InnoTuf® HP-1090A

Polyurethane Thermoset Elastomer, Polyester Based

Innovative Polymers, Inc.

Message:

HP-1090A is a high performance 90 shore A polyester polyol based polyurethane formulated for hand-batch or meter mix processing methods. Excellent physical properties can be obtained with a post cure without the utilization of mercury, MOCA, or TDI.

General Information			
RoHS Compliance	RoHS Compliant		
Appearance	Translucent		
Physical	**Nominal Value**	**Unit**	**Test Method**
Specific Gravity			
Hardener	1.13	g/cm³	
Cured	1.16	g/cm³	
Base Resin	1.20	g/cm³	
Molding Shrinkage - Flow	1.0 to 1.5	%	ASTM D2566
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Taber Abrasion Resistance (1000 Cycles, 1000 g, H-18 Wheel)	15.0	mg	ASTM D4060
Elastomers	**Nominal Value**	**Unit**	**Test Method**
Tear Strength (Split)	20	kN/m	ASTM D470
Thermoset	**Nominal Value**	**Unit**	**Test Method**
Thermoset Components			
	Mix Ratio by Volume: 100		
Hardener	Mix Ratio by Weight: 100		
	Mix Ratio by Weight: 82		
Resin	Mix Ratio by Volume: 77		
Demold Time (66°C)	60 to 180	min	
Uncured Properties	**Nominal Value**	**Unit**	**Test Method**
Viscosity			
43°C [1]	0.60	Pa·s	
43°C [2]	0.85	Pa·s	
43°C [3]	1.5	Pa·s	
Curing Time [4]	1.8E+2	hr	
Gel Time	10 to 16	min	
Cured Properties	**Nominal Value**	**Unit**	**Test Method**

Shore Hardness (Shore A)	85 to 95		ASTM D2240
Tensile Strength	31.0	MPa	ASTM D638
Tensile Elongation at Break	470	%	ASTM D638
Tear Strength	66.5	kN/m	ASTM D624

NOTE	
1.	Hardener
2.	Mixed
3.	Resin
4.	16 hours at 150°F + 7 days at 77°F

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

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