

Nymax[™] GF 600 A 33 XDH Slate 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 	, 33% Filler by Weight	
Features	General Purpose	Good Weather Resistance	9
Uses	Automotive ApplicationsConstruction Applications	Consumer ApplicationsGeneral Purpose	Industrial Applications
Automotive Specifications	 CHRYSLER MS-DB41 CI 	PN2625	
Appearance	 Gray 		
Forms	 Pellets 		
Processing Method	Injection Molding		

Technical Properties 1

Iechnical Properties 1							
Physical	Typical Value (English)	Typical Value (SI)	Test Method				
Specific Gravity	1.38	1.38	ASTM D792				
Density	1.37 g/cm ³	1.37 g/cm ³	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				
Mechanical	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 ² (Yield)	22500 psi	155 MPa	ASTM D638				
Tensile Stress (Yield)	140 psi	0.965 MPa	ISO 527-2				
Tensile Elongation ² (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				
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	2.00 ft·lb/in	107 J/m					
Notched Izod Impact Strength	8.30 ft·lb/in²	17.4 kJ/m²	ISO 180				

Copyright ©, 2008 PolyOne Corporation. PolyOne makes no representations, guarantees, or warranties of any kind with respect to the Information contained in this document about its accuracy, suitability for particular applications, or the results obtained or obtainable using the information. Some of the Information arises from laboratory work with small-scale equipment which may not provide a reliable indication of performance or properties obtained or obtainable on larger-scale equipment. Values reported as "typical" or stated without a range do not state minimum or maximum properties; consult your sales representative for property ranges and min/max specifications. Processing conditions can cause material properties to shift from the values stated in the Information. PolyOne makes no warranties or guarantees respecting suitability of either PolyOne's products or the Information for your process or end-use application. You have the responsibility to conduct full-scale end-product performance testing to determine suitability in your application, and you assume all risk and liability arising from your use of the Information and/or use or handling of any product. PollYONE MAKES NO WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, either with respect to the Information or products reflected by the Information. This data sheet shall NOT operate as permission, recommendation, or inducement to practice any patented invention without permission of the patent owner.

Nymax™ GF 600 A 33 XDH Slate

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			

Molded Test Bars: Dry as Molded

Notes

¹ Typical values are not to be construed as specifications.

CONTACT INFORMATION

Argentina - Buenos Aires +0054 11 4200 5917

Brasil - Campinas +55 19 3206 0561 Mexico - Toluca +52 722 2790200

United States - Avon Lake +1 440 930 1000 Asia

China - Shenzhen +86 (0) 755 2969 2888

China - Suzhou +86 (0) 512 6823 24 38 India - Mumbai +91 9820 194 220

Singapore - Singapore +65 (0) 6861 9325 Europe

Germany - Gaggenau +49 (0) 7225 6802 0

Spain - Barbastro (Huesca) +34 (0) 9 7431 0314

Turkey - Cekmece-Istanbul-Türkiye +90 (0) 212 549 2256

United Kingdom - Widnes +44 (0) 05600 760 800 PolyOne.

Beyond Polymers.

Better Business Solutions. SM

www.polyone.com

PolyOne Americas 33587 Walker Road

Avon Lake, Ohio 44012 United States

+1 440 930 1000 +1 866 POLYONE PolyOne Asia

No. 88 Guoshoujing Road Z.J Hi-tech Park, Pudong Shanghai, 201203, China

+86 (0) 21 5080 1188

PolyOne Europe

2 Rue Melville Wilson 5330 Assesse, Belgium +32 (0) 83 660 211

Copyright ©, 2008 PolyOne Corporation. PolyOne makes no representations, guarantees, or warranties of any kind with respect to the Information contained in this document about its accuracy, suitability for particular applications, or the results obtained or obtainable using the information. Some of the Information arises from laboratory work with small-scale equipment which may not provide a reliable indication of performance or properties obtained or obtainable on larger-scale equipment. Values reported as "typical" or stated without a range do not state minimum or maximum properties; consult your sales representative for property ranges and min/max specifications. Processing conditions can cause material properties to shift from the values stated in the Information. PolyOne makes no warranties or guarantees respecting suitability of either PolyOne's products or the Information for your process or end-use application. You have the responsibility to conduct full-scale end-product performance testing to determine suitability in your application, and you assume all risk and liability arising from your use of the Information and/or use or handling of any product. Poll-YONE MAKES NO WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, either with respect to the Information or products reflected by the Information. This data sheet shall NOT operate as permission, recommendation, or inducement to practice any patented invention without permission of the patent owner.

² Type I, 0.20 in/min (5.1 mm/min)