

# Bergamid™ B70 G30 Black Polyamide 6

# **Key Characteristics**

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Bergamid B70 G30 Black is a Polyamide 6 (Nylon 6) product filled with 30% glass fiber. It can be processed by injection molding.

General	
Material Status	Commercial: Active
Regional Availability	Europe
Filler / Reinforcement	Glass Fiber, 30% Filler by Weight
Appearance	Black
Forms	Pellets
Processing Method	Injection Molding

# Technical Properties 1

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density <sup>2</sup>	1.37 g/cm³	1.37 g/cm <sup>3</sup>	ISO 1183
Molding Shrinkage	0.30 to 0.70 %	0.30 to 0.70 %	ISO 294-4
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus	1.31E+6 psi	9000 MPa	ISO 527-2
Tensile Strength	23200 psi	160 MPa	ISO 527
Tensile Strain (Break)	2.5 %	2.5 %	ISO 527
Flexural Modulus	1.19E+6 psi	8200 MPa	ISO 178
Flexural Strength	33400 psi	230 MPa	ISO 178
Impact	Typical Value (English)	Typical Value (SI)	Test Method
Charpy Notched Impact Strength (73°F (23°C))	4.8 ft·lb/in²	10 kJ/m²	ISO 179
Charpy Unnotched Impact Strength			ISO 179
-22°F (-30°C)	23 ft·lb/in²	48 kJ/m²	
73°F (23°C)	29 ft·lb/in²	61 kJ/m²	
Notched Izod Impact Strength (73°F (23°C))	5.2 ft·lb/in²	11 kJ/m²	ISO 180
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Heat Deflection Temperature			ISO 75-2/B
66 psi (0.45 MPa), Unannealed	428 °F	220 °C	
Heat Deflection Temperature			ISO 75-2/A
264 psi (1.8 MPa), Unannealed	410 °F	210 °C	
Electrical	Typical Value (English)	Typical Value (SI)	Test Method
Surface Resistivity	1.0E+14 ohms	1.0E+14 ohms	IEC 60093
Flammability	Typical Value (English)	Typical Value (SI)	Test Method
Flame Rating (0.06 in (1.6 mm))	HB	НВ	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	

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Injection	Typical Value (English)	Typical Value (SI)	
Mold Temperature	122 to 194 °F	50 to 90 °C	

## **Notes**

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

 $^{2}$  +/-0.02

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