

Maxxam™ PE GF/30 UV Black T70

High Density Polyethylene

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 Europe
Filler / Reinforcement	Glass Fiber
Features	General Purpose
Uses	 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	1.17 g/cm³	1.17 g/cm³	ISO 1183
Molding Shrinkage			ISO 294-4
Across Flow	0.90 to 1.1 %	0.90 to 1.1 %	
Flow	0.20 to 0.40 %	0.20 to 0.40 %	
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus			ISO 527-2
	711000 psi	4900 MPa	
176°F (80°C)	145000 psi	1000 MPa	
Tensile Stress			ISO 527-2
Break	5510 psi	38.0 MPa	
Break, 176°F (80°C)	2180 psi	15.0 MPa	
Tensile Strain			ISO 527-2
Break	1.4 %	1.4 %	
Break, 176°F (80°C)	20 %	20 %	
Flexural Modulus	653000 psi	4500 MPa	ASTM D790
Impact	Typical Value (English)	Typical Value (SI)	Test Method
Notched Izod Impact Strength	2.4 ft·lb/in²	5.0 kJ/m²	ISO 180
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Heat Deflection Temperature		<u> </u>	ISO 75-2/A
264 psi (1.8 MPa), Annealed	248 °F	120 °C	

Processing Information

Injection	Typical Value (English)	Typical Value (SI)	
Drying Temperature	176°F	80 °C	
Drying Time	2.0 hr	2.0 hr	
Processing (Melt) Temp	464 to 536 °F	240 to 280 °C	

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Technical Data Sheet

Injection	Typical Value (English)	Typical Value (SI)	
Mold Temperature	122 to 158 °F	50 to 70 °C	
Injection Rate	Slow-Fast	Slow-Fast	
Injection Notes			

pre drying is not mandatory

Notes

¹ Typical values are not to be construed as specifications.

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