



Maxxam™ PPC-20T Nat

Polypropylene Copolymer

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 • Talc		
Additive	• Impact Modifier		
Features	• Copolymer	• General Purpose	• Impact Modified
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	1.05	1.05	ASTM D792
Specific Volume	26.4 in ³ /lb	0.954 cm ³ /g	ASTM D792
Melt Mass-Flow Rate (MFR) ² (230°C/2.16 kg)	7.0 g/10 min	7.0 g/10 min	ASTM D1238
Molding Shrinkage - Flow	8.0E-3 to 0.012 in/in	0.80 to 1.2 %	ASTM D955
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Strength ³ (Yield)	3600 psi	24.8 MPa	ASTM D638
Tensile Elongation ³ (Break)	60 %	60 %	ASTM D638
Flexural Modulus	290000 psi	2000 MPa	ASTM D790
Flexural Strength	5500 psi	37.9 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	1.1 ft·lb/in	59 J/m	
Unnotched Izod Impact ⁴			ASTM D256
73°F (23°C), 0.125 in (3.18 mm)	15 ft·lb/in	810 J/m	
Instrumented Dart Impact - Energy to Maximum Load	12.6 ft·lb/in	673 J/m	ASTM D3763
Gardner Impact			ASTM D3029
-9°F (-23°C), 0.125 in (3.18 mm)	82.0 in·lb	9.26 J	
Hardness	Typical Value (English)	Typical Value (SI)	Test Method
Rockwell Hardness (R-Scale)	70	70	ASTM D785

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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)	244 °F	118 °C	

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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