WPP PP PPH3TF2-Black

Washington Penn Plastic Co. Inc. - Polypropylene Homopolymer

Wednesday, October 9, 2019

General Information

Product Description

Properties shown below for this filled blend are typical for a 20% talc-reinforced polypropylene homopolymer. This basic product satisfies many application needs. Special compounds are available.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Talc, 20% Filler by Weight		
Additive	• Heat Stabilizer		
Features	• Heat Stabilized	• High Heat Resistance	• Homopolymer
Uses	• Automotive Applications		
Appearance	• Black	• Colors Available	
Forms	• Pellets		

ASTM & ISO Properties [1]

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.05	g/cm³	ASTM D792
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	23	g/10 min	ASTM D1238
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Strength [2] (Yield)	34.0	MPa	ASTM D638
Tensile Elongation [2] (Break)	33	%	ASTM D638
Flexural Modulus - Secant [3]	2500	MPa	ASTM D790
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact (23°C)	32	J/m	ASTM D256
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load			ASTM D648
0.45 MPa, Unannealed	129	°C	
Deflection Temperature Under Load			ASTM D648
1.8 MPa, Unannealed	75.0	°C	

Additional Information

Tested at 23 ± 2°C (73.4 ± 3.6°F) and 50 ± 5% relative humidity unless otherwise noted.

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	71 to 88	°C
Drying Time	1.0	hr
Rear Temperature	221 to 227	°C
Middle Temperature	221 to 227	°C
Front Temperature	224 to 229	°C
Nozzle Temperature	229 to 241	°C
Mold Temperature	16 to 49	°C
Injection Pressure	4.14 to 7.58	MPa
Holding Pressure	1.72 to 4.83	MPa

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Injection	Nominal Value	Unit
Back Pressure	0.689 to 1.38	MPa
Clamp Tonnage	3.4 to 5.5	kN/cm²
Cushion	3.18 to 6.35	mm

Injection Notes

Injection Speed: 1.5 to 2.5 in/s
Zone 4 Temperature: 445 to 455°F
Hot Runner Temperature: 445 to 475°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] 50 mm/min

[3] 13 mm/min