

# Nymax<sup>™</sup> GF 600 A 33 HS Black 13 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>North America</li> </ul>	South America	
Filler / Reinforcement	Glass Fiber Reinforcement	<ul> <li>Unspecified Filler\Reinfor., 33% Filler by Weight</li> </ul>	
Additive	Heat Stabilizer		
Features	General Purpose	Heat Stabilized	
Uses	<ul><li>Automotive Applications</li><li>Construction Applications</li></ul>	<ul><li>Consumer Applications</li><li>General Purpose</li></ul>	<ul> <li>Industrial Applications</li> </ul>
Appearance	<ul> <li>Natural Color</li> </ul>		
Forms	Pellets		
Processing Method	Injection Molding		

Technical Properties 1

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Physical	Typical Value (English)	Typical Value (SI)	Test Method
Specific Gravity	1.36	1.36	ASTM D792
Molding Shrinkage - Flow	0.0030 in/in	0.30 %	ASTM D955
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Strength <sup>2</sup> (Yield)	24000 psi	165 MPa	ASTM D638
Tensile Elongation <sup>2</sup> (Yield)	3.0 %	3.0 %	ASTM D638
Flexural Modulus	1.20E+6 psi	8270 MPa	ASTM D790
Flexural Strength	32000 psi	221 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	2.10 ft·lb/in	112 J/m	
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
66 psi (0.45 MPa), Annealed, 0.125 in (3.18 mm)	428 °F	220 °C	
Deflection Temperature Under Load			ASTM D648
264 psi (1.8 MPa), Annealed, 0.125 in (3.18 mm)	392 °F	200 °C	
Melting Temperature	428 °F	220 °C	ASTM D789
Additional Properties			

#### Additional Properties

Molded Test Bars: Dry as Molded

### **Notes**

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<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)

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