



# Bergamid™ B70 BLACK TM-X

## Polyamide 6

### Key Characteristics

General	
Material Status	• Commercial: Active
Regional Availability	• Europe
Features	• Impact Modified
Appearance	• Black
Forms	• Pellets
Processing Method	• Injection Molding

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

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density	1.11 g/cm <sup>3</sup>	1.11 g/cm <sup>3</sup>	ISO 1183
Molding Shrinkage	1.2 %	1.2 %	ISO 294-4
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus	334000 psi	2300 MPa	ISO 527-2
Tensile Stress (Yield)	9430 psi	65.0 MPa	ISO 527-2
Tensile Strain (Yield)	4.0 %	4.0 %	ISO 527-2
Impact	Typical Value (English)	Typical Value (SI)	Test Method
Charpy Notched Impact Strength (73°F (23°C))	6.7 ft·lb/in <sup>2</sup>	14 kJ/m <sup>2</sup>	ISO 179
Charpy Unnotched Impact Strength 73°F (23°C)	48 ft·lb/in <sup>2</sup>	100 kJ/m <sup>2</sup>	ISO 179
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Heat Deflection Temperature 66 psi (0.45 MPa), Unannealed	347 °F	175 °C	ISO 75-2/B
Heat Deflection Temperature 264 psi (1.8 MPa), Unannealed	140 °F	60.0 °C	ISO 75-2/A
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)	3.70	3.70	IEC 60250
Dissipation Factor (1 MHz)	0.030	0.030	IEC 60250
Comparative Tracking Index	600 V	600 V	IEC 60112
Flammability	Typical Value (English)	Typical Value (SI)	Test Method
Flame Rating 0.03 to 0.06 in (0.8 to 1.6 mm)	HB	HB	UL 94

### Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Drying Temperature	176 °F	80 °C
Drying Time	3.0 to 4.0 hr	3.0 to 4.0 hr
Processing (Melt) Temp	482 to 536 °F	250 to 280 °C
Mold Temperature	104 to 176 °F	40 to 80 °C
Holding Pressure	7250 to 14500 psi	50.0 to 100 MPa

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## Notes

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

## 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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