



Maxxam™ PPR-20G 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, 20% Filler by Weight	• Glass Fiber	
Features	• Chemically Coupled	• 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
Specific Gravity	1.04	1.04	ASTM D792
Specific Volume	26.6 in ³ /lb	0.961 cm ³ /g	ASTM D792
Melt Mass-Flow Rate (MFR) ² (230°C/2.16 kg)	5.0 g/10 min	5.0 g/10 min	ASTM D1238
Molding Shrinkage - Flow	1.0E-3 to 3.0E-3 in/in	0.10 to 0.30 %	ASTM D955
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Strength ³ (Yield)	9300 psi	64.1 MPa	ASTM D638
Tensile Elongation ³ (Break)	10 %	10 %	ASTM D638
Flexural Modulus	510000 psi	3520 MPa	ASTM D790
Flexural Strength	13100 psi	90.3 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	1.3 ft·lb/in	69 J/m	
Unnotched Izod Impact ⁴			ASTM D256
73°F (23°C), 0.125 in (3.18 mm)	5.8 ft·lb/in	310 J/m	
Hardness	Typical Value (English)	Typical Value (SI)	Test Method
Rockwell Hardness (R-Scale)	105	105	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)	314 °F	157 °C	
Flammability	Typical Value (English)	Typical Value (SI)	Test Method
Flame Rating (0.06 in (1.5 mm), ALL)	HB	HB	UL 94

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Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Mold Temperature	60.8 to 122 °F	16.0 to 50.0 °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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