



Maxxam™ PP5140R B1

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	• Talc, 40% Filler by Weight
Features	• Good Processability • Good Stiffness • Good Strength • High Heat Resistance • Medium Flow
Uses	• Appliance Components • Automotive Applications • Consumer Applications • General Purpose • Industrial Applications
Appearance	• Black
Forms	• Pellets
Processing Method	• Injection Molding

Technical Properties ¹

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density	1.22 g/cm ³	1.22 g/cm ³	ISO 1183
Molding Shrinkage	1.0 %	1.0 %	ISO 294-4
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Stress (Yield)	4060 psi	28.0 MPa	ISO 527-2
Tensile Strain (Break)	10 %	10 %	ISO 527-2
Flexural Modulus	551000 psi	3800 MPa	ISO 178
Impact	Typical Value (English)	Typical Value (SI)	Test Method
Notched Izod Impact Strength			ISO 180
-40°F (-40°C)	0.71 ft·lb/in ²	1.5 kJ/m ²	
73°F (23°C)	1.3 ft·lb/in ²	2.7 kJ/m ²	
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Heat Deflection Temperature			ISO 75-2/B
66 psi (0.45 MPa), Unannealed	266 °F	130 °C	
Heat Deflection Temperature			ISO 75-2/A
264 psi (1.8 MPa), Unannealed	176 °F	80.0 °C	
Melting Temperature	320 to 329 °F	160 to 165 °C	
Flammability	Typical Value (English)	Typical Value (SI)	Test Method
Flame Rating	HB	HB	UL 94

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Processing (Melt) Temp	356 to 428 °F	180 to 220 °C
Mold Temperature	59 to 149 °F	15 to 65 °C