



PoliXL™ PA6MG40N

Nylon 6, 40% Mineral/Fiberglass Reinforced, Natural, Heat Stabilized

Physical	DAM	Conditioned	Test Method
Specific Gravity, g/cc	1.5	-	D792
Mold Shrinkage, %			D955
Parallel: 23 °C	0.3 - 0.5	-	
Perpendicular :23°C	0.6 - 0.8	-	
Water Absorption, %			D570
Equilibrium, 23 °C, 50% RH	1.2	-	
Ash (Mineral/Glass-fiber), %	40	-	D2584

Mechanical	DAM	Conditioned	Test Method
Tensile Modulus, psi (MPa)	1,203,800 (8,300)	667,174 (4,600)	ISO 527
Tensile Strength (Break), psi (MPa)	18,129 (125)	11,600 (80)	D638
Tensile Strain (Break), %	3	6	D638
Flexural Modulus, psi (MPa)	1,102,286 (7,600)	-	D790
Flex Strength, psi (MPa)	29,000 (200)	-	D790

Impact	DAM	Conditioned	Test Method
Charpy Notched Impact Strength ft-lb/in (kJ/m ²)			ISO 179
23 °C	1.31 (7)	2.25 (12)	
-30 °C	1.03 (5.5)	0.75 (4)	
Charpy Unnotched Impact Strength, ft-lb/in (kJ/m ²)			ISO 179
23°C	11.2 (60)	12.2 (65)	
-30 °C	9.4 (50)	9.4 (50)	
Notched Izod Impact Strength, ft-lb/in (kJ/m ²)			D256
23°C	1.7 (9)	2.06 (11)	
-30 °C	0.75 (4)	1.03 (5.5)	

Thermal	DAM	Conditioned	Test Method
Heat Deflection Temperature, °F (°C)			ISO 75
0.45 MPa Unannealed	417 (214)	-	
1.8 MPa Unannealed	401 (205)	-	
Melting Temperature, °F (°C)	428 (220)	-	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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