

60D Light Color / Mass Casting

Slow reacting polyurethane

Key Properties

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

Applications

- For room temperature hand mix dispensing methods
- For translucent mass castings

Processing Properties

			Resin (Isocyanate)	Hardener (Polyol)
Mix ratio		pbw	100	40
		pbv	100	42
Density	ASTM D-792	g/cm ³	ca. 1.10	ca. 1.06
Viscosity at 77°F (25°C)	ASTM D-2393	cP	ca. 6,900	ca. 150

			Mixture
Mix viscosity at 77°F (25°C)	ASTM D-2393	cP	ca. 3,300
Gel time at 77°F (25°C)		min	14-20
Demold time at 77°F (25°C)		h	3-7

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		Clear / Yellow	Clear / Yellow
Density	ASTM D-792	g/cm ³	1.07	1.07
Shore hardness D	ASTM D-2240		50-60	50-60
Tensile strength	ASTM D-638	psi	3,250	3,250
Elongation at Break	ASTM D-638	%	250	185
Tear strength	ASTM D-624	pli	550	585
Flexural modulus	ASTM D-790	psi	3,600	50,000
Notched Izod	ASTM D-256	ft-lbf/in	14.0	14.0
Linear shrinkage	ASTM D-2566	in/in	.001	.005-.010

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

For best results, de-air the material prior to casting. The hardener component will slightly darken as it ages. It is recommended that dry nitrogen be used to blanket the material to prevent oxidization and from becoming moisture contaminated. Care must be taken not to damage the metal seal when removing it from the hardener can. If the seal is punctured and then replaced, it will not sufficiently retain the nitrogen blanket. This will allow the hardener to oxidize and become dark. The cured material will also oxidize over a short period of time. This will cause the material to slightly darken in shade.

Packaging

IE-3960 Quart Kit	2.8 lbs.
IE-3960 1 Gal. Kit	11.2 lbs.
IE-3960 5 Gal. Kit	56 lbs.
IE-3960 Drum Kit	630 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.
