



## Bergamid™ B700 G30 U Black

### Polyamide 6

#### Key Characteristics

##### Product Description

Glass Fiber Reinforced PA6 Compound with Flame Retardant.

##### General

|                        |                                     |
|------------------------|-------------------------------------|
| Material Status        | • Commercial: Active                |
| Regional Availability  | • Europe                            |
| Filler / Reinforcement | • Glass Fiber, 30% Filler by Weight |
| Features               | • Flame Retardant                   |
| Appearance             | • Black                             |
| Processing Method      | • Injection Molding                 |

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

| Physical                                                     | Typical Value (English)        | Typical Value (SI)             | Test Method     |
|--------------------------------------------------------------|--------------------------------|--------------------------------|-----------------|
| Density                                                      | 1.51 to 1.55 g/cm <sup>3</sup> | 1.51 to 1.55 g/cm <sup>3</sup> | ISO 1183        |
| Molding Shrinkage                                            | 0.30 to 0.40 %                 | 0.30 to 0.40 %                 | ISO 294-4       |
| Mechanical                                                   | Typical Value (English)        | Typical Value (SI)             | Test Method     |
| Tensile Modulus                                              | 1.60E+6 psi                    | 11000 MPa                      | ISO 527-2       |
| Tensile Stress (Break)                                       | 27600 psi                      | 190 MPa                        | ISO 527-2       |
| Tensile Strain (Break)                                       | < 3.0 %                        | < 3.0 %                        | ISO 527-2       |
| Flexural Stress                                              | 34800 psi                      | 240 MPa                        | ISO 178         |
| Impact                                                       | Typical Value (English)        | Typical Value (SI)             | Test Method     |
| Charpy Notched Impact Strength                               | 4.0 ft-lb/in <sup>2</sup>      | 8.5 kJ/m <sup>2</sup>          | ISO 179         |
| Charpy Unnotched Impact Strength                             | 25 ft-lb/in <sup>2</sup>       | 53 kJ/m <sup>2</sup>           | ISO 179         |
| Thermal                                                      | Typical Value (English)        | Typical Value (SI)             | Test Method     |
| Heat Deflection Temperature<br>264 psi (1.8 MPa), Unannealed | 401 °F                         | 205 °C                         | ISO 75-2/A      |
| Flammability                                                 | Typical Value (English)        | Typical Value (SI)             | Test Method     |
| Flame Rating                                                 |                                |                                |                 |
| 0.031 in (0.8 mm)                                            | V-0                            | V-0                            | Internal Method |
| 0.06 in (1.6 mm)                                             | V-0                            | V-0                            | UL 94           |

#### Processing Information

| Injection          | Typical Value (English) | Typical Value (SI) |
|--------------------|-------------------------|--------------------|
| Drying Temperature | 176 to 194 °F           | 80 to 90 °C        |
| Drying Time        | 4.0 to 6.0 hr           | 4.0 to 6.0 hr      |
| Rear Temperature   | 464 to 536 °F           | 240 to 280 °C      |
| Middle Temperature | 464 to 536 °F           | 240 to 280 °C      |
| Front Temperature  | 464 to 536 °F           | 240 to 280 °C      |
| Mold Temperature   | 149 to 185 °F           | 65 to 85 °C        |

##### Injection Notes

Injection Pressure: MED-HIGH  
Hold Pressure: MED-HIGH  
Screw Speed: MODERATE  
Back Pressure: LOW

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## Notes

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

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