



## Rigid Polyurethane

### Flame Retardant 80D Clear

#### Key Properties

- Free of Mercury, MOCA, TDI, and Halogens
- Easily Pigmentable

#### Applications

- Roto-Casting
- Hand batch or vacuum assisted casting

#### Processing Properties

			Isocyanate	Polyol
Aspect	visual		Clear	Clear
Mix Ratio		pbw	100	50
		pbv	100	56
Density	ASTM D-792	g/ml	1.15	1.02
Viscosity at 25°C (77°F)	ASTM D-2393	cP	1,000	1,000

				Mixture
Mix Viscosity at 25°C (77°F)	ASTM D-2393	cP		1,000
Gel Time at 25°C (77°F)		min		30-40
Demold Time at 25°C (77°F)		hour		6-8

#### Cured / Mechanical Properties

Cure 1: 7 days @ 77°F (25°C)			Cured
Aspect	visual		Clear
Density	ASTM D-792	g/ml	1.10
Shore D Hardness	ASTM D-2240		80
HDT at 66psi	ASTM D-638	°F(°C)	47
Tensile Strength	ASTM D-638	psi	10,200
Elongation at Break	ASTM D-638	%	6.2
Flexural Strength	ASTM D-790	psi	12,700
Flexural Modulus	ASTM D-790	psi	313,000
Linear Shrinkage	ASTM D-2566	in./in.	.002-.01
Notched Izod	ASTM D-256	ft-lb/in	0.9

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**Processing**

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**The processing and material temperature should be between 68-77°F (20-25°C). Agitation is required before mixing to ensure homogenization.** For best results, de-gas the material prior to casting, then pressurize to 60psi until cured. It is recommended that a dry nitrogen blanket be used to blanket the stored material to prevent oxidation and moisture contamination.

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**Packaging**

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1.5 Quart Kit	3	lbs.	1.36	kg
1.5 Gal. Kit	12	lbs.	5.44	kg
7.5 Gal. Kit	60	lbs.	27.21	kg
1.5 Drum Kit	675	lbs.	306.12	kg

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**Storage**

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Original containers should be kept tightly sealed and stored at ambient temperatures 59-86°F (15-30°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 as soon as possible.

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**Handling Precautions**

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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.

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