

# Innothane®

**Product Name**

**IE-3070**  
**Excellent Green Strength Rigid**

**Description**

IE-3070 is a rigid polyurethane formulated for hand-batch processing or vacuum cast methods. Excellent physical properties can be obtained with a room temperature cure without the utilization of mercury, MOCA or TDI. It has excellent green strength yielding enhanced demold characteristics and also yields easy to paint surfaces requiring little preparation.

**Physical Properties**

<b>Mix Ratio</b>	Resin:Hardener (parts by weight)		<b>100:92</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>
	Hardener	450	<b>Demold Time*</b>
	Mixed	150	<b>Color</b>
			8 ± 2 Minutes
			40 ± 10 Minutes
			White
<b>Specific Gravity</b> (g/cc)	Resin	1.16	* Demold time is always mass dependant
	Hardener	1.06	
<b>Peak Exotherm</b>	200g.	230°F	

**Cured Properties**

Cure 1 ► 7 days at 77°F



	Method	Cure 1
<b>Hardness (shore D)</b>	ASTM D-2240	70 ± 5
<b>Tensile Strength (psi)</b>	ASTM D-638	4,950
<b>Elongation at Break</b>	ASTM D-638	24%
<b>Compression Strength (psi)</b>	ASTM D-695	NA
<b>Compression Modulus (psi)</b>	ASTM D-695	165,000
<b>Ultimate Flex Strength (psi)</b>	ASTM D-790	6,000
<b>Flexural Modulus (psi)</b>	ASTM D-790	145,000
<b>Notched Izod (ft.lbs./in.)</b>	ASTM D-256	0.6
<b>Linear Shrink (in./in.)</b>	ASTM D-2566	.002-.006
<b>Heat Deflection Temp. (66psi)</b>	ASTM D-648	66°C / 150°F
<b>Heat Deflection Temp. (264psi)</b>	ASTM D-648	62°C / 143°F
<b>Specific Gravity (g/cc)</b>		1.06

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

<b><u>Kit Weights</u></b>	<b>Quart Kit</b>	<b>1 Gal. Kit</b>	<b>5 Gal. Kit</b>	<b>Drum Kit</b>
	<b>3.84 lbs.</b>	<b>15.36 lbs.</b>	<b>76.8 lbs.</b>	<b>864 lbs.</b>

## **Safety and Handling**

DO NOT USE UNTIL MSDSs 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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