

High Performance 50D

Tough, abrasion resistant elastomer

Key Properties

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

Applications

- For hand-mix processing methods

Processing Properties

			Resin (Isocyanate)	Hardener (Polyol)
Mix ratio		pbw	100	22
		pbv	100	22
Density	ASTM D-792	g/cm ³	ca. 1.08	ca. 1.18
Viscosity at 77°F (25°C)	ASTM D-2393	cP	ca. 7,100	ca. 600

			Mixture
Mix viscosity at 77°F (25°C)	ASTM D-2393	cP	ca. 3,300
Gel time at 77°F (25°C)		min	15-25
Demold time at 77°F (25°C)		h	4-6

Cured / Mechanical Properties (approximate values)

Cure 1: 7 days at 77°F Cure 2: 24 hours at 77°F + 5 hours at 150°F			Cure 1	Cure 2
Aspect	visual		Amber	Amber
Density	ASTM D-792	g/cm ³	1.09	1.09
Shore hardness D	ASTM D-2240		45-55	45-55
Tensile strength	ASTM D-638	psi	4,325	3,200
Elongation at Break	ASTM D-638	%	280	350
Tear strength	ASTM D-624	pli	420	470
Taber abrasion*	ASTM D-4060	mg loss	31	31
Linear shrinkage	ASTM D-2566	in/in	0.004-0.008	0.004-0.008

*H-18 wheel, 1000g load, 1000 cycles

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

The hardener component will darken as it ages. It is recommended that dry nitrogen be used to blanket the material to prevent oxidization and from becoming moisture contaminated.

Both the hardener and resin will freeze when exposed to temperatures below 32°F. If this occurs, place containers in an oven at 120°F, agitating every 45 minutes until the materials are re-liquefied. It is important to note that temperatures exceeding the recommended heating conditions or failure to agitate will cause excessive localized heat and potentially damage the product.

Packaging

HP-2250 Quart Kit	2.44 lbs.
HP-2250 1 Gal. Kit	9.76 lbs.
HP-2250 5 Gal. Kit	48.8 lbs.
HP-2250 Drum Kit	549 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.
