



WPP PP WPP2194-Natural

Washington Penn Plastic Co. Inc. - Polypropylene Copolymer

Wednesday, October 9, 2019

General Information

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Copolymer • Durable	• Good Stiffness • Good Toughness	• High Impact Resistance
Uses	• Automotive Applications	• Automotive Interior Trim	
Appearance	• Colors Available	• Natural Color	
Forms	• Pellets		

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.898	g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	10	g/10 min	ASTM D1238
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength ² (Yield)	20.0	MPa	ASTM D638
Flexural Modulus - Tangent ³	900	MPa	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (23°C)	540	J/m	ASTM D256
Instrumented Dart Impact ⁴ (-30°C)	22.0	J	ASTM D3763

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	71 to 88	°C
Drying Time	1.0	hr
Rear Temperature	218 to 224	°C
Middle Temperature	224 to 229	°C
Front Temperature	224 to 229	°C
Nozzle Temperature	218 to 229	°C
Mold Temperature	16 to 49	°C
Injection Pressure	4.14 to 8.27	MPa
Holding Pressure	2.07 to 4.14	MPa
Back Pressure	0.345 to 1.03	MPa
Clamp Tonnage	3.4 to 5.5	kN/cm ²
Cushion	3.18 to 6.35	mm

Injection Notes

Injection Speed: 1.25 to 2.75 in/s
Zone 4 Temperature: 445 to 455°F
Hot Runner Temperature: 425 to 455°F
Hydraulic Oil Temperature: 110 to 125°F
Shot Capacity vs. Barrel Capacity: 2.5 to 4
Screw Decompression: 0.1 to 0.25 in

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Notes

¹ Typical properties: these are not to be construed as specifications.

² 50 mm/min

³ 1.3 mm/min

⁴ 2.20 m/sec