# Bergamid™ B70 S natural FD

**Polyamide 6**

## Key Characteristics

| General | | | |
|---|---|---|---|
| Material Status | • Commercial: Active | | |
| Regional Availability | • Africa & Middle East | • Asia Pacific | • Europe |
| Features | • Food Contact Acceptable | | |
| RoHS Compliance | • RoHS Compliant | | |
| Forms | • Pellets | | |

## Technical Properties [1]

| Physical | Typical Value (English) | Typical Value (SI) | Test Method |
|---|---|---|---|
| Density [2] | 1.13 g/cm³ | 1.13 g/cm³ | DIN 53479 |
| Molding Shrinkage - Flow [3] | | | Internal Method |
| 73°F (23°C), 0.157 in (4.00 mm) | 1.2 to 1.8 % | 1.2 to 1.8 % | |
| K-Value [4] | 74.0 to 78.0 | 74.0 to 78.0 | |
| **Mechanical** | **Typical Value (English)** | **Typical Value (SI)** | **Test Method** |
| Tensile Modulus (73°F (23°C)) | 160000 psi | 1100 MPa | ISO 527-1/1 |
| Tensile Stress (Yield, 73°F (23°C)) | 7250 psi | 50.0 MPa | ISO 527-2/50 |
| Tensile Strain (Yield) | 4.0 % | 4.0 % | ISO 527-2 |
| Tensile Strain (Break) | > 10 % | > 10 % | ISO 527-2 |
| **Impact** | **Typical Value (English)** | **Typical Value (SI)** | **Test Method** |
| Charpy Notched Impact Strength | | | ISO 179/1eA |
| -22°F (-30°C) | 5.0 ft·lb/in² | 11 kJ/m² | |
| 73°F (23°C) | 60 ft·lb/in² | 130 kJ/m² | |
| Charpy Unnotched Impact Strength | | | ISO 179/1eU |
| -22°F (-30°C) | No Break | No Break | |
| 73°F (23°C) | No Break | No Break | |
| **Thermal** | **Typical Value (English)** | **Typical Value (SI)** | **Test Method** |
| Deflection Temperature Under Load | | | ISO 75-2/B |
| 66 psi (0.45 MPa), Unannealed | 338 °F | 170 °C | |
| Deflection Temperature Under Load | | | ISO 75-2/A |
| 264 psi (1.8 MPa), Unannealed | 149 °F | 65.0 °C | |
| Maximum Use Temperature | | | IEC 60216 |
| -- [5] | 167 °F | 75 °C | |
| Short Time | 347 °F | 175 °C | |
| Melting Temperature (DSC) | 433 °F | 223 °C | ISO 3146 |
| **Electrical** | **Typical Value (English)** | **Typical Value (SI)** | **Test Method** |
| Surface Resistivity | 1.0E+13 ohms | 1.0E+13 ohms | IEC 60093 |
| Volume Resistivity | 1.0E+15 ohms·cm | 1.0E+15 ohms·cm | IEC 60093 |
| Relative Permittivity (1 MHz) | 7.00 | 7.00 | IEC 60250 |
| Dissipation Factor (1 MHz) | 0.30 | 0.30 | IEC 60250 |
| Comparative Tracking Index (Solution A) | 600 V | 600 V | IEC 60112 |

## Notes

[1] Typical values are not to be construed as specifications.

[2] ±0.03 g/cm³

[3] PolyOne Method

[4] 96% H2SO4

[5] Continuous (GTP 50% Tensile)

## CONTACT INFORMATION

**North America**
Avon Lake, United States
33587 Walker Road
Avon Lake, OH, United States , 44012
+1 440 930 1000
+1 844 4AVIENT

**South America**
Sao Paulo, Brazil
Av. Francisco Nakasato, 1700
13295-000 Itupeva
Sao Paulo, Brazil
+55 11 4593 9200

**Asia**
Shanghai, China
2F, Block C
200 Jinsu Road
Pudong, 201206
Shanghai, China
+86 (0) 21 6028 4888

**Europe**
Pommerloch, Luxembourg
19 Route de Bastogne
Pommerloch, Luxembourg , L-9638
+352 269 050 35

avient.com