



Nymax™ GMF 604 40 UV Black 115 1 X 1

Polyamide 6

Key Characteristics

Product Description

Glass fiber and mineral reinforced PA6 compound with UV resistant

General

Material Status	• Commercial: Active		
Regional Availability	• Latin America	• North America	
Filler / Reinforcement	• Glass\Mineral, 40% Filler by Weight		
Additive	• Heat Stabilizer	• UV Stabilizer	
Features	• General Purpose	• Heat Stabilized	
Uses	• Automotive Applications	• Consumer Applications	• Industrial Applications
	• Construction Applications	• General Purpose	
Appearance	• Black		
Forms	• Pellets		
Processing Method	• Injection Molding		

Technical Properties ¹

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Specific Gravity	1.48	1.48	ASTM D792
Density	1.48 g/cm ³	1.48 g/cm ³	ISO 1183
Molding Shrinkage	0.30 to 0.40 %	0.30 to 0.40 %	ASTM D955
Water Absorption (24 hr, 0.125 in (3.18 mm))	0.80 %	0.80 %	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	1.10E+6 psi	7580 MPa	ASTM D638
Tensile Modulus	1.13E+6 psi	7800 MPa	ISO 527-2
Tensile Strength ² (Yield)	17000 psi	117 MPa	ASTM D638
Tensile Stress (Yield)	14500 psi	100 MPa	ISO 527-2
Tensile Strength ² (Break)	15000 psi	103 MPa	ASTM D638
Tensile Elongation ² (Break)	2.0 to 3.0 %	2.0 to 3.0 %	ASTM D638
Tensile Strain (Break)	3.0 %	3.0 %	ISO 527-2
Flexural Modulus	1.05E+6 psi	7240 MPa	ASTM D790
Flexural Modulus	1.09E+6 psi	7500 MPa	ISO 178
Flexural Strength	25000 psi	172 MPa	ASTM D790
Flexural Stress	26100 psi	180 MPa	ISO 178
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	
Notched Izod Impact Strength	5.8 ft·lb/in ²	12 kJ/m ²	ISO 180
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Heat Deflection Temperature			ISO 75-2/A
264 psi (1.8 MPa), Annealed	374 °F	190 °C	

Additional Information

Molded Test Bars: Dry as Molded

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Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Drying Temperature	180 °F	82.2 °C
Drying Time	4.0 hr	4.0 hr
Suggested Max Moisture	0.10 to 0.20 %	0.10 to 0.20 %
Rear Temperature	500 to 530 °F	260 to 277 °C
Middle Temperature	525 to 550 °F	274 to 288 °C
Front Temperature	525 to 550 °F	274 to 288 °C
Nozzle Temperature	525 to 550 °F	274 to 288 °C
Mold Temperature	120 to 200 °F	48.9 to 93.3 °C

Notes

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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