



Bergamid™ B70 G50 H Natural

Polyamide 6

Key Characteristics

Product Description

Bergamid B70 G50 H Natural 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
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	410 °F	210 °C	ISO 75-2/B
Heat Deflection Temperature 264 psi (1.8 MPa), Unannealed	428 °F	220 °C	ISO 75-2/A
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
Dissipation Factor	0.013	0.013	IEC 60250
Comparative Tracking Index	500 V	500 V	IEC 60112
Flammability	Typical Value (English)	Typical Value (SI)	Test Method
Flame Rating (0.13 in (3.2 mm))	HB	HB	UL 94

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Drying Temperature	176 °F	80 °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 to 90 °C