

# Nymax<sup>™</sup> 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	<ul><li> Africa &amp; Middle East</li><li> Asia Pacific</li></ul>	<ul><li>Europe</li><li>Latin America</li></ul>	North America
Filler / Reinforcement	Glass Fiber		
Features	<ul> <li>General Purpose</li> </ul>		
Uses	<ul><li>Automotive Applications</li><li>Construction Applications</li></ul>	<ul><li>Consumer Applications</li><li>General Purpose</li></ul>	Industrial Applications
Appearance	<ul> <li>Natural Color</li> </ul>		
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 <sup>2</sup> (Yield)	4.0 %	4.0 %	ASTM D638
Tensile Elongation (Break)	12 %	12 %	ISO 527
Flexural Modulus			
	1.26E+6 psi	8700 MPa	ASTM D790
<del></del>	1.35E+6 psi	9310 MPa	ISO 178
Flexural Strength			
	37700 psi	260 MPa	ASTM D790
<del></del>	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/in²	15 kJ/m²	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

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# Nymax™ NM6000-00012 HS Natural

### **Technical Data Sheet**

Flammability	Typical Value (English)	Typical Value (SI)	Test Method
Flame Rating (0.06 in (1.6 mm))	НВ	НВ	UL 94
Additional Information			

Molded Test Bars: Dry as Molded

#### **Notes**

<sup>1</sup> Typical values are not to be construed as specifications.

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<sup>&</sup>lt;sup>2</sup> Type I, 0.20 in/min (5.1 mm/min)