

**Product Name**

IE-70D Polyurethane



General Purpose 70 Shore D

Description

IE-70D is a 70 shore D polyurethane formulated for room temperature hand-batch processing. Excellent physical properties can be obtained with a room temperature cure without the utilization of mercury, MOCA, or TDI.

Physical Properties

Mix Ratio	Resin:Hardener (parts by weight)		100:50
Mix Ratio	Resin:Hardener (parts by volume)		100:53
Viscosity (cps@77°F)	Resin	45	Gel Time
	Hardener	800	
	Mixed	200	Demold Time*
Specific Gravity (g/cc)	Resin	1.12	Color
	Hardener	1.05	

* Demold time is always mass dependant

Cure 1 ► 7 days at Room Temperature
Cure 2 ► N/A

Cured Properties

	Method	Cure 1	Cure 2
Hardness (shore D)	ASTM D-2240	70 ± 5	
Tensile Strength (psi)	ASTM D-638	5,350	
Elongation at Break	ASTM D-638	4%	
Compression Strength (psi)	ASTM D-695	NA	
Compression Modulus (psi)	ASTM D-695	NA	
Ultimate Flex Strength (psi)	ASTM D-790	9,000	
Flexural Modulus (psi)	ASTM D-790	250,000	
Notched Izod (ft.lbs./in.)	ASTM D-256	0.5	
Linear Shrink (in./in.)	ASTM D-2566	0.005	
Heat Deflection Temp. (66psi)	ASTM D-648	60°C / 140°F	
Heat Deflection Temp. (264psi)	ASTM D-648	NA	
Specific Gravity (g/cc)		1.10	

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. If pigment has been added to the to the hardener component, it may separate during storage.

Agitate hardener 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.
 PURCHASER has the responsibility for determining any applicability of and compliance with federal, state, and local laws concerning labeling, use, and waste disposal, particularly in making consumer items. Innovative Polymers, Inc. makes no warranty, expressed or implied, for merchantability or fitness of use. The sole liability of Innovative Polymers, Inc. for any claim arising out of the manufacture, use, or sale of its products shall be the buyers purchase price.