# URS 4850

## CLEAR POLYURETHANE CASTING SYSTEM

## 50 SHORE A

## DESCRIPTION

**URS 4850** is a flexible, clear polyether based urethane casting system designed for clear-see through potting or casting applications.  **URS 4850** provides excellent hydrolytic and UV stability while maintaining its' physical characteristics to -40 Deg F.  Applications include see through potting of electrical components, items for encapsulation protection & thick shell coatings.

## FEATURES

Clear/see through
High Impact Strength
Good Tensile  Strength
No MOCA or TDI
Hand or Machine Processing
Outstanding Oil Resistance
Superior Hydrolytic stability

## LIQUID PROPERTIES

| LIQUID PROPERTIES | POL 10190B | ISO 1080A | MIXED |
|---|---|---|---|
| Appearance | Clear Liquid | Clear Liquid | Clear Liquid |
| Viscosity (cps) | 200-600 (77F) | 500-700cps  (77 F) | 400-600cps (77F) |
| Density (lbs/gal) | 8.55-8.65 | 9.20-9.40 | 8.90-9.00 |

## PHYSICAL PROPERTIES

| | |
|---|---|
| Hardness, Shore A | 50 |
| Tensile Strength, Ultimate, psi | 1150 |
| Elongation, %, | 410 |
| Tear Strength  "Die C "   lbs / in | 160 |

**PROCESSING PARAMETERS**

Process polyol 10190B at 60 to 160 degrees F.

Melt Isocyanate 1080A if frozen at 100 degrees F., otherwise use at 60 to 160 degrees F.

Mold Temperature: 60 to 160 degrees F.

Mix ratio: 100.00 parts Polyol 10190B to 37.25 parts Isocyanate 1080A by weight.

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

Pot life: (200g mass) (77 degrees F) 15 to 20 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.