



# Bergamid™ B70 G15 soul VN7289 CF TM-Z SO6

## Polyamide 6

### Key Characteristics

| General                |                                                                                          |  |
|------------------------|------------------------------------------------------------------------------------------|--|
| Material Status        | • Commercial: Active                                                                     |  |
| Regional Availability  | • Africa & Middle East • Europe<br>• Asia Pacific • North America                        |  |
| Filler / Reinforcement | • Glass Fiber, 15% Filler by Weight                                                      |  |
| Features               | • Good Color Stability • High Impact Resistance<br>• High Heat Resistance • UV Resistant |  |
| RoHS Compliance        | • RoHS Compliant                                                                         |  |
| Forms                  | • Pellets                                                                                |  |

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

| Physical                                              | Typical Value (English)       | Typical Value (SI)            | Test Method |
|-------------------------------------------------------|-------------------------------|-------------------------------|-------------|
| Density <sup>2</sup> (73°F (23°C))                    | 1.17 g/cm <sup>3</sup>        | 1.17 g/cm <sup>3</sup>        | DIN 53479   |
| Melt Mass-Flow Rate (MFR) (235°C/2.16 kg)             | > 6.0 g/10 min                | > 6.0 g/10 min                | ISO 1133    |
| Melt Volume-Flow Rate (MVR) (235°C/2.16 kg)           | > 5.00 cm <sup>3</sup> /10min | > 5.00 cm <sup>3</sup> /10min | ISO 1133    |
| Molding Shrinkage - Flow (0.0787 in (2.00 mm))        | 3.0E-3 to 4.6E-3 in/in        | 0.30 to 0.46 %                | ASTM D955   |
| Molding Shrinkage - Across Flow (0.0787 in (2.00 mm)) | 7.5E-3 to 8.8E-3 in/in        | 0.75 to 0.88 %                | ASTM D955   |
| Ash Content                                           | 15 %                          | 15 %                          | ISO 3451    |
| Mechanical                                            | Typical Value (English)       | Typical Value (SI)            | Test Method |
| Tensile Modulus                                       |                               |                               | ISO 527-2/1 |
| 73°F (23°C), 0.157 in (4.00 mm), Injection Molded     | 653000 to 725000 psi          | 4500 to 5000 MPa              |             |
| Tensile Stress                                        |                               |                               | ISO 527-2/5 |
| Break, 73°F (23°C), 0.157 in (4.00 mm)                | 14500 psi                     | 100 MPa                       |             |
| Tensile Strain                                        |                               |                               | ISO 527-2/5 |
| Break, 73°F (23°C), 0.157 in (4.00 mm)                | > 4.0 %                       | > 4.0 %                       |             |
| Impact                                                | Typical Value (English)       | Typical Value (SI)            | Test Method |
| Charpy Notched Impact Strength (73°F (23°C))          | > 7.1 ft·lb/in <sup>2</sup>   | > 15 kJ/m <sup>2</sup>        | ISO 179/1eA |
| Charpy Unnotched Impact Strength                      |                               |                               | ISO 179/1eU |
| 73°F (23°C)                                           | > 29 ft·lb/in <sup>2</sup>    | > 60 kJ/m <sup>2</sup>        |             |
| Thermal                                               | Typical Value (English)       | Typical Value (SI)            | Test Method |
| Heat Deflection Temperature                           |                               |                               | ISO 75-2/B  |
| 66 psi (0.45 MPa), Unannealed                         | 401 °F                        | 205 °C                        |             |
| Maximum Use Temperature                               |                               |                               | IEC 60216   |
| -- <sup>3</sup>                                       | 203 °F                        | 95 °C                         |             |
| Short Time                                            | 374 °F                        | 190 °C                        |             |
| Melting Temperature (DSC)                             | 433 °F                        | 223 °C                        | ISO 3146    |
| Electrical                                            | Typical Value (English)       | Typical Value (SI)            | Test Method |
| Surface Resistivity                                   | 1.0E+12 ohms                  | 1.0E+12 ohms                  | IEC 60093   |
| Volume Resistivity                                    | 1.0E+13 ohms·cm               | 1.0E+13 ohms·cm               | IEC 60093   |

**Notes**

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

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<sup>2</sup>  $\pm 0.03$  g/cm<sup>3</sup>

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<sup>3</sup> Continuous (GTP 50% Tensile)