



Nymax™ GF 1200 A 43 HS Natural Polyamide 66

Key Characteristics

Product Description

The Nymax® GF 1200 Series of glass fiber-reinforced nylon 6/6 compounds have been specifically formulated for applications requiring high stiffness, tensile properties, heat resistance, and durability in harsh environments. 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., 43% Filler by Weight | |
| Additive | • Heat Stabilizer | | |
| Features | • General Purpose | • Heat Stabilized | |
| Uses | • Automotive Applications • Construction Applications | • Consumer Applications • General 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 | 1.50 | 1.50 | ASTM D792 |
| Molding Shrinkage - Flow | 0.0020 in/in | 0.20 % | ASTM D955 |
| Water Absorption (24 hr, 0.125 in (3.18 mm)) | 0.60 % | 0.60 % | ASTM D570 |
| Mechanical | Typical Value (English) | Typical Value (SI) | Test Method |
| Tensile Strength ² (Break) | 32000 psi | 221 MPa | ASTM D638 |
| Tensile Elongation ² (Break) | 3.0 % | 3.0 % | ASTM D638 |
| Flexural Modulus | 1.60E+6 psi | 11000 MPa | ASTM D790 |
| Flexural Strength | 43000 psi | 296 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 | 2.75 ft-lb/in | 147 J/m | |
| Thermal | Typical Value (English) | Typical Value (SI) | Test Method |
| Deflection Temperature Under Load | | | ASTM D648 |
| 66 psi (0.45 MPa), Unannealed, 0.125 in (3.18 mm) | 495 °F | 257 °C | |
| Deflection Temperature Under Load | | | ASTM D648 |
| 264 psi (1.8 MPa), Unannealed, 0.125 in (3.18 mm) | 480 °F | 249 °C | |
| Melting Temperature | 500 °F | 260 °C | ASTM D789 |
| Additional Properties | | | |
| Molded Test Bars: Dry as Molded | | | |

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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