



## PoliXL™ PA66GF50BK

Nylon 66, 50% Fiberglass Reinforced, Black, Heat Stabilized

Physical	DAM	Conditioned	Test Method
Specific Gravity, g/cc	1.56	-	D792
Mold Shrinkage, %			D955
Parallel: 23 °C	0.2 - 0.4	-	
Perpendicular :23°C	0.6 - 0.8	-	
Water Absorption, %			D570
Equilibrium, 23 °C, 50% RH	1.8	-	
Ash (Glass-fiber), %	50	-	D2584

Mechanical	DAM	Conditioned	Test Method
Tensile Modulus, psi (MPa)	2,450,000 (17,000)	1,380,000 (9,500)	ISO 527
Tensile Strength (Break), psi (MPa)	34,100 (235)	24,660 (170)	D638
Tensile Strain (Break), %	2.5	3	D638
Flexural Modulus, psi (MPa)	2,100,000 (14,480)	1,590,000 (11,000)	D790
Flex Strength, psi (MPa)	56,600 (390)	39,000 (270)	D790

Impact	DAM	Conditioned	Test Method
Charpy Notched Impact Strength ft-lb/in (kJ/m <sup>2</sup> )			ISO 179
23 °C	4 (21)	4.7 (25)	
-30 °C	3.5 (18)	5.6 (30)	
Charpy Unnotched Impact Strength, ft-lb/in (kJ/m <sup>2</sup> )			ISO 179
23°C	11.2 (60)	12.2 (65)	
-30 °C	11 (58)	8.62 (46)	
Notched Izod Impact Strength, ft-lb/in (kJ/m <sup>2</sup> )			D256
23°C	2.4 (13)	3 (16)	
-30 °C	1.9 (10)	2 (11)	

Thermal	DAM	Conditioned	Test Method
Heat Deflection Temperature, °F (°C)			ISO 75
0.45 MPa Unannealed	502 (261)	-	
1.8 MPa Unannealed	485 (252)	-	
Melting Temperature, °F (°C)	505 (263)	-	DSC

Flammability	DAM	Conditioned	Test Method
0.71 mm	HB	-	UL94
1.50 mm	HB	-	UL94
3.00 mm	HB	-	UL94



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