

Maxxam™ PP5120F B2

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	EuropeLatin America	North America
Filler / Reinforcement	• Talc		
Features	 General Purpose 	 Heat Stabilized 	
Uses	Automotive ApplicationsConstruction Applications	Consumer ApplicationsGeneral Purpose	Industrial Applications
Automotive Specifications	 FORD WSK-M4D792-A2 		
Appearance	 Black 		
Forms	 Pellets 		
Processing Method	Injection Molding		

Technical Properties 1

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density / Specific Gravity	1.05	1.05	ISO 1183
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	16 g/10 min	16 g/10 min	ISO 1133
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Stress ² (Yield)	4640 psi	32.0 MPa	ISO 527
Tensile Strain (Break)	20 %	20 %	ISO 527-2
Flexural Modulus 3	363000 psi	2500 MPa	ISO 178
Impact	Typical Value (English)	Typical Value (SI)	Test Method
Notched Izod Impact Strength (73°F (23°C))	1.7 ft·lb/in²	3.5 kJ/m²	ISO 180
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Heat Deflection Temperature			ISO 75-2/B
66 psi (0.45 MPa), Unannealed	248 °F	120 °C	
Heat Deflection Temperature			ISO 75-2/A
264 psi (1.8 MPa), Unannealed	158 °F	70.0 °C	
Flammability	Typical Value (English)	Typical Value (SI)	Test Method
Burning Rate	< 3.9 in/min	< 100 mm/min	ISO 3795
Flame Rating (0.06 in (1.6 mm))	НВ	НВ	UL 94

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	365 to 392 °F	185 to 200 °C	
Middle Temperature	392 to 419 °F	200 to 215 °C	

Copyright ©, 2019 PolyOne Corporation. PolyOne makes no representations, guarantees, or warranties of any kind with respect to the Information contained in this document about its accuracy, suitability for particular applications, or the results obtained or obtainable using the information. Some of the Information arises from laboratory work with small-scale equipment which may not provide a reliable indication of performance or properties obtained or obtainable on larger-scale equipment. Values reported as "typical" or stated without a range do not state minimum or maximum properties; consult your sales representative for property ranges and min/max specifications. Processing conditions can cause material properties to shift from the values stated in the Information. PolyOne makes no warranties or guarantees respecting suitability of either PolyOne's products or the Information for your process or end-use application. You have the responsibility to conduct full-scale end-product performance testing to determine suitability in your application, and you assume all risk and liability arising from your use of the Information and/or use or handling of any product. Poll-YONE MAKES NO WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, either with respect to the Information or products reflected by the Information. This data sheet shall NOT operate as permission, recommendation, or inducement to practice any patented invention without permission of the patent owner.

Rev: 2018-09-18 Page: 1 of 2

Injection	Typical Value (English)	Typical Value (SI)	
Front Temperature	401 to 428 °F	205 to 220 °C	
Nozzle Temperature	401 to 428 °F	205 to 220 °C	
Mold Temperature	104 °F	40 °C	
Injection Rate	Moderate	Moderate	
Back Pressure	1160 psi	8.00 MPa	

Notes

- ¹ Typical values are not to be construed as specifications.
- ² 2.0 in/min (50 mm/min)

CONTACT INFORMATION

Americas

United States - Avon Lake +1 440 930 1000

United States - McHenry +1 815 385 8500 Asia

China - Guangzhou +86 20 8732 7260

China - Shenzhen +86 755 2969 2888 China - Suzhou +86 512 6823 24 38

China - Suzhou +86 512 6265 2600 Hong Kong -+852 2690 5332

Taiwan - Yonghe City, +886 9396 99740, +886 2929 1849 Europe

Germany - Gaggenau +49 7225 6802 0

Spain - Barbastro (Huesca) +34 974 310 314

PolyOne.

Beyond Polymers.

Better Business Solutions. SM

www.polyone.com

PolyOne Americas 33587 Walker Road

Avon Lake, Ohio 44012 United States

+1 440 930 1000

+1 866 POLYONE

PolyOne Asia

No. 88 Guoshoujing Road Z.J Hi-tech Park, Pudong Shanghai, 201203, China +86 21 5080 1188 PolyOne Europe 6 Giällewee

+352 269 050 35

Copyright ©, 2019 PolyOne Corporation. PolyOne makes no representations, guarantees, or warranties of any kind with respect to the Information contained in this document about its accuracy, suitability for particular applications, or the results obtained or obtainable using the information. Some of the Information arises from laboratory work with small-scale equipment which may not provide a reliable indication of performance or properties obtained or obtainable on larger-scale equipment. Values reported as "typical" or stated without a range do not state minimum or maximum properties; consult your sales representative for property ranges and min/max specifications. Processing conditions can cause material properties obstift from the values stated in the Information. PolyOne makes no warranties or guarantees respecting suitability of either PolyOne's products or the Information for your process or end-use application. You have the responsibility to conduct full-scale end-product performance testing to determine suitability in your application, and you assume all risk and liability arising from your use of the Information and/or use or handling of any product. PoltYONE MAKES NO WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, either with respect to the Information or products reflected by the Information. This data sheet shall NOT operate as permission, recommendation, or inducement to practice any patented invention without permission of the patent owner.

Rev: 2018-09-18 Page: 2 of 2

³ 0.079 in/min (2.0 mm/min)