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 • 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
Specific Gravity	1.48	1.48	ASTM D792
Density	1.48 g/cm³	1.48 g/cm³	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/in²	12 kJ/m²	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			

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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