

WPP PP PPH2TF2-Black

Polypropylene Homopolymer

Washington Penn Plastic Co. Inc.



Prospector

General		
Material Status	• Commercial: Active	
Availability	• North America	
Filler / Reinforcement	• Talc Filler, 20% Filler by Weight	
Additive	• Heat Stabilizer	
Features	• Heat Stabilized	• Homopolymer
Uses	• Automotive Applications	
Appearance	• Black	• Colors Available
Forms	• Pellets	

Physical	Nominal Value Unit	Test Method
Specific Gravity	1.04 g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	6.0 g/10 min	ASTM D1238

Mechanical	Nominal Value Unit	Test Method
Tensile Strength ² (Yield)	33.1 MPa	ASTM D638
Tensile Elongation ² (Break)	20 %	ASTM D638
Flexural Modulus - Tangent ³	2620 MPa	ASTM D790
Flexural Strength ³	55.2 MPa	ASTM D790

Impact	Nominal Value Unit	Test Method
Notched Izod Impact		ASTM D256
-30°C, 3.18 mm	29 J/m	
23°C, 3.18 mm	30 J/m	
Unnotched Izod Impact (23°C, 3.18 mm)	430 J/m	ASTM D256

Thermal	Nominal Value Unit	Test Method
Deflection Temperature Under Load		ASTM D648
0.45 MPa, Unannealed	122 °C	
1.8 MPa, Unannealed	72.0 °C	

Injection	Nominal Value Unit
Drying Temperature	71.1 to 87.8 °C
Drying Time	1.0 hr
Rear Temperature	224 to 229 °C
Middle Temperature	224 to 229 °C
Front Temperature	227 to 232 °C
Nozzle Temperature	232 to 243 °C
Mold Temperature	15.6 to 48.9 °C
Injection Pressure	4.14 to 7.58 MPa
Holding Pressure	1.72 to 4.83 MPa
Back Pressure	0.689 to 1.38 MPa
Clamp Tonnage	3.4 to 5.5 kN/cm ²
Cushion	3.18 to 6.35 mm

Injection Notes

Injection Speed: 1.5 to 2.5 in/s
 Zone 4 Temperature: 450 to 460°F
 Hot Runner Temperature: 450 to 480°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

Notes

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

² 51 mm/min

³ 1.3 mm/min