

Bergamid™ B70 G35 H Natural Polyamide 6

Key Characteristics

Product Description

Bergamid B70 G35 H is a Polyamide 6 (Nylon 6) product filled with 35% glass fiber. It can be processed by injection molding and its principal features are high heat.

General	
Material Status	Commercial: Active
Regional Availability	Europe
Filler / Reinforcement	Glass Fiber, 35% Filler by Weight
Features	Heat Stabilized
Appearance	Natural Color
Forms	• Pellets
Processing Method	Injection Molding

Technical Properties 1

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density ²	1.40 g/cm ³	1.40 g/cm ³	ISO 1183
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus	1.60E+6 psi	11000 MPa	ISO 527-2
Tensile Stress	28300 psi	195 MPa	ISO 527-2
Tensile Strain (Break)	< 3.0 %	< 3.0 %	ISO 527
Impact	Typical Value (English)	Typical Value (SI)	Test Method
Charpy Notched Impact Strength (73°F (23°C))	8.6 ft·lb/in²	18 kJ/m²	ISO 179
Charpy Unnotched Impact Strength			ISO 179
73°F (23°C)	36 ft·lb/in²	75 kJ/m²	
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	
Heat Deflection Temperature			ISO 75-2/A
264 psi (1.8 MPa), Unannealed	392 °F	200 °C	
Melting Temperature (DSC)	419 to 437 °F	215 to 225 °C	ISO 3146
Maximum Service Temperature			IEC 60216
Continuous	248 °F	120 °C	
Short-term	374 °F	190 °C	
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+15 ohms·cm	1.0E+15 ohms·cm	IEC 60093
Electric Strength	1700 V/mil	65 kV/mm	IEC 60243-1
Comparative Tracking Index	500 V	500 V	IEC 60112
Flammability	Typical Value (English)	Typical Value (SI)	Test Method
Flammability	< 4 in/min	< 100 mm/min	FMVSS

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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	500 to 554 °F	260 to 290 °C	
Mold Temperature	122 to 194 °F	50 to 90 °C	
Holding Pressure	7250 to 14500 psi	50.0 to 100 MPa	

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 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 (Huesi

Spain - Barbastro (Huesca) +34 974 310 314

PolyOne.

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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 $^{^{2}}$ +-0.02