

# Maxxam™ 20 T/20 UV Grey 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	• Good Processability • Good Stiffness	• Good Strength • High Flow	• UV Resistant • UV Stabilized
Uses	• Appliances • Automotive Applications	• Construction Applications • Consumer Applications	• General Purpose • Industrial Applications
Appearance	• Grey		
Forms	• Pellets		
Processing Method	• Injection Molding		

### Technical Properties <sup>1</sup>

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density	1.05 g/cm <sup>3</sup>	1.05 g/cm <sup>3</sup>	ISO 1183
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	20 g/10 min	20 g/10 min	ISO 1133
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus	341000 psi	2350 MPa	ISO 527-2/1
Tensile Stress (Injection Molded)	3990 psi	27.5 MPa	ISO 527-2/50
Tensile Strain (Yield, 73°F (23°C))	4.0 %	4.0 %	ISO 527-2/50
Tensile Strain (Break)	10 %	10 %	ISO 527-2/50
Impact	Typical Value (English)	Typical Value (SI)	Test Method
Charpy Unnotched Impact Strength Injection Molded	19 ft·lb/in <sup>2</sup>	40 kJ/m <sup>2</sup>	ISO 179/1eU
Notched Izod Impact Strength 73°F (23°C), Injection Molded	1.4 ft·lb/in <sup>2</sup>	3.0 kJ/m <sup>2</sup>	ISO 180/A
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Heat Deflection Temperature 264 psi (1.8 MPa), Unannealed	158 °F	70.0 °C	ISO 75-2/A
Vicat Softening Temperature	302 °F	150 °C	ISO 306/A120
Ball Pressure Test (257°F (125°C))	Pass	Pass	IEC 60695-10-2
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	HB	HB	UL 94
Glow Wire Flammability Index 0.03 to 0.08 in (0.8 to 2.0 mm)	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
Middle Temperature	356 to 374 °F	180 to 190 °C
Front Temperature	365 to 383 °F	185 to 195 °C
Nozzle Temperature	374 to 392 °F	190 to 200 °C
Mold Temperature	77 to 131 °F	25 to 55 °C

**Notes**

<sup>1</sup> Typical values are not to be construed as specifications.



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