

# Nymax<sup>™</sup> GF 600 A 14 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	Filler, 14% Filler by Weight    Glass Fiber
Features	General Purpose
Uses	<ul> <li>Automotive Applications</li> <li>Construction Applications</li> <li>General Purpose</li> <li>Industrial Applications</li> </ul>
Appearance	Natural Color
Forms	• Pellets
Processing Method	Injection Molding

## Technical Properties 1

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Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density / Specific Gravity	1.22	1.22	ASTM D792
Molding Shrinkage - Flow	4.0E-3 in/in	0.40 %	ASTM D955
Water Absorption (24 hr, 0.125 in (3.18 mm))	1.0 %	1.0 %	ASTM D570
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Strength <sup>2</sup> (Yield)	16000 psi	110 MPa	ASTM D638
Tensile Strength <sup>2</sup> (Break)	17000 psi	117 MPa	ASTM D638
Tensile Elongation <sup>2</sup> (Yield)	4.0 %	4.0 %	ASTM D638
Flexural Modulus	650000 psi	4480 MPa	ASTM D790
Flexural Strength	20000 psi	138 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	1.0 ft·lb/in	53 J/m	
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Deflection Temperature Under Load		<u> </u>	ASTM D648
66 psi (0.45 MPa), Unannealed, 0.125 in (3.18 mm)	414 °F	212 °C	
Deflection Temperature Under Load			ASTM D648
264 psi (1.8 MPa), Unannealed, 0.125 in (3.18 mm)	383 °F	195 °C	
Melting Temperature	419°F	215 °C	ASTM D789
Additional Information			

Molded Test Bars: Dry as Molded

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Rev: 2017-11-17 Page: 1 of 2

## **Processing Information**

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Injection	Typical Value (English)	Typical Value (SI)	
Drying Temperature	180 °F	82 °C	
Drying Time	4.0 hr	4.0 hr	
Mold Temperature	120 to 200 °F	49 to 93 °C	

### **Notes**

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Rev: 2017-11-17 Page: 2 of 2

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

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