InnoTuf® TP-4053

Polyurethane Thermoset Elastomer Innovative Polymers, Inc.

Message:

TP-4053 is a rigid, impact resistant polyurethane formulated for hand-batch processing. Excellent physical properties can be obtained with a mild post cure without the utilization of mercury, MOCA, or TDI. TP-4053 is a tough ABS simulated product.

High Impact Resistance High Rigidity RRHS Compliance ROHS Compliant Appearance White Physical Nominal Value Unit Test Method Specific Gravity Hardener 1.23 g/cm² Cured 1.25 g/cm² Molding Shrinkage - Flow Nominal Value Unit Test Method Specific Modulus ASTM D2566 Mechanical Nominal Value Unit Test Method Flexural Strength 108 MPa ASTM D790 Flexural Strength Nominal Value Unit Test Method Notched Izod Impact Nominal Value Unit Test Method Deflection Temperature Under Load (0.45 MPa ASTM D256 Thermoset Nominal Value Unit Test Method Deflection Temperature Under Load (0.45 MPa ASTM D256 Thermoset Nominal Value Unit Test Method Deflection Temperature Under Load (0.45 MPa ASTM D256 Thermoset Nominal Value Unit Test Method Deflection Temperature Under Load (0.45 MPa. Unit Test Method Deflection Temperature Under Load (0.45 MPa. Unit Test Method Deflection Temperature Under Load (0.45 MPa. Unit Test Method Deflection Temperature Under Load (0.45 MPa. Unit Test Method Test Method Mik Ratio by Volume: 100 Resin Mik Ratio by Volume: 100 Mik Ratio by Volume: 90 Demold Time Mik Ratio by Volume: 90 Demold Time	General Information			
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Demold Time 60 to 180 min		Mix Ratio by Weight: 100		
Demold Time 60 to 180 min				
	Resin	Mix Ratio by Volume: 90		
Uncured Properties Nominal Value Unit Test Method	Demold Time	60 to 180	min	
	Uncured Properties	Nominal Value	Unit	Test Method

Viscosity				
38°C ¹	0.15	Pa·s		
38°C ²	1.0	Pa·s		
38°C ³	2.2	Pa·s		
Curing Time ⁴	26	hr		
Gel Time	6.0 to 10	min		
Cured Properties	Nominal Value	Unit	Test Method	
Shore Hardness (Shore D)	80 to 90		ASTM D2240	
Tensile Strength	65.5	MPa	ASTM D638	
Tensile Elongation at Break	4.0	%	ASTM D638	
NOTE				
1.	Resin	Resin		
2.	Mixed			
3.	Hardener	Hardener		
4.	2 hours at 150°F + 24 hour	s at 77°F		

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