# Bergamid™ A70 G30 black

## Polyamide 66

### Key Characteristics

| Product Description | | |
|---|---|---|
| Bergamid A70 G30 Black is a Polyamide 66 (Nylon 66) product filled with 30% glass fiber. It can be processed by injection molding. | | |
| **General** | | |
| Material Status | • Commercial: Active | |
| Regional Availability | • Asia Pacific | • Europe |
| Filler / Reinforcement | • Glass Fiber, 30% Filler by Weight | |
| Appearance | • Black | |
| Forms | • Pellets | |
| Processing Method | • Injection Molding | |

### Technical Properties [1]

| Physical | Typical Value (English) | Typical Value (SI) | Test Method |
|---|---|---|---|
| Density | 1.36 g/cm³ | 1.36 g/cm³ | 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) | 3.0 % | 3.0 % | ISO 527 |
| **Impact** | **Typical Value (English)** | **Typical Value (SI)** | **Test Method** |
| Charpy Notched Impact Strength (73°F (23°C)) | 4.8 ft·lb/in² | 10 kJ/m² | ISO 179 |
| Charpy Unnotched Impact Strength | | | ISO 179 |
| 73°F (23°C) | 36 ft·lb/in² | 75 kJ/m² | |
| **Thermal** | **Typical Value (English)** | **Typical Value (SI)** | **Test Method** |
| Heat Deflection Temperature | | | ISO 75-2/B |
| 66 psi (0.45 MPa), Unannealed | 482 °F | 250 °C | |
| Heat Deflection Temperature | | | ISO 75-2/A |
| 264 psi (1.8 MPa), Unannealed | 482 °F | 250 °C | |
| Continuous Use Temperature | 248 °F | 120 °C | IEC 216 |
| Melting Temperature (DSC) | 491 to 509 °F | 255 to 265 °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 |
| Relative Permittivity | 3.70 | 3.70 | IEC 60250 |
| Dissipation Factor | 0.018 | 0.018 | IEC 60250 |
| 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 | 3.0 to 4.0 hr | 3.0 to 4.0 hr |
| Suggested Max Moisture | < 0.10 % | < 0.10 % |

| Injection | Typical Value (English) | Typical Value (SI) |
|---|---|---|
| Processing (Melt) Temp | 536 to 572 °F | 280 to 300 °C |
| Mold Temperature | 122 to 194 °F | 50 to 90 °C |

**Notes**

[1] Typical values are not to be construed as specifications.