



Nymax™ ND633 GF Black

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, 33% Filler by Weight		
Additive	• Heat Stabilizer		
Recycled Content	• Yes		
Features	• General Purpose	• Heat Stabilized	• Industrial Resin
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	1.38	1.38	ASTM D792
Molding Shrinkage - Flow	1.5E-3 to 4.5E-3 in/in	0.15 to 0.45 %	ASTM D955
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Strength ² (Break)	19000 psi	131 MPa	ASTM D638
Tensile Elongation ² (Yield)	2.0 %	2.0 %	ASTM D638
Flexural Modulus	1.20E+6 psi	8270 MPa	ASTM D790
Flexural Strength	30000 psi	207 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	1.2 ft·lb/in	64 J/m	
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
264 psi (1.8 MPa), Unannealed, 0.125 in (3.18 mm)	392 °F	200 °C	
Flammability	Typical Value (English)	Typical Value (SI)	Test Method
Flame Rating (0.06 in (1.5 mm), Black)	HB	HB	UL 94
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	0.10 to 0.20 %	0.10 to 0.20 %
Rear Temperature	430 to 480 °F	221 to 249 °C
Middle Temperature	460 to 510 °F	238 to 266 °C
Front Temperature	470 to 540 °F	243 to 282 °C
Nozzle Temperature	465 to 535 °F	241 to 279 °C
Mold Temperature	120 to 200 °F	49 to 93 °C

Notes

¹ Typical values are not to be construed as specifications.

² Type I, 0.20 in/min (5.1 mm/min)