Maxxam™ PPH-40T Nat

Polypropylene Homopolymer

Key Characteristics

Product Description
PolyOne's Maxxam™ family of polypropylene- and polyethylene-based products covers a wide range of applications, markets and performance requirements. Standard grades are compounded with calcium carbonate, glass and talc to provide a desired balance of properties including stiffness, durability, impact resistance and heat resistance. Custom grades are available with features such as UV stabilizers, heat stabilizers, custom color, high impact, etc.

General			
Material Status	• Commercial: Active		
Regional Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Filler, 40% Filler by Weight	• Talc	
Features	• General Purpose	• Homopolymer	
Uses	• Automotive Applications • Construction Applications	• Consumer Applications • General Purpose	• Industrial Applications
Appearance	• Natural Color		
Forms	• Pellets		
Processing Method	• Injection Molding		

Technical Properties [1]

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density / Specific Gravity	1.23	1.23	ASTM D792
Specific Volume	22.5 in³/lb	0.813 cm³/g	ASTM D792
Melt Mass-Flow Rate (MFR) [2] (230°C/2.16 kg)	11 g/10 min	11 g/10 min	ASTM D1238
Molding Shrinkage - Flow	4.0E-3 to 8.0E-3 in/in	0.40 to 0.80 %	ASTM D955
Mechanical	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Tensile Strength [3] (Yield)	4700 psi	32.4 MPa	ASTM D638
Tensile Elongation [3] (Break)	15 %	15 %	ASTM D638
Flexural Modulus	550000 psi	3790 MPa	ASTM D790
Flexural Strength	8370 psi	57.7 MPa	ASTM D790
Impact	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Notched Izod Impact			ASTM D256A
73°F (23°C), 0.125 in (3.18 mm), Injection Molded	0.50 ft·lb/in	27 J/m	
Unnotched Izod Impact [4]			ASTM D256
73°F (23°C), 0.125 in (3.18 mm)	2.6 ft·lb/in	140 J/m	
Hardness	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Rockwell Hardness (R-Scale)	92	92	ASTM D785
Thermal	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Deflection Temperature Under Load			ASTM D648
66 psi (0.45 MPa), Unannealed, 0.125 in (3.18 mm)	297 °F	147 °C	
Flammability	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Flame Rating (0.06 in (1.5 mm), ALL)	HB	HB	UL 94

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Mold Temperature	61 to 122 °F	16 to 50 °C

Notes

[1] Typical values are not to be construed as specifications.

[2] Procedure A

[3] Type I, 2.0 in/min (51 mm/min)

[4] Injection Molded

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