



PoliXL™ PA66GM38BK

Nylon 66, 38% Fiberglass/Mineral Reinforced, Black, Heat Stabilized

Physical	DAM	Conditioned	Test Method
Specific Gravity, g/cc	1.4	-	D792
Mold Shrinkage, %			D955
Parallel: 23 °C	0.6 - 0.8	-	
Perpendicular :23°C	0.7 - 0.9	-	
Water Absorption, %			D570
Equilibrium, 23 °C, 50% RH	1.8	-	
Ash (Glass-fiber/Mineral), %	38	-	D2584

Mechanical	DAM	Conditioned	Test Method
Tensile Modulus, psi (MPa)	1,087,800 (7,500)	725,200 (5,000)	ISO 527
Tensile Strength (Break), psi (MPa)	17,400 (120)	10,400 (72)	D638
Tensile Strain (Break), %	2.5	4.6	D638
Flexural Modulus, psi (MPa)	1,100,000 (7,580)	900,000 (6,200)	D790
Flex Strength, psi (MPa)	28,000 (193)	27,000 (186)	D790

Impact	DAM	Conditioned	Test Method
Charpy Notched Impact Strength ft-lb/in (kJ/m ²)			ISO 179
23 °C	0.56 (3)	0.58 (32)	
-30 °C	0.54 (2.9)	0.54 (2.9)	
Charpy Unnotched Impact Strength, ft-lb/in (kJ/m ²)			ISO 179
23°C	7.4 (40)	7.4 (40)	
-30 °C	-	-	
Notched Izod Impact Strength, ft-lb/in (kJ/m ²)			D256
23°C	0.8 (4.2)	0.8 (4.2)	
-30 °C	0.64 (3.4)	0.64 (3.4)	

Thermal	DAM	Conditioned	Test Method
Heat Deflection Temperature, °F (°C)			ISO 75
0.45 MPa Unannealed	491 (255)	-	
1.8 MPa Unannealed	473 (245)	-	
Melting Temperature, °F (°C)	500 (260)	-	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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