Nymax™ GF 600 A 33 Natural

Polyamide 6

Avient Corporation

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Technical Data

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		
Literature [1]	• Technical Datasheet		
UL Yellow Card [2]	• E76261-101482582		
Search for UL Yellow Card	• Avient Corporation • Nymax™		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Glass Fiber, 33% Filler by Weight		
Features	• General Purpose		
Uses	• Automotive Applications • Construction Applications	• Consumer Applications • General Purpose	• Industrial Applications
Appearance	• Natural Color		
Forms	• Pellets		
Processing Method	• Injection Molding		

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.39	g/cm³	ASTM D792
Molding Shrinkage - Flow	0.10 to 0.30	%	ASTM D955
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	10300	MPa	ISO 527
Tensile Strength (Break)	180	MPa	ISO 527
Tensile Elongation			
Yield [4]	4.0	%	ASTM D638
Break	12	%	ISO 527
Flexural Modulus			
--	8700	MPa	ASTM D790
--	9310	MPa	ISO 178
Flexural Strength	260	MPa	ASTM D790 ISO 178
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact			
23°C, 3.18 mm, Injection Molded	130	J/m	ASTM D256A
Partial Break	15	kJ/m²	ISO 180
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load			
1.8 MPa, Annealed, 3.18 mm	204	°C	ASTM D648
1.8 MPa, Annealed	202	°C	ISO 75-2/A
Melting Temperature	220	°C	ASTM D789
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating (1.6 mm)	HB		UL 94

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Additional Information
Molded Test Bars: Dry as Molded

Injection	Nominal Value	Unit
Drying Temperature	82	°C
Drying Time	4.0	hr
Suggested Max Moisture	0.060 to 0.12	%
Rear Temperature	249 to 277	°C
Middle Temperature	260 to 288	°C
Front Temperature	271 to 299	°C
Nozzle Temperature	268 to 296	°C
Mold Temperature	66 to 110	°C

Notes

[1] These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.

[2] A UL Yellow Card contains UL-verified flammability and electrical characteristics. UL Prospector continually works to link Yellow Cards to individual plastic materials in Prospector, however this list may not include all of the appropriate links. It is important that you verify the association between these Yellow Cards and the plastic material found in Prospector. For a complete listing of Yellow Cards, visit the UL Yellow Card Search.

[3] Typical properties: these are not to be construed as specifications.

[4] Type I, 5.1 mm/min

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