Maxxam™ 12 T/20 Black T 70

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	• Europe		
Filler / Reinforcement	• Talc, 20% Filler by Weight		
Features	• Chemical Resistant • Good Impact Resistance • Good Processability	• Good Stiffness • Good Strength • Good Surface Finish	• High Flow
Uses	• Appliances • 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	1.04 g/cm³	1.04 g/cm³	ISO 1183
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	10 g/10 min	10 g/10 min	ISO 1133
Mechanical	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Tensile Modulus	377000 psi	2600 MPa	ISO 527-2/1
Tensile Stress	4350 psi	30.0 MPa	ISO 527-2/50
Tensile Strain (Yield)	10 %	10 %	ISO 527-2/50
Impact	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Notched Izod Impact Strength	1.9 ft·lb/in²	4.0 kJ/m²	ISO 180/A
Thermal	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Heat Deflection Temperature			ISO 75-2/A
264 psi (1.8 MPa), Unannealed	167 °F	75.0 °C	
Vicat Softening Temperature	311 °F	155 °C	ISO 306/A120
Melting Temperature	320 to 329 °F	160 to 165 °C	
Electrical	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Comparative Tracking Index	600 V	600 V	IEC 60112
Flammability	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Flame Rating (0.06 in (1.6 mm))	HB	HB	UL 94
Glow Wire Flammability Index	1200 °F	650 °C	IEC 60695-2-12

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Drying Temperature	176 °F	80 °C
Drying Time	1.0 hr	1.0 hr
Rear Temperature	347 to 365 °F	175 to 185 °C

Injection	Typical Value (English)	Typical Value (SI)
Middle Temperature	356 to 374 °F	180 to 190 °C
Front Temperature	365 to 383 °F	185 to 195 °C
Nozzle Temperature	383 to 392 °F	195 to 200 °C
Mold Temperature	77 to 131 °F	25 to 55 °C

Notes

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

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