



Bergamid™ B70 G50 Natural

Polyamide 6

Key Characteristics

Product Description

Bergamid B70 G50 Natural is a Polyamide 6 (Nylon 6) product filled with 50% glass fiber. It can be processed by injection molding.

General

Material Status	• Commercial: Active
Regional Availability	• Europe
Filler / Reinforcement	• Glass Fiber, 50% Filler by Weight
Appearance	• Natural Color
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)	3.0 %	3.0 %	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))	10 ft·lb/in ²	22 kJ/m ²	ISO 179
Charpy Unnotched Impact Strength 73°F (23°C)	43 ft·lb/in ²	90 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	230 °F	110 °C	IEC 216
Melting Temperature (DSC)	428 to 437 °F	220 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	0.013	0.013	IEC 60250
Comparative Tracking Index	500 V	500 V	IEC 60112

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

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Injection	Typical Value (English)	Typical Value (SI)
Mold Temperature	122 to 194 °F	50.0 to 90.0 °C

Notes

¹ Typical values are not to be construed as specifications.

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