

**URS 2090**

**HIGH STRENGTH POLYURETHANE SYSTEM**

**90 SHORE A**

**DESCRIPTION**

**URS 2090** 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**

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

**PHYSICAL PROPERTIES**

Hardness, Shore A	90
Modulus, psi, 100%	1190
200%	1420
300%	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
Mg Loss / 5,000 Cycles	135

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.