



## Bergamid™ B65 G/GK30 natural Polyamide 6

### Key Characteristics

#### Product Description

Bergamid B65 G/GK30 is a Polyamide 6 (Nylon 6) product filled with 30% glass fiber + glass beads. It can be processed by injection molding.

#### General

|                        |                                                |
|------------------------|------------------------------------------------|
| Material Status        | • Commercial: Active                           |
| Regional Availability  | • Europe                                       |
| Filler / Reinforcement | • Glass Bead\Glass Fiber, 30% Filler by Weight |
| Appearance             | • Natural Color                                |
| Forms                  | • Pellets                                      |
| Processing Method      | • Injection Molding                            |

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

| Physical                                                  | Typical Value (English)   | Typical Value (SI)     | Test Method |
|-----------------------------------------------------------|---------------------------|------------------------|-------------|
| Density                                                   | 1.35 g/cm <sup>3</sup>    | 1.35 g/cm <sup>3</sup> | ISO 1183    |
| Mechanical                                                | Typical Value (English)   | Typical Value (SI)     | Test Method |
| Tensile Modulus                                           | 943000 psi                | 6500 MPa               | ISO 527-2   |
| Tensile Stress                                            | 16000 psi                 | 110 MPa                | ISO 527-2   |
| 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))              | 3.3 ft·lb/in <sup>2</sup> | 7.0 kJ/m <sup>2</sup>  | ISO 179     |
| Charpy Unnotched Impact Strength 73°F (23°C)              | 24 ft·lb/in <sup>2</sup>  | 50 kJ/m <sup>2</sup>   | ISO 179     |
| Thermal                                                   | Typical Value (English)   | Typical Value (SI)     | Test Method |
| Heat Deflection Temperature 66 psi (0.45 MPa), Unannealed | 410 °F                    | 210 °C                 | ISO 75-2/B  |
| Melting Temperature (DSC)                                 | 433 °F                    | 223 °C                 | ISO 3146    |
| Electrical                                                | Typical Value (English)   | Typical Value (SI)     | Test Method |
| Comparative Tracking Index                                | 500 V                     | 500 V                  | IEC 60112   |
| Flammability                                              | Typical Value (English)   | Typical Value (SI)     | Test Method |
| Flame Rating (0.13 in (3.2 mm))                           | 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      |
| Processing (Melt) Temp | 500 to 554 °F           | 260 to 290 °C      |
| Mold Temperature       | 122 to 194 °F           | 50 to 90 °C        |

#### Notes

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