



# Nymax™ GF 600 A 33 Black 112 A V

## 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	• North America	• South America	
Filler / Reinforcement	• Glass Fiber Reinforcement, 33% Filler by Weight		
Features	• General Purpose	• Good Weather Resistance	
Uses	• Automotive Applications	• Consumer Applications	• Industrial Applications
	• Construction Applications	• General Purpose	
Automotive Specifications	• GM GMP.PA6.045		
Appearance	• Black		
Forms	• Pellets		
Processing Method	• Injection Molding		

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

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Specific Gravity	1.38	1.38	ASTM D792
Molding Shrinkage - Flow	0.0020 to in/in 0.0040	0.20 to 0.40 %	ASTM D955
Water Absorption (24 hr)	0.90 %	0.90 %	ASTM D570
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus	1.20E+6 psi	8270 MPa	ASTM D638
Tensile Strength <sup>2</sup> (Yield)	22000 psi	152 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	2.00 ft-lb/in	107 J/m	
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)	392 °F	200 °C	

#### Additional Properties

Molded Test Bars: Dry as Molded

#### 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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