



## Nymax™ ND633 GF 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	• Latin America	• North America	
Filler / Reinforcement	• Glass Fiber, 33% Filler by Weight		
Features	• General Purpose	• Industrial Resin	
Uses	• Automotive Applications • Construction Applications	• Consumer Applications • General Purpose	• Industrial Applications
Appearance	• Natural Color		
Forms	• Pellets		
Processing Method	• Injection Molding		

### Technical Properties <sup>1</sup>

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Specific Gravity	1.36	1.36	ASTM D792
Molding Shrinkage - Flow	3.0E-3 in/in	0.30 %	ASTM D955
Water Absorption (24 hr)	1.0 %	1.0 %	ASTM D570
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Strength <sup>2</sup> (Yield)	24000 psi	165 MPa	ASTM D638
Tensile Strength <sup>2</sup> (Break)	22000 psi	152 MPa	ASTM D638
Tensile Elongation <sup>2</sup> (Yield)	4.0 %	4.0 %	ASTM D638
Flexural Modulus	1.20E+6 psi	8270 MPa	ASTM D790
Flexural Strength	34000 psi	234 MPa	ASTM D790
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	2.4 ft·lb/in	130 J/m	
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
264 psi (1.8 MPa), Unannealed, 0.125 in (3.18 mm)	401 °F	205 °C	
Melting Temperature	428 °F	220 °C	DSC
Additional Information			
Molded Test Bars: Dry as Molded			

### Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Drying Temperature	180 °F	82.2 °C
Drying Time	4.0 hr	4.0 hr
Mold Temperature	120 to 200 °F	48.9 to 93.3 °C

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**Notes**

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

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

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