

## URS 6178

### HIGH PERFORMANCE, ABRASION RESISTANT FDA APPROVED POLYURETHANE CASTING SYSTEM

### 78 SHORE A

#### DESCRIPTION

**URS 6178** is a high performance, abrasion resistant polyether based urethane System with fda approval, excellent abrasion resistance and high recovery.

**URS 6178** is recommended for applications where wear resistance from impact and Sliding particals are of consideration such as food sizing screens, impact Guards , food guide slots, support plates, feed bins, etc.

#### FEATURES

Excellent Abrasion Resistance  
High Impact Strength  
Good Tensile Strength  
No MOCA or TDI  
Hand or Machine Processing  
Outstanding Oil Resistance  
Meets FDA 21 CFR Sec. 175.105 & 177.168

#### LIQUID

<u>PROPERTIES</u>	<u>POL 4080B</u>	<u>ISO 110A</u>	<u>MIXED</u>
Appearance	Amber Liquid	Amber Liquid	Amber Liquid
Viscosity (cps)	1000-2000 (100F)	500-1000 (77 F)	1000 – 1400 (100F)
Density (lbs/gal)	8.10 – 8.25	10.0 -10.2	8.75 – 8.95

#### PHYSICAL PROPERTIES

Hardness, Shore A	78
Tensile Strength, Ultimate, psi	4580
Elongation, %	480
Tear Strength “Die C “ lbs / in	420
Linear Shrinkage D – 2566 (1.125” Deep)	.05 IN / IN

## **URS 6178 Cont:**

### **PROCESSING PARAMETERS**

Melt and process polyol 4080B at 120 to 160 degrees F.

Melt Isocyanate 110A if frozen at 100 degrees F., otherwise use at 70-85 degrees F.

Mold Temperature: 120 to 160 degrees F.

Mix ratio: 100.00 parts Polyol 4080B to 54.50 parts Isocyanate 110A by weight.

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

Pot life: (200g mass) (100 degrees F) 5 to 8 minutes.

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

NOTE: if catalyst is used it must also conform to appropriate FDA sections.

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.