

Bergamid™ B70 G30 H GREY VN-3872

Polyamide 6

Key Characteristics

Product Description

Bergamid B70 G30 H Grey VN-3872 is a Polyamide 6 (Nylon 6) product filled with 30% glass fiber. It can be processed by injection molding and its feature is heat stabilized.

General

| | |
|------------------------|-------------------------------------|
| Material Status | • Commercial: Active |
| Regional Availability | • Europe |
| Filler / Reinforcement | • Glass Fiber, 30% Filler by Weight |
| Features | • Heat Stabilized |
| Forms | • Pellets |
| Processing Method | • Injection Molding |

Technical Properties ¹

| Physical | Typical Value (English) | Typical Value (SI) | Test Method |
|---|---------------------------|--------------------------|-------------|
| Density ² | > 1.36 g/cm ³ | > 1.36 g/cm ³ | ISO 1183 |
| Mechanical | Typical Value (English) | Typical Value (SI) | Test Method |
| Tensile Modulus | 1.38E+6 psi | 9500 MPa | ISO 527-2 |
| Tensile Strength | 26100 psi | 180 MPa | ISO 527 |
| Tensile Strain (Break) | 3.5 % | 3.5 % | ISO 527 |
| Flexural Strength | 36300 psi | 250 MPa | ISO 178 |
| Impact | Typical Value (English) | Typical Value (SI) | Test Method |
| Charpy Notched Impact Strength (73°F (23°C)) | 4.8 ft·lb/in ² | 10 kJ/m ² | ISO 179 |
| Thermal | Typical Value (English) | Typical Value (SI) | Test Method |
| Heat Deflection Temperature 264 psi (1.8 MPa), Unannealed | < 410 °F | < 210 °C | ISO 75-2/A |
| Melting Temperature (DSC) | 419 to 437 °F | 215 to 225 °C | ISO 3146 |
| Electrical | Typical Value (English) | Typical Value (SI) | Test Method |
| Surface Resistivity | 1.0E+14 ohms | 1.0E+14 ohms | IEC 60093 |
| Volume Resistivity | 1.0E+16 ohms·cm | 1.0E+16 ohms·cm | IEC 60093 |
| Comparative Tracking Index | 500 V | 500 V | IEC 60112 |
| Flammability | Typical Value (English) | Typical Value (SI) | Test Method |
| Flame Rating | HB | HB | UL 94 |

Processing Information

| Injection | Typical Value (English) | Typical Value (SI) |
|------------------------|-------------------------|--------------------|
| Drying Temperature | 176 °F | 80 °C |
| Drying Time | < 4.0 hr | < 4.0 hr |
| Suggested Max Moisture | < 0.10 % | < 0.10 % |
| Processing (Melt) Temp | 482 to 536 °F | 250 to 280 °C |
| Mold Temperature | 122 to 194 °F | 50 to 90 °C |

Notes

¹ Typical values are not to be construed as specifications.

² +/-0.02