



# Bergamid™ B70 G60 Natural

## Polyamide 6

### Key Characteristics

#### Product Description

Bergamid B70 G60 Natural is a Polyamide 6 (Nylon 6) product filled with 60% glass fiber. It can be processed by injection molding.

#### General

Material Status	• Commercial: Active
Regional Availability	• Europe
Filler / Reinforcement	• Glass Fiber, 60% Filler by Weight
Appearance	• Natural Color
Forms	• Pellets
Processing Method	• Injection Molding

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

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density (73°F (23°C))	1.72 g/cm <sup>3</sup>	1.72 g/cm <sup>3</sup>	ISO 1183
Melt Mass-Flow Rate (MFR) (260°C/5.0 kg)	4.5 g/10 min	4.5 g/10 min	ISO 1133
Melt Volume-Flow Rate (MVR) (260°C/5.0 kg)	2.50 cm <sup>3</sup> /10min	2.50 cm <sup>3</sup> /10min	ISO 1133
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus			ISO 527-2/1
73°F (23°C), 0.157 in (4.00 mm), Injection Molded	2.94E+6 psi	20300 MPa	
Tensile Strength <sup>2</sup>			ISO 527
73°F (23°C), 0.157 in (4.00 mm), Injection Molded	34100 psi	235 MPa	
Tensile Strain <sup>3</sup>			ISO 527
Break, 73°F (23°C), 0.157 in (4.00 mm), Injection Molded	2.2%	2.2%	
Flexural Modulus	2.35E+6 psi	16200 MPa	ISO 178
Impact	Typical Value (English)	Typical Value (SI)	Test Method
Charpy Notched Impact Strength (73°F (23°C))	5.7 ft·lb/in <sup>2</sup>	12 kJ/m <sup>2</sup>	ISO 179
Charpy Unnotched Impact Strength			ISO 179
73°F (23°C)	24 ft·lb/in <sup>2</sup>	50 kJ/m <sup>2</sup>	
Notched Izod Impact	3.6 ft·lb/in	190 J/m	ASTM D256
Notched Izod Impact Strength	8.6 ft·lb/in <sup>2</sup>	18 kJ/m <sup>2</sup>	ISO 180
Unnotched Izod Impact	28 ft·lb/in	1500 J/m	ASTM D256
Unnotched Izod Impact Strength	38 ft·lb/in <sup>2</sup>	80 kJ/m <sup>2</sup>	ISO 180
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Heat Deflection Temperature			ISO 75-2/A
264 psi (1.8 MPa), Unannealed	419 °F	215 °C	
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

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## 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

## Notes

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

<sup>2</sup> 0.20 in/min (5.0 mm/min)

<sup>3</sup> 0.20 in/min (5 mm/min)

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