



## Bergamid™ B70 G20 U Black T 70

### Polyamide 6

#### Key Characteristics

| General                |                                                                  |                                                              |                           |
|------------------------|------------------------------------------------------------------|--------------------------------------------------------------|---------------------------|
| Material Status        | • Commercial: Active                                             |                                                              |                           |
| Regional Availability  | • Europe                                                         |                                                              |                           |
| Filler / Reinforcement | • Glass Fiber, 20% Filler by Weight                              |                                                              |                           |
| Features               | • Flame Retardant<br>• Good Hardness<br>• Good Impact Resistance | • Good Processability<br>• Good Stiffness<br>• Good Strength | • Medium Viscosity        |
| Uses                   | • Appliances<br>• Consumer Applications                          | • Electrical/Electronic Applications<br>• General Purpose    | • Industrial Applications |
| Appearance             | • Black                                                          |                                                              |                           |
| Forms                  | • Pellets                                                        |                                                              |                           |
| Processing Method      | • Injection Molding                                              |                                                              |                           |

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

| Physical                                           | Typical Value (English)   | Typical Value (SI)     | Test Method    |
|----------------------------------------------------|---------------------------|------------------------|----------------|
| Density                                            | 1.53 g/cm <sup>3</sup>    | 1.53 g/cm <sup>3</sup> | ISO 1183       |
| Mechanical                                         | Typical Value (English)   | Typical Value (SI)     | Test Method    |
| Tensile Modulus                                    | 1.16E+6 psi               | 8000 MPa               | ISO 527-2/1    |
| Tensile Stress                                     | 16000 psi                 | 110 MPa                | ISO 527-2/5    |
| Tensile Strain (Break)                             | 2.5 %                     | 2.5 %                  | ISO 527-2/5    |
| Impact                                             | Typical Value (English)   | Typical Value (SI)     | Test Method    |
| Notched Izod Impact Strength                       | 3.8 ft·lb/in <sup>2</sup> | 8.0 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))                    | V-0                       | V-0                    | UL 94          |
| Glow Wire Flammability Index<br>0.08 in (2.0 mm)   | 1760 °F                   | 960 °C                 | IEC 60695-2-12 |
| Glow Wire Ignition Temperature<br>0.04 in (1.0 mm) | 1430 °F                   | 775 °C                 | IEC 60695-2-13 |

#### Processing Information

| Injection          | Typical Value (English) | Typical Value (SI) |
|--------------------|-------------------------|--------------------|
| Drying Temperature | 176 °F                  | 80 °C              |
| Drying Time        | 2.0 to 4.0 hr           | 2.0 to 4.0 hr      |
| Rear Temperature   | 446 to 464 °F           | 230 to 240 °C      |
| Middle Temperature | 455 to 473 °F           | 235 to 245 °C      |
| Front Temperature  | 464 to 482 °F           | 240 to 250 °C      |
| Nozzle Temperature | 482 to 500 °F           | 250 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.