. Testing of this product is strongly recommended to confirm suitability for specific applications. Data should not be used for specification purposes.