

Nymax™ GMF 604 40 UV BK002

Polyamide 6

Key Characteristics

Product Description	
Glass fiber and mineral reinforced PA6 compound with UV resistant	
General	
Material Status	• Commercial: Active
Regional Availability	• Asia Pacific
Filler / Reinforcement	• Glass Fiber/Mineral, 40% Filler by Weight
Additive	• UV Stabilizer
Features	• UV Stabilized
Uses	• Automotive Applications • Industrial Applications
Appearance	• Black
Forms	• Pellets
Processing Method	• Injection Molding

Technical Properties ¹

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density	1.48 g/cm ³	1.48 g/cm ³	ISO 1183
Molding Shrinkage			ISO 294-4
Across Flow	0.30 to 0.60 %	0.30 to 0.60 %	
Flow	0.10 to 0.30 %	0.10 to 0.30 %	
Water Absorption (24 hr, 73°F (23°C))	0.76 %	0.76 %	ISO 62
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus ² (73°F (23°C))	1.31E+6 psi	9000 MPa	ISO 527
Tensile Stress ³ (Break)	17400 psi	120 MPa	ISO 527
Flexural Modulus	1.09E+6 psi	7500 MPa	ISO 178
Impact	Typical Value (English)	Typical Value (SI)	Test Method
Charpy Notched Impact Strength			ISO 179
-40°F (-40°C)	1.4 ft·lb/in ²	3.0 kJ/m ²	
73°F (23°C)	2.0 ft·lb/in ²	4.2 kJ/m ²	
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Deflection Temperature Under Load			ISO 75-2
264 psi (1.8 MPa), Unannealed	370 °F	188 °C	
Melting Temperature	> 428 °F	> 220 °C	DSC
Additional Information			
Molded Test Bars: Dry as Molded			

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Drying Temperature	176 to 248 °F	80 to 120 °C
Drying Time	4.0 to 6.0 hr	4.0 to 6.0 hr
Processing (Melt) Temp	464 to 554 °F	240 to 290 °C
Mold Temperature	176 to 248 °F	80 to 120 °C

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Notes

¹ Typical values are not to be construed as specifications.

² 0.039 in/min (1 mm/min)

³ 0.20 in/min (5 mm/min)

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