



Nymax™ NM6000-00012 HS Natural Polyamide 6

Key Characteristics

Product Description

The Nymax® GF 600 Series of glass fiber-reinforced Nylon 6 compounds have been specifically engineered for applications requiring high stiffness, tensile strength, and toughness, while providing enhanced surface appearance versus nylon 6/6 compounds. These materials are available in a broad range of reinforcement levels depending upon stiffness characteristics desired and have been formulated to offer ease of processing in most standard thermoplastic processing equipment.

General

Material Status	• Commercial: Active		
Regional Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Glass Fiber		
Features	• General Purpose		
Uses	• Automotive Applications • Construction Applications	• Consumer Applications • General Purpose	• Industrial Applications
Appearance	• Natural Color		
Forms	• Pellets		
Processing Method	• Injection Molding		

Technical Properties ¹

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density / Specific Gravity	1.39	1.39	ASTM D792
Molding Shrinkage - Flow	1.0E-3 to 3.0E-3 in/in	0.10 to 0.30 %	ASTM D955
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus	1.50E+6 psi	10300 MPa	ISO 527
Tensile Strength (Break)	26100 psi	180 MPa	ISO 527
Tensile Elongation ² (Yield)	4.0 %	4.0 %	ASTM D638
Tensile Elongation (Break)	12 %	12 %	ISO 527
Flexural Modulus			
--	1.26E+6 psi	8700 MPa	ASTM D790
--	1.35E+6 psi	9310 MPa	ISO 178
Flexural Strength			
--	37700 psi	260 MPa	ASTM D790
--	37700 psi	260 MPa	ISO 178
Impact	Typical Value (English)	Typical Value (SI)	Test Method
Notched Izod Impact			ASTM D256A
73°F (23°C), 0.125 in (3.18 mm), Injection Molded	2.5 ft·lb/in	130 J/m	
Notched Izod Impact Strength (Partial Break)	7.2 ft·lb/in ²	15 kJ/m ²	ISO 180
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
264 psi (1.8 MPa), Annealed, 0.125 in (3.18 mm)	399 °F	204 °C	
Heat Deflection Temperature			ISO 75-2/A
264 psi (1.8 MPa), Annealed	396 °F	202 °C	
Melting Temperature	428 °F	220 °C	ASTM D789

Flammability	Typical Value (English)	Typical Value (SI)	Test Method
Flame Rating (0.06 in (1.6 mm))	HB	HB	UL 94
Additional Information			
Molded Test Bars: Dry as Molded			

Notes

¹ Typical values are not to be construed as specifications.

² Type I, 0.20 in/min (5.1 mm/min)