

# **FORSCH POLYMER CORP.**

## **TECHNICAL DATA BULLETIN**

### **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**

<b><u>PROPERTIES</u></b>	<b><u>POL 4080B</u></b>	<b><u>ISO 110A</u></b>	<b><u>MIXED</u></b>
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.

This product is warranted to be of uniform quality within manufacturing tolerances. Since no control is exercised over its use, no warranty, expressed or implied, is made as to the effects of such use. The obligation herein shall be limited to refunding the purchase price of that portion of the material proven to be defective.