

Nymax[™] GF 600 A 25 Natural 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 | Unspecified Filler\Reinfor., 25% Filler by Weight | |
| Features | General Purpose | | |
| Uses | Automotive ApplicationsConstruction Applications | Consumer ApplicationsGeneral Purpose | Industrial Applications |
| Appearance | Natural Color | | |
| Forms | Pellets | | |
| Processing Method | Injection Molding | | |

Technical Properties 1

| Physical | Typical Value (English) | Typical Value (SI) | Test Method |
|---|-------------------------|--------------------|-------------|
| Specific Gravity | 1.32 | 1.32 | ASTM D792 |
| Molding Shrinkage - Flow | 0.0030 in/in | 0.30 % | ASTM D955 |
| Mechanical | Typical Value (English) | Typical Value (SI) | Test Method |
| Tensile Strength ² (Yield) | 20000 psi | 138 MPa | ASTM D638 |
| Tensile Elongation ² (Yield) | 4.0 % | 4.0 % | ASTM D638 |
| Flexural Modulus | 1.00E+6 psi | 6890 MPa | ASTM D790 |
| Flexural Strength | 30000 psi | 207 MPa | ASTM D790 |
| 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 | 1.90 ft·lb/in | 101 J/m | |
| Thermal | Typical Value (English) | Typical Value (SI) | Test Method |
| Deflection Temperature Under Load | | | ASTM D648 |
| 66 psi (0.45 MPa), Annealed, 0.125 in (3.18 mm) | 419 °F | 215 °C | |
| Deflection Temperature Under Load | | | ASTM D648 |
| 264 psi (1.8 MPa), Annealed, 0.125 in (3.18 mm) | 392 °F | 200 °C | |
| Melting Temperature | 428 °F | 220 °C | ASTM D789 |
| Additional Properties | | | |

Molded Test Bars: Dry as Molded

Notes

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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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