



# Bergamid™ B70 H UF Black 70

## Polyamide 6

### Key Characteristics

| General               |                                                                         |                                                              |                                                           |
|-----------------------|-------------------------------------------------------------------------|--------------------------------------------------------------|-----------------------------------------------------------|
| Material Status       | • Commercial: Active                                                    |                                                              |                                                           |
| Regional Availability | • Europe                                                                |                                                              |                                                           |
| Features              | • Flame Retardant<br>• Good Heat Resistance<br>• Good Impact Resistance | • Good Processability<br>• Good Stiffness<br>• Good Strength | • Halogen Free<br>• Heat Stabilized<br>• 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 / Specific Gravity                       | 1.16                      | 1.16                  | ISO 1183       |
| Mechanical                                       | Typical Value (English)   | Typical Value (SI)    | Test Method    |
| Tensile Modulus                                  | 471000 psi                | 3250 MPa              | ISO 527-2/1    |
| Tensile Stress                                   | 10900 psi                 | 75.0 MPa              | ISO 527-2/50   |
| Tensile Strain (Yield)                           | 3.5 %                     | 3.5 %                 | ISO 527-2/50   |
| Impact                                           | Typical Value (English)   | Typical Value (SI)    | Test Method    |
| Notched Izod Impact Strength                     | 2.4 ft·lb/in <sup>2</sup> | 5.0 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-2                       | V-2                   | UL 94          |
| Glow Wire Flammability Index<br>0.08 in (2.0 mm) | 1760 °F                   | 960 °C                | IEC 60695-2-12 |

### 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 | 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.

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