



# Nymax™ GF 600 A 33 UV XDB Light Slate

## 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		
Additive	• UV Stabilizer		
Features	• General Purpose	• Good UV Resistance	• Good Weather Resistance
Uses	• Automotive Applications	• Consumer Applications	• Industrial Applications
	• Construction Applications	• General Purpose	
Appearance	• Gray		
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
Density	1.37 g/cm <sup>3</sup>	1.37 g/cm <sup>3</sup>	ISO 1183
Molding Shrinkage - Flow	0.0020 to 0.0040 in/in	0.20 to 0.40 %	ASTM D955
Molding Shrinkage	0.20 to 0.40 %	0.20 to 0.40 %	ISO 294-4
Water Absorption (24 hr)	0.90 %	0.90 %	ASTM D570
Water Absorption (73°F (23°C), 24 hr)	1.0 %	1.0 %	ISO 62
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus	1.15E+6 psi	7930 MPa	ASTM D638
Tensile Modulus	8300 psi	57.2 MPa	ISO 527-2
Tensile Strength <sup>2</sup> (Yield)	22300 psi	153 MPa	ASTM D638
Tensile Stress (Yield)	140 psi	0.965 MPa	ISO 527-2
Tensile Elongation <sup>2</sup> (Yield)	3.0 %	3.0 %	ASTM D638
Tensile Strain (Break)	4.0 %	4.0 %	ISO 527-2
Flexural Modulus	1.15E+6 psi	7930 MPa	ASTM D790
Flexural Modulus	8400 psi	57.9 MPa	ISO 178
Flexural Strength	32000 psi	221 MPa	ASTM D790
Flexural Strength	220 psi	1.52 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	1.90 ft-lb/in	101 J/m	
Notched Izod Impact Strength	8.10 ft-lb/in <sup>2</sup>	17.0 kJ/m <sup>2</sup>	ISO 180

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Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Deflection Temperature Under Load 264 psi (1.8 MPa), Annealed, 0.125 in (3.18 mm)	402 °F	206 °C	ASTM D648
Heat Deflection Temperature 264 psi (1.8 MPa), Annealed	392 °F	200 °C	ISO 75-2/A
<b>Additional Properties</b>			
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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