

# InnoTooling™ IE-9040

Polyurethane Thermoset Elastomer

Innovative Polymers, Inc.

Message:

IE-9040 is a slow reacting polyurethane formulated for room temperature hand-batch or vacuum assisted casting methods. Excellent physical properties can be obtained with a room temperature cure without the utilization of mercury, MOCA, or TDI. This product is especially developed for translucent mass castings.

General Information			
RoHS Compliance	RoHS Compliant		
Appearance	Clear/Transparent		
	Yellow		
Processing Method	Vacuum Casting		
Physical	Nominal Value	Unit	Test Method
Specific Gravity			
Cured	1.06	g/cm³	
Hardener	1.06	g/cm³	
Base Resin	1.06	g/cm³	
Molding Shrinkage - Flow	0.10	%	ASTM D2566
Thermoset	Nominal Value	Unit	Test Method
Thermoset Components			
	Mix Ratio by Volume: 20		
Hardener	Mix Ratio by Weight: 20		
	Mix Ratio by Weight: 100		
Resin	Mix Ratio by Volume: 100		
Demold Time	240 to 480	min	
Uncured Properties	Nominal Value	Unit	Test Method
Viscosity			
25°C <sup>1</sup>	0.085	Pa·s	
25°C <sup>2</sup>	5.0	Pa·s	
25°C <sup>3</sup>	10	Pa·s	
Curing Time <sup>4</sup>	40	hr	
Gel Time	15 to 25	min	
Cured Properties	Nominal Value	Unit	Test Method
Shore Hardness (Shore D)	35 to 45		ASTM D2240

Tensile Modulus	86.2	MPa	ASTM D638
Tensile Strength	16.2	MPa	ASTM D638
Tensile Elongation at Break	200	%	ASTM D638
Tear Strength	54.3	kN/m	ASTM D624

#### NOTE

- |    |                                      |
|----|--------------------------------------|
| 1. | Hardener                             |
| 2. | Mixed                                |
| 3. | Resin                                |
| 4. | 24 hours at 77°F + 16 hours at 150°F |

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

#### Recommended distributors for this material

### Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

