

Nymax™ GF 1200 A 55 HS Black 13

Polyamide 66

Avient Corporation

PROSPECTOR®

www.ulprospector.com

Technical Data

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 |
| Literature ¹ | • Technical Datasheet |
| Search for UL Yellow Card | • Avient Corporation • Nymax™ |
| Availability | • Africa & Middle East • Asia Pacific • Europe • Latin America • North America |
| Filler / Reinforcement | • Filler, 55% Filler by Weight • Glass Fiber |
| Additive | • Heat Stabilizer |
| Features | • Heat Stabilized |
| Appearance | • Black |
| Forms | • Pellets |

| Physical | Nominal Value Unit | Test Method |
|-----------------------------------|------------------------|-------------|
| Density / Specific Gravity | 1.64 g/cm ³ | ASTM D792 |
| Molding Shrinkage - Flow | 0.10 to 0.30 % | ASTM D955 |
| Water Absorption (24 hr, 3.18 mm) | 0.60 % | ASTM D570 |

| Mechanical | Nominal Value Unit | Test Method |
|---|--------------------|-------------|
| Tensile Strength | | |
| Break ³ | 221 MPa | ASTM D638 |
| -- ⁴ | 209 MPa | ISO 527 |
| Tensile Elongation ³ (Break) | 3.0 % | ASTM D638 |
| Flexural Modulus | | |
| -- | 15200 MPa | ASTM D790 |
| -- ⁵ | 16200 MPa | ISO 178 |
| Flexural Strength | 310 MPa | ASTM D790 |

| Impact | Nominal Value Unit | Test Method |
|---------------------------------|----------------------|-------------|
| Notched Izod Impact | | |
| 23°C, 3.18 mm, Injection Molded | 91 J/m | ASTM D256A |
| -- | 11 kJ/m ² | ISO 180 |

| Thermal | Nominal Value Unit | Test Method |
|-----------------------------------|--------------------|-------------|
| Deflection Temperature Under Load | | |
| 0.45 MPa, Unannealed, 3.18 mm | 257 °C | ASTM D648 |
| 1.8 MPa, Unannealed | 248 °C | ISO 75-2 |
| 1.8 MPa, Unannealed, 3.18 mm | 248 °C | ASTM D648 |

Additional Information

Molded Test Bars: Dry as Molded



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| Injection | Nominal Value Unit |
|------------------------|--------------------|
| Drying Temperature | 82 °C |
| Drying Time | 4.0 hr |
| Suggested Max Moisture | 0.060 to 0.12 % |
| Rear Temperature | 274 to 288 °C |
| Middle Temperature | 274 to 288 °C |
| Front Temperature | 274 to 288 °C |
| Nozzle Temperature | 288 to 299 °C |
| Mold Temperature | 66 to 110 °C |

Notes

¹ These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.

² Typical properties: these are not to be construed as specifications.

³ Type I, 5.1 mm/min

⁴ 5.0 mm/min

⁵ 25 mm/min

