

Low-Density Rigid Thixotropic

Rigid polyurethane

Key Properties

- Excellent physical properties after RT cure
- Low density
- Layup on vertical surfaces
- Easy to sand
- Easy to pigment

Applications

- For room temperature hand-batch processing
- Ideal for theming masks, heads, and props
- Prototype model making
- Casting reproduction sculptures

Processing Properties

			Resin (Isocyanate)	Hardener (Polyol)
Mix ratio		pbw	100	98
		pbv	100	98
Density	ASTM D-792	g/cm ³	ca. 0.68	ca. 0.68
Viscosity at 77°F (25°C)	ASTM D-2393	cP	ca. 200	ca. 1,200

			Mixture
Mix viscosity at 77°F (25°C)	ASTM D-2393	cP	ca. 2,500
Gel time at 77°F (25°C)		min	4-6
Demold time at 77°F (25°C)		hours	1-2

Cured / Mechanical Properties (approximate values)

Cure: 7 days at 77°F			Cure
Aspect	visual		Beige
Density	ASTM D-792	g/cm ³	0.68
Shore hardness D	ASTM D-2240		55-65
Deflection temperature, HDT (66psi)	ASTM D-648	°F (°C)	140 (60)
Tensile strength	ASTM D-638	psi	2,400
Elongation at break	ASTM D-638	%	2.5
Flexural strength	ASTM D-790	psi	3,750
Flexural modulus	ASTM D-790	psi	175,000
Notched Izod	ASTM D-256	ft.lbs./in	0.80
Linear shrinkage	ASTM D-2566	in/in	0.002-0.005

Processing

The processing and material temperature should be between 68-77°F (20-25°C).

This material is heavily filled and the filler will separate from the liquid during storage. When you open the container, you will see filler on top that must be pre-mixed with liquid on the bottom. **You must mix both the polyol and iso thoroughly before using.** This system has been designed to ease the release of mixed air without degassing or pressure. However, for best results, de-air the material prior to casting or pressurize to 60 psi.

Agitate the polyol and iso before use to ensure that the formula is homogeneous.

Packaging

IE-3461 Quart Kit	2.97 lbs.
IE-3461 1 Gal. Kit	7.92 lbs.
IE-3461 5 Gal. Kit	49.5 lbs.
IE-3461 Drum Kit	591 lbs.

Storage

Original containers should be kept tightly sealed and stored at ambient temperatures 59-86°F (15°C to 30°C). If properly stored the products have the shelf-life indicated on the product label.

Partly used containers should always be sealed appropriately and used up as soon as possible.

Handling Precautions

Good workplace ventilation is to be ensured during processing. At the same time, the employer's liability insurance association's industrial hygiene safety regulations regarding the handling of reaction resins and their hardeners are to be observed. Please take heed of the appropriate safety data sheets.