



## Bergamid™ B70 G15 Black

### Polyamide 6

#### Key Characteristics

| Product Description                 |                                     |
|-------------------------------------|-------------------------------------|
| Glass fiber reinforced PA6 compound |                                     |
| General                             |                                     |
| Material Status                     | • Commercial: Active                |
| Regional Availability               | • Europe                            |
| Filler / Reinforcement              | • Glass Fiber, 15% Filler by Weight |
| Appearance                          | • Black                             |
| Forms                               | • Pellets                           |
| Processing Method                   | • Injection Molding                 |

#### Technical Properties <sup>1</sup>

| Physical                                     | Typical Value (English)        | Typical Value (SI)             | Test Method |
|----------------------------------------------|--------------------------------|--------------------------------|-------------|
| Density                                      | 1.21 to 1.25 g/cm <sup>3</sup> | 1.21 to 1.25 g/cm <sup>3</sup> | ISO 1183    |
| Melt Mass-Flow Rate (MFR)                    |                                |                                | ISO 1133    |
| 230°C/2.16 kg                                | 6.0 g/10 min                   | 6.0 g/10 min                   |             |
| 260°C/2.16 kg                                | 19 g/10 min                    | 19 g/10 min                    |             |
| Molding Shrinkage                            |                                |                                | ISO 294     |
| Across Flow                                  | 0.80 to 1.0 %                  | 0.80 to 1.0 %                  |             |
| Flow                                         | 0.30 to 0.50 %                 | 0.30 to 0.50 %                 |             |
| Water Absorption (24 hr, 73°F (23°C))        | 1.2 %                          | 1.2 %                          | ISO 62      |
| Mechanical                                   | Typical Value (English)        | Typical Value (SI)             | Test Method |
| Tensile Modulus                              | 841000 psi                     | 5800 MPa                       | ISO 527-2   |
| Tensile Stress                               | 16700 psi                      | 115 MPa                        | ISO 527-2   |
| Tensile Strain (Break)                       | 2.8 %                          | 2.8 %                          | ISO 527-2   |
| Flexural Modulus                             | 653000 psi                     | 4500 MPa                       | ISO 178     |
| Flexural Stress (3.5% Strain)                | 21800 psi                      | 150 MPa                        | ISO 178     |
| Impact                                       | Typical Value (English)        | Typical Value (SI)             | Test Method |
| Charpy Notched Impact Strength (73°F (23°C)) | 2.2 ft·lb/in <sup>2</sup>      | 4.6 kJ/m <sup>2</sup>          | ISO 179     |
| Charpy Unnotched Impact Strength             |                                |                                | ISO 179     |
| -22°F (-30°C)                                | 12 ft·lb/in <sup>2</sup>       | 26 kJ/m <sup>2</sup>           |             |
| 73°F (23°C)                                  | 17 ft·lb/in <sup>2</sup>       | 36 kJ/m <sup>2</sup>           |             |
| Thermal                                      | Typical Value (English)        | Typical Value (SI)             | Test Method |
| Heat Deflection Temperature                  |                                |                                | ISO 75-2/B  |
| 66 psi (0.45 MPa), Unannealed                | 410 °F                         | 210 °C                         |             |
| Heat Deflection Temperature                  |                                |                                | ISO 75-2/A  |
| 264 psi (1.8 MPa), Unannealed                | 365 °F                         | 185 °C                         |             |
| Melting Temperature                          | > 428 °F                       | > 220 °C                       | DSC         |

#### Processing Information

| Injection              | Typical Value (English) | Typical Value (SI) |
|------------------------|-------------------------|--------------------|
| Drying Temperature     | 176 to 248 °F           | 80 to 120 °C       |
| Drying Time            | 4.0 to 6.0 hr           | 4.0 to 6.0 hr      |
| Processing (Melt) Temp | 464 to 518 °F           | 240 to 270 °C      |

| Injection        | Typical Value (English) | Typical Value (SI) |
|------------------|-------------------------|--------------------|
| Mold Temperature | 176 to 248 °F           | 80 to 120 °C       |

**Notes**

<sup>1</sup> Typical values are not to be construed as specifications.