



## Bergamid™ B70 G50 Natural 70

### Polyamide 6

#### Key Characteristics

| General                |                                                              |                                                             |                           |
|------------------------|--------------------------------------------------------------|-------------------------------------------------------------|---------------------------|
| Material Status        | • Commercial: Active                                         |                                                             |                           |
| Regional Availability  | • Europe                                                     |                                                             |                           |
| Filler / Reinforcement | • Glass Fiber, 50% Filler by Weight                          |                                                             |                           |
| Features               | • Good Hardness<br>• Good Processability<br>• Good Stiffness | • Good Strength<br>• High Impact Resistance<br>• Lubricated | • Medium Viscosity        |
| Uses                   | • Appliances<br>• Automotive Applications                    | • Consumer Applications<br>• General Purpose                | • Industrial Applications |
| Appearance             | • Natural Color                                              |                                                             |                           |
| Forms                  | • Pellets                                                    |                                                             |                           |
| Processing Method      | • Injection Molding                                          |                                                             |                           |

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

| Physical                            | Typical Value (English)  | Typical Value (SI)     | Test Method |
|-------------------------------------|--------------------------|------------------------|-------------|
| Density                             | 1.55 g/cm <sup>3</sup>   | 1.55 g/cm <sup>3</sup> | ISO 1183    |
| Mechanical                          | Typical Value (English)  | Typical Value (SI)     | Test Method |
| Tensile Modulus                     | 2.18E+6 psi              | 15000 MPa              | ISO 527-2/1 |
| Tensile Stress                      | 29000 psi                | 200 MPa                | ISO 527-2/5 |
| Tensile Strain <sup>2</sup> (Break) | 3.0 %                    | 3.0 %                  | ISO 527-2   |
| Impact                              | Typical Value (English)  | Typical Value (SI)     | Test Method |
| Notched Izod Impact Strength        | 10 ft-lb/in <sup>2</sup> | 21 kJ/m <sup>2</sup>   | ISO 180/A   |
| Thermal                             | Typical Value (English)  | Typical Value (SI)     |             |
| Melting Temperature                 | 428 to 437 °F            | 220 to 225 °C          |             |
| Flammability                        | Typical Value (English)  | Typical Value (SI)     | Test Method |
| Flame Rating (0.06 in (1.6 mm))     | HB                       | HB                     | UL 94       |

#### Processing Information

| Injection          | Typical Value (English) | Typical Value (SI) |
|--------------------|-------------------------|--------------------|
| Drying Temperature | 176 to 194 °F           | 80 to 90 °C        |
| Drying Time        | 2.0 to 4.0 hr           | 2.0 to 4.0 hr      |
| Rear Temperature   | 455 to 473 °F           | 235 to 245 °C      |
| Middle Temperature | 464 to 482 °F           | 240 to 250 °C      |
| Front Temperature  | 473 to 491 °F           | 245 to 255 °C      |
| Nozzle Temperature | 491 to 500 °F           | 255 to 260 °C      |
| Mold Temperature   | 140 to 176 °F           | 60 to 80 °C        |

#### Notes

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

<sup>2</sup> 0.20 in/min (5 mm/min)

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