# Nymax™ GF 1200 A 33 HR 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, 33% Filler by Weight | | |
| Additive | • Heat Stabilizer | • Hydrolysis Resistant | |
| Features | • General Purpose | • Heat Stabilized | |
| Uses | • Automotive Applications<br>• Construction Applications | • Consumer Applications<br>• 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 | 1.38 | 1.38 | ASTM D792 |
| Molding Shrinkage - Flow | 0.0030 to 0.0050 in/in | 0.30 to 0.50 % | ASTM D955 |
| Water Absorption (24 hr, 0.125 in (3.18 mm)) | 1.0 % | 1.0 % | ASTM D570 |
| **Mechanical** | **Typical Value (English)** | **Typical Value (SI)** | **Test Method** |
| Tensile Modulus | 1.00E+6 psi | 6890 MPa | ASTM D638 |
| Tensile Strength [2] (Break) | 26500 psi | 183 MPa | ASTM D638 |
| Tensile Elongation [2] (Break) | 3.0 to 4.0 % | 3.0 to 4.0 % | ASTM D638 |
| Flexural Modulus | 1.00E+6 psi | 6890 MPa | ASTM D790 |
| Flexural Strength | 28000 psi | 193 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 | 2.00 ft·lb/in | 107 J/m | |
| **Thermal** | **Typical Value (English)** | **Typical Value (SI)** | **Test Method** |
| Deflection Temperature Under Load | | | ASTM D648 |
| 264 psi (1.8 MPa), Unannealed, 0.125 in (3.18 mm) | 473 °F | 245 °C | |

| 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)

## CONTACT INFORMATION


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