

# Nymax<sup>™</sup> GF 600 A 33 UV ZJ1 Light Khaki 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.

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Material Status	Commercial: Active				
Regional Availability	North America	<ul> <li>South America</li> </ul>			
Filler / Reinforcement	<ul> <li>Glass Fiber Reinforcement, 33% Filler by Weight</li> </ul>				
Additive	UV Stabilizer				
Features	General Purpose	<ul> <li>Good UV Resistance</li> </ul>	<ul> <li>Good Weather Resistance</li> </ul>		
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	• Tan				
Forms	Pellets				
Processing Method	<ul> <li>Injection Molding</li> </ul>				

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

hysical	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 in/in 0.0040	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		
lechanical	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)	22500 psi	155 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		
npact	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			
Notched Izod Impact Strength	8.00 ft·lb/in <sup>2</sup>	16.8 kJ/m²	ISO 180		

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### **Technical Data Sheet**

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)	402 °F	206 °C	
Heat Deflection Temperature			ISO 75-2/A
264 psi (1.8 MPa), Annealed	392 °F	200 °C	
Additional Properties			
Moldod Toot Dara: Dry on Moldod			

Molded Test Bars: Dry as Molded

#### Notes

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

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

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