

FORSCH POLYMER CORP.

TECHNICAL DATA BULLETIN

URS 6140

HIGH STRENGTH , LOW DUROMETER FDA APPROVED POLYURETHANE CASTING SYSTEM

40 SHORE A

DESCRIPTION

URS 6140 is a medium viscosity based urethane casting system with excellent low durometer characteristics and FDA approval. **URS 6140** is designed for applications requiring high flexibility and good cut tear resistance with excellent machining qualities when filler is added. Applications include rollers, bumpers, pads, strippers, sound damping parts, flexible molds, etc.

FEATURES

High Flexibility
Excellent Oil And Solvent Resistance
High Filler Loading Capabilities
No MOCA or TDI
Hand or Machine Processing
Meets FDA 21 CFR Sec. 175.105 & 177.168

LIQUID

PROPERTIES

POL 6050B

ISO 110A

MIXED

Appearance	Amber Liquid	Amber Liquid	Amber Liquid
Viscosity (cps)	6500 - 8500 (77 F)	500-1000 (77 F)	5500 - 7500 (77 F)
Density (lbs/gal)	8.60 - 8.80	10.0 -10.2	8.80 - 9.00

PHYSICAL PROPERTIES

Hardness, Shore A	40
Modulus, psi 100%	160
200%	210
300%	320
Tensile Strength, Ultimate, psi	2420
Elongation, %	505
Tear Strength, "Die C" lbs / in	125

URS 6140 Cont:

PROCESSING PARAMETERS

Melt and process polyol 6050B at 80 to 150 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 6050B to 16.00 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) 8 to 12 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.