

# Bergamid™ B70 G/GK30 natural Polyamide 6

## **Key Characteristics**

#### Product Description

Bergamid B70 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 | <ul> <li>Glass Bead\Glass Fiber, 30% Filler by Weight</li> </ul> |
| Features               | Good Processability  |
| Appearance             | Natural Color  |
| Forms                  | • Pellets  |
| Processing Method      | Injection Molding  |

## Technical Properties 1

| Physical  | Typical Value (English) | Typical Value (SI) | Test Method |
|---|-------------------------|--------------------|-------------|
| Density <sup>2</sup>                            | 1.35 g/cm³              | 1.35 g/cm³         | ISO 1183    |
| Mechanical                                      | Typical Value (English) | Typical Value (SI) | Test Method |
| Tensile Modulus                                 | 943000 psi              | 6500 MPa           | ISO 527-2   |
| Tensile Stress                                  | 13800 psi               | 95.0 MPa           | ISO 527-2   |
| Tensile Strain (Break)                          | 2.0 to 5.0 %            | 2.0 to 5.0 %       | ISO 527     |
| Impact  | Typical Value (English) | Typical Value (SI) | Test Method |
| Charpy Notched Impact<br>Strength (73°F (23°C)) | 2.9 ft·lb/in²           | 6.0 kJ/m²          | ISO 179     |
| Charpy Unnotched Impact Strength                |                         |                    | ISO 179     |
| 73°F (23°C)                                     | 17 ft·lb/in²            | 35 kJ/m²           |             |
| 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                   | 374 °F                  | 190 °C             |             |
| Melting Temperature (DSC)                       | 419 to 437 °F           | 215 to 225 °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                      | НВ                 | UL 94       |
| Flame Rating (0.13 in (3.2 mm))                 | HB                      | НВ                 | UL          |

### **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        |  |

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#### **Notes**

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

<sup>2</sup> +/-0.02

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