

IE-3644 w / Increased Stiffness

Tough, impact resistant elastomer

Key Properties

- Excellent physical properties after RT cure
- Free of mercury or MOCA

Applications

- For room temperature hand-batch systems

Processing Properties

			Resin (Isocyanate)	Hardener (Polyol)
Mix ratio		pbw	100	60
		pbv	100	58
Density	ASTM D-792	g/cm ³	ca. 1.16	ca. 1.20
Viscosity at 77°F (25°C)	ASTM D-2393	cP	ca. 4,500	ca. 180

			Mixture
Mix viscosity at 77°F (25°C)	ASTM D-2393	cP	ca. 1,575
Gel time at 77°F (25°C)		min	14-18
Demold time at 77°F (25°C)		h	4-8

Cured / Mechanical Properties (approximate values)

Cure 1: 24 hours at 77°F + 16 hours at 150°F

Cure 2: 7 days at 77°F

			Cure 1	Cure 2
Aspect	visual		Translucent Amber	Translucent Amber
Density	ASTM D-792	g/cm ³	1.16	1.16
Shore hardness D	ASTM D-2240		57-67	57-67
Tensile strength	ASTM D-638	psi	4,500	4,900
Elongation at Break	ASTM D-638	%	20	40
Tear strength	ASTM D-624	pli	425	550
Flexural modulus	ASTM D-790	psi	90,000	90,000
Notched Izod	ASTM D-256	ft·lbf/in	2.5	4.0
Linear shrinkage	ASTM D-2566	in/in	.001	.001

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

Formulated for hand-batch equipment. For best results, de-air the material prior to casting, then pressurize to 60 psi until cured. If pigment has been added, it will separate during storage.

Agitate the hardener before use to ensure that the formula is homogeneous.

Packaging

IE-3648 Quart Kit	3.2 lbs.
IE-3648 1 Gal. Kit	12.8 lbs.
IE-3648 5 Gal. Kit	64 lbs.
IE-3648 Drum Kit	720 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.
