



## Product Name

# IE-3075 Polyurethane



## Description

IE-3075 is a tough, impact resistant elastomer formulated for room temperature hand-batch mixing. Excellent physical properties can be obtained with a room temperature cure without the utilization of mercury, MOCA or TDI.

## Physical Properties

<b>Mix Ratio</b>	Resin:Hardener (parts by weight)	<b>100:89</b>		
<b>Mix Ratio</b>	Resin:Hardener (parts by volume)	<b>100:100</b>		
<b>Viscosity</b> (cps@77°F)	Resin	75	<b>Gel Time</b>	8 ± 2 Minutes
	Hardener	850	<b>Demold Time*</b>	60 ± 30 Minutes
	Mixed	300	<b>Color</b>	Translucent
<b>Specific Gravity</b> (g/cc)	Resin	1.25	*Demold time is always mass dependant	
	Hardener	1.11		

Cure 1 ► 24 hours at 77°F + 16 hours at 200°F  
Cure 2 ► 7 days at 77°F

## Cured Properties

	Method	Cure 1	Cure 2
<b>Hardness (shore D)</b>	ASTM D-2240	80 ± 5	80 ± 5
<b>Tensile Strength (psi)</b>	ASTM D-638	10,000	10,500
<b>Elongation at Break</b>	ASTM D-638	9%	8%
<b>Compression Strength (psi)</b>	ASTM D-695	NA	NA
<b>Compression Modulus (psi)</b>	ASTM D-695	300,000	NA
<b>Ultimate Flex Strength (psi)</b>	ASTM D-790	16,500	17,000
<b>Flexural Modulus (psi)</b>	ASTM D-790	390,000	420,000
<b>Notched Izod (ft.lbs./in.)</b>	ASTM D-256	0.7	0.7
<b>Linear Shrink (in./in.)</b>	ASTM D-2566	0.002-0.004	0.002-0.004
<b>Heat Deflection Temp. (66psi)</b>	ASTM D-648	83°C / 182°F	77°C / 171°F
<b>Heat Deflection Temp. (264psi)</b>	ASTM D-648	NA	NA
<b>Specific Gravity (g/cc)</b>		1.11	1.11

## Processing Notes

Formulated for hand-batch or vacuum assisted casting equipment. For best results, de-air the material prior to casting, then pressurize to 60 psi until cured.

**Agitate hardener and resin before mixing to ensure that the formula is homogeneous.**

## Safety and Handling

DO NOT USE UNTIL MSDS HAVE BEEN READ AND UNDERSTOOD. Store containers in a dry location. Partially used containers should be blanketed with dry nitrogen to prevent moisture contamination. Moisture will react with the resin component, creating carbon dioxide gas and a possible pressure increase in the container.

SPECIFICATION WRITERS: The above values are meant to represent typical properties only. Users are encouraged to qualify products in their own laboratories prior to specification publication.

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