



**Product Name**

## IE-50AC Polyurethane



**Description**

IE-50AC is a tough, abrasion resistant elastomer formulated for hand-batch processing. Excellent physical properties can be obtained with a room temperature cure without the utilization of mercury, MOCA, or TDI. IE-50AC is particularly ideal for color-matching applications due to its transparent appearance.

**Physical Properties**

<b>Mix Ratio</b>	Resin:Hardener (parts by weight)		<b>50:100</b>	
<b>Mix Ratio</b>	Resin:Hardener (parts by volume)		<b>51:100</b>	
<b>Viscosity</b> (cps@77°F)	Resin	45	<b>Gel Time</b>	12 ± 2 Minutes
	Hardener	1350	<b>Demold Time*</b>	3 ± 1 Hours
	Mixed	875	<b>Color</b>	Clear
<b>Specific Gravity</b> (g/cc)	Resin	1.21	* Demold time is always mass dependant	
	Hardener	1.23		

Cure 1 ▶ 7 days at 77°F  
Cure 2 ▶ N/A

**Cured Properties**

	Method	Cure 1	Cure 2
<b>Hardness (shore A)</b>	ASTM D-2240	50 ± 5	
<b>Tensile Strength (psi)</b>	ASTM D-638	400	
<b>Elongation at Break</b>	ASTM D-638	150%	
<b>Tear Strength (pli)</b>	ASTM D-624	100	
<b>Linear Shrink (in./in.)</b>	ASTM D-2566	0.001	
<b>Specific Gravity (g/cc)</b>		1.21	

**Processing Notes**

IE-50AC is ideal for custom pigmentation using Innovative Polymer's ester-based pigments. Innovative Polymer's standard pigment line may be used, but the color will not be as compatible. IE-50AC may be inhibited by certain silicone rubbers. A test sample should be prepared to verify compatibility. Contact Innovative Polymers Inc. for more information.

**Agitate the hardener before mixing to ensure a homogeneous formulation.**

**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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