



Nymax™ GF 604 35 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	• Latin America	• North America	
Filler / Reinforcement	• Glass Fiber, 35% Filler by Weight		
Additive	• Heat Stabilizer		
Features	• General Purpose	• Heat Stabilized	
Uses	• Automotive Applications • Construction Applications	• Consumer Applications • General Purpose	• Industrial Applications
Appearance	• Black		
Forms	• Pellets		
Processing Method	• Injection Molding		

Technical Properties ¹

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density / Specific Gravity	1.39	1.39	ASTM D792
Molding Shrinkage - Flow	2.0E-3 to 4.0E-3 in/in	0.20 to 0.40 %	ASTM D955
Water Absorption (24 hr)	1.0 %	1.0 %	ASTM D570
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus	1.30E+6 psi	8960 MPa	ASTM D638
Tensile Strength ² (Yield)	22000 psi	152 MPa	ASTM D638
Tensile Strength ² (Break)	25000 psi	172 MPa	ASTM D638
Tensile Elongation ² (Yield)	3.0 %	3.0 %	ASTM D638
Flexural Modulus	1.30E+6 psi	8960 MPa	ASTM D790
Flexural Strength	31000 psi	214 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	2.0 ft·lb/in	110 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)	393 °F	201 °C	
Additional Information			
Molded Test Bars: Dry as Molded			

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Drying Temperature	180 °F	82 °C
Drying Time	4.0 hr	4.0 hr
Suggested Max Moisture	0.060 to 0.12 %	0.060 to 0.12 %
Rear Temperature	480 to 530 °F	249 to 277 °C
Middle Temperature	500 to 550 °F	260 to 288 °C
Front Temperature	520 to 570 °F	271 to 299 °C
Nozzle Temperature	515 to 565 °F	268 to 296 °C
Mold Temperature	150 to 230 °F	66 to 110 °C

Notes

¹ Typical values are not to be construed as specifications.

² Type I, 0.20 in/min (5.1 mm/min)