

Nymax[™] GF 600 47 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	North America South America		
Filler / Reinforcement	 Glass Fiber Reinforcement, 47% Filler by Weight 		
Features	General Purpose		
Uses	 Automotive Applications Construction Applications General Purpose Industrial Applications 		
Appearance	Natural Color		
Forms	• Pellets		
Processing Method	Injection Molding		

Technical Properties 1

reclinical Properties				
Physical	Typical Value (English)	Typical Value (SI)	Test Method	
Specific Gravity	1.50	1.50	ASTM D792	
Molding Shrinkage - Flow	0.0010 to in/in 0.0030	0.10 to 0.30 %	ASTM D955	
Water Absorption (24 hr)	1.0 %	1.0 %	ASTM D570	
Mechanical Programme Technology	Typical Value (English)	Typical Value (SI)	Test Method	
Tensile Modulus	2.00E+6 psi	13800 MPa	ASTM D638	
Tensile Strength ² (Yield)	30000 psi	207 MPa	ASTM D638	
Tensile Elongation ² (Yield)	3.0 %	3.0 %	ASTM D638	
Flexural Modulus	2.00E+6 psi	13800 MPa	ASTM D790	
Flexural Strength	38000 psi	262 MPa	ASTM D790	
mpact	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	3.00 ft·lb/in	160 J/m		
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)	410 °F	210 °C	ASTM D648	

Additional Properties

Molded Test Bars: Dry as Molded

Notes

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¹ Typical values are not to be construed as specifications.

² Type I, 0.20 in/min (5.1 mm/min)

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