# **URS 2090**

# HIGH STRENGTH POLYURETHANE SYSTEM

#### 90 SHORE A

#### **DESCRIPTION**

**URS 2092** is a medium viscosity polyester based urethane casting system with outstanding tear and tensile strength. **URS 2090** is designed for applications that require a high modulus, abrasion resistance, toughness and resiliency. Applications include impellers, skirt boards, belt scrapers, etc.

### **FEATURES**

Outstanding Abrasion Resistance High Modulus Excellent Tear Resistance No MOCA or TDI Hand or Machine Processing

### LIQUID

<u>PROPERTIES</u>	<u>POL 350B</u>	<u>ISO 160A</u>	MIXED
Appearance Viscosity (cps)	Amber Liquid 8,000 -10,000 (90F)	Amber Liquid 100-500 (77 F)	Amber Liquid 4,500-6,500 (90 F)
Density (lbs/gal)	8.35-8.60	10.0 – 10.20	8.90-9.10

# **PHYSICAL PROPERTIES**

FITT SICAL FF	10F LHTILS		
Hardness, Shore A			
Modulus, psi,	100% 200% 300%	1190 1420 1740	
Tensile Strength, Ultimate, psi		7365	
Elongation %		490	
Split Tear PLI		327	
Bayshore Rebound, %		35	
Tabor Abrasion, H-18 Wheel			
Mg Loss / 1,000 Cycles		45	

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URS 2090 Cont:

## **PROCESSING PARAMETERS**

Melt and process polyol 350B at 100 to 150 degrees F.

Melt Isocyanate 160A if frozen at 100 degrees F., otherwise use at 70 to 85 degrees F.

Mold Temperature: 110 to 180 degrees F.

Mix Ratio: 100 parts Polyol 350B to 50 parts Isocyanate 160A by weight.

Degas mixture if possible or Pre-degas in dispensing equipment prior to casting.

Pot Life: (200g mass) (100 F) 8 to 10 minutes.

Demold: 1-2 hours or 30-45 minutes with maximum process and mold temperature. Catalyst may also be used to shorten demold time.

Post Cure: 16-24 hours @ 140 degrees F.

#### **STORAGE**

Systems should be stored unopened in air tight containers at 60-90 degrees F. Partially emptied. Containers should be swept free of atmospheric moisture with dry nitrogen before sealing.

## **HANDLING PRECAUTIONS**

For complete and updated health and safety information, read the MATERIAL SAFETY DATA SHEETS. Do not handle or use until the MATERIAL SAFETY DATA SHEET has been read and understood.