



Bergamid™ B70 G50 H Black

Polyamide 6

Key Characteristics

Product Description

Bergamid B70 G50 H Black is a Polyamide 6 (Nylon 6) product filled with 50% glass fiber. It can be processed by injection molding and it is heat stabilized.

General

Material Status	• Commercial: Active
Regional Availability	• Europe
Filler / Reinforcement	• Glass Fiber, 50% Filler by Weight
Features	• Heat Stabilized
Appearance	• Black
Forms	• Pellets
Processing Method	• Injection Molding

Technical Properties ¹

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density	1.55 g/cm ³	1.55 g/cm ³	ISO 1183
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus	2.18E+6 psi	15000 MPa	ISO 527-2
Tensile Strength	31900 psi	220 MPa	ISO 527
Tensile Strain (Break)	2.0 %	2.0 %	ISO 527
Flexural Strength	46400 psi	320 MPa	ISO 178
Impact	Typical Value (English)	Typical Value (SI)	Test Method
Charpy Notched Impact Strength (73°F (23°C))	7.1 ft·lb/in ²	15 kJ/m ²	ISO 179
Charpy Unnotched Impact Strength 73°F (23°C)	40 ft·lb/in ²	85 kJ/m ²	ISO 179
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Heat Deflection Temperature 66 psi (0.45 MPa), Unannealed	428 °F	220 °C	ISO 75-2/B
Heat Deflection Temperature 264 psi (1.8 MPa), Unannealed	410 °F	210 °C	ISO 75-2/A
Continuous Use Temperature	248 °F	120 °C	IEC 216
Melting Temperature (DSC)	419 to 437 °F	215 to 225 °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+16 ohms·cm	1.0E+16 ohms·cm	IEC 60093
Electric Strength	2300 V/mil	90 kV/mm	IEC 60243-1
Relative Permittivity	4.20	4.20	IEC 60250
Dissipation Factor	0.014	0.014	IEC 60250
Comparative Tracking Index	500 V	500 V	IEC 60112
Flammability	Typical Value (English)	Typical Value (SI)	Test Method
Flame Rating	HB	HB	UL 94

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Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Drying Temperature	176 °F	80.0 °C
Drying Time	4.0 hr	4.0 hr
Processing (Melt) Temp	482 to 536 °F	250 to 280 °C
Mold Temperature	122 to 194 °F	50.0 to 90.0 °C

Notes

¹ 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



Beyond Polymers.

Better Business Solutions. SM

www.polyone.com

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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