



PoliXL™ PA66GI14BK

Nylon 66, 14% Fiberglass Reinforced, Impact Modified, Black, Heat Stabilized

Physical	DAM	Conditioned	Test Method
Specific Gravity, g/cc	1.22	-	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), %	14	-	D2584

Mechanical	DAM	Conditioned	Test Method
Tensile Modulus, psi (MPa)	700,000 (4,800)	-	ISO 527
Tensile Strength (Break), psi (MPa)	16,000 (110)	-	ISO 527
Tensile Strain (Break), %	5	-	ISO 527
Flexural Modulus, psi (MPa)	680,000 (4,700)	-	ISO 178
Flex Strength, psi (MPa)	24,000 (165)	-	ISO 178

Impact	DAM	Conditioned	Test Method
Charpy Notched Impact Strength ft-lb/ in (kJ/m ²)			ISO 179
23 °C	2.4 (13)	3.15 (17)	
-30 °C	1.3 (7)	1.5 (8)	
Charpy Unnotched Impact Strength, ft-lb/in (kJ/m ²)			ISO 179
23°C	13.3 (70)	14 (75)	
-30 °C	12 (63)	12.5 (66)	
Notched Izod Impact Strength, ft-lb/ in (kJ/m ²)			ISO 180
23°C	2.4 (13)	-	
-30 °C	2 (11)	-	

Thermal	DAM	Conditioned	Test Method
Heat Deflection Temperature, °F (°C)			ISO 75
0.45 MPa Unannealed	464 (240)	-	
1.8 MPa Unannealed	428 (220)	-	
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



Legal Disclaimer

The information presented here is accurate and reliable. Because conditions of use are beyond our control, we make no warranties, expressed or implied and specifically exclude any and all warranties of merchantability and fitness for a particular purpose. Our products are sold with the express understanding that our customers will conduct their own tests to determine the suitability of the material for their particular use. Nothing herein shall be construed as permission or recommendation to practice a patented invention without a license. The sole liability for Niche Polymer for any claims arising out of the manufacturer, use or sale of its products shall be for our customers purchase price or material replacement.

