

WPP PP PPH5CF3-Black

Washington Penn Plastic Co. Inc. - Polypropylene Homopolymer

Wednesday, October 9, 2019

General Information					
Product Description					
Properties shown below for this f	filled blend are typical for a 33% calcium o	carbonate filled polypropylene homo	ppolymer.		
General					
Material Status	Commercial: Active				
Availability	 Africa & Middle East 	• Europe	North America		
	 Asia Pacific 	 Latin America 			
Filler / Reinforcement	Calcium Carbonate, 32% Filler by Weight				
Additive	 Heat Stabilizer 				
Features	 Good Dimensional Stability 	 Good Stiffness 	• Homopolymor		
	 Good Impact Resistance 	 Heat Stabilized 	 Homopolymer 		
Uses	 Automotive Applications 	 Consumer Applications 			
Appearance	Black	 Colors Available 			
Forms	Pellets				

ASTM & ISO Properties ¹				
Physical	Nominal Value	Unit	Test Method	
Density	1.14	g/cm³	ISO 1183	
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	18	g/10 min	ISO 1133	
Mechanical	Nominal Value	Unit	Test Method	
Tensile Stress (Yield)	19.0	MPa	ISO 527-2/5	
Flexural Modulus ²	2350	MPa	ISO 178	
Impact	Nominal Value	Unit	Test Method	
Charpy Notched Impact Strength			ISO 179	
-40°C	3.5	kJ/m²		
23°C	4.8	kJ/m²		
Thermal	Nominal Value	Unit	Test Method	
Heat Deflection Temperature (1.8 MPa, Unannealed)	65.0	°C	ISO 75-2/A	
Additional Information				

Tested at $23 \pm 2^{\circ}$ C ($73.4 \pm 3.6^{\circ}$ F) and $50 \pm 5\%$ relative humidity unless otherwise noted.

Processing Information			
njection	Nominal Value	Unit	
Drying Temperature	71 to 88	°C	
Drying Time	1.0	hr	
Rear Temperature	216 to 221	°C	
Middle Temperature	216 to 221	°C	
Front Temperature	218 to 224	°C	
Nozzle Temperature	224 to 235	°C	
Mold Temperature	16 to 49	°C	
Injection Pressure	4.14 to 7.58	MPa	
Holding Pressure	1.72 to 4.83	MPa	
Back Pressure	0.517 to 1.03	MPa	
Clamp Tonnage	3.4 to 5.5	kN/cm²	



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Injection	Nominal Value Unit
Cushion	3.18 to 6.35 mm

Injection Notes

Injection Speed: 1.5 to 2.5 in/s
Zone 4 Temperature: 435 to 445°F
Hot Runner Temperature: 435 to 465°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 2.0 mm/min