



# Bergamid™ B70 L natural FD

## Polyamide 6

### Key Characteristics

| General               |                        |                |          |
|-----------------------|------------------------|----------------|----------|
| Material Status       | • Commercial: Active   |                |          |
| Regional Availability | • Africa & Middle East | • Asia Pacific | • Europe |
| 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))                                            | 1.13 g/cm <sup>3</sup>           | 1.13 g/cm <sup>3</sup>       | DIN 53479    |
| K-Value <sup>3</sup>                                                          | 74.0 to 78.0                     | 74.0 to 78.0                 |              |
| Mechanical                                                                    | Typical Value (English)          | Typical Value (SI)           | Test Method  |
| Tensile Modulus<br>73°F (23°C), 0.157 in (4.00 mm),<br>Injection Molded       | 435000 psi                       | 3000 MPa                     | ISO 527-2/1  |
| Tensile Stress<br>Yield, 73°F (23°C), 0.157 in (4.00 mm)                      | 11600 psi                        | 80.0 MPa                     | ISO 527-2/50 |
| Tensile Strain<br>Yield, 73°F (23°C), 0.157 in (4.00 mm),<br>Injection Molded | 4.0 %                            | 4.0 %                        | ISO 527-2/50 |
| Tensile Strain<br>Break, 73°F (23°C), 0.157 in (4.00 mm),<br>Injection Molded | > 20 %                           | > 20 %                       | ISO 527-2/50 |
| Flexural Modulus                                                              | 319000 psi                       | 2200 MPa                     | ISO 178      |
| Flexural Stress                                                               | 10900 psi                        | 75.0 MPa                     | ISO 178      |
| Impact                                                                        | Typical Value (English)          | Typical Value (SI)           | Test Method  |
| Charpy Notched Impact<br>Strength (73°F (23°C))                               | 1.9 to 2.9 ft·lb/in <sup>2</sup> | 4.0 to 6.0 kJ/m <sup>2</sup> | ISO 179/1eA  |
| Charpy Unnotched Impact Strength<br>-22°F (-30°C)                             | No Break                         | No Break                     | ISO 179/1eU  |
| 73°F (23°C)                                                                   | No Break                         | No Break                     |              |
| Thermal                                                                       | Typical Value (English)          | Typical Value (SI)           | Test Method  |
| Maximum Use Temperature<br>-- <sup>4</sup>                                    | 167 °F                           | 75 °C                        | IEC 60216    |
| 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+14 ohms                     | 1.0E+14 ohms                 | IEC 60093    |
| Volume Resistivity                                                            | 1.0E+15 ohms·cm                  | 1.0E+15 ohms·cm              | IEC 60093    |

### Notes

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

<sup>2</sup> ±0.01 g/cm<sup>3</sup>

<sup>3</sup> 96% H<sub>2</sub>SO<sub>4</sub>

<sup>4</sup> Continuous (GTP 50% Tensile)

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## CONTACT INFORMATION

## Americas

United States - Avon Lake  
+1 440 930 1000

United States - McHenry  
+1 815 385 8500

## Asia

China - Guangzhou  
+86 20 8732 7260

China - Shenzhen  
+86 755 2969 2888

China - Suzhou  
+86 512 6823 24 38

China - Suzhou  
+86 512 6265 2600

Hong Kong -  
+852 2690 5332

Taiwan - Yonghe City,  
+886 9396 99740, +886 2929 1849

## Europe

Germany - Gaggenau  
+49 7225 6802 0

Spain - Barbastro (Huesca)  
+34 974 310 314



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[www.polyone.com](http://www.polyone.com)

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**PolyOne Americas**

33587 Walker Road  
Avon Lake, Ohio 44012  
United States  
+1 440 930 1000  
+1 866 POLYONE

**PolyOne Asia**

No. 88 Guoshoujing Road  
Z.J Hi-tech Park, Pudong  
Shanghai, 201203, China  
+86 21 5080 1188

**PolyOne Europe**

6 Giällewee  
+352 269 050 35

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