



# Bergamid™ B70 G35 HW black SO2

## Polyamide 6

### Key Characteristics

#### Product Description

Bergamid B70 G35 HW Black SO2 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 and hydrolysis resistance.

#### General

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

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

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density	1.41 g/cm <sup>3</sup>	1.41 g/cm <sup>3</sup>	ISO 1183
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus 73°F (23°C), 0.157 in (4.00 mm)	1.67E+6 psi	11500 MPa	ISO 527-2/1
Tensile Strength <sup>2</sup> 73°F (23°C), 0.157 in (4.00 mm)	26800 psi	185 MPa	ISO 527
Tensile Strain <sup>3</sup> Break, 73°F (23°C), 0.157 in (4.00 mm)	> 3.0 %	> 3.0 %	ISO 527
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 73°F (23°C)	43 ft·lb/in <sup>2</sup>	90 kJ/m <sup>2</sup>	ISO 179
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Heat Deflection Temperature 264 psi (1.8 MPa), Unannealed	410 °F	210 °C	ISO 75-2/A
Melting Temperature (DSC)	428 °F	220 °C	ISO 3146
Electrical	Typical Value (English)	Typical Value (SI)	Test Method
Surface Resistivity	1.0E+13 ohms	1.0E+13 ohms	IEC 60093
Volume Resistivity	1.0E+16 ohms·cm	1.0E+16 ohms·cm	IEC 60093
Relative Permittivity	3.70	3.70	IEC 60250
Dissipation Factor	0.015	0.015	IEC 60250
Comparative Tracking Index	500 V	500 V	IEC 60112
Flammability	Typical Value (English)	Typical Value (SI)	Test Method
Flame Rating	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

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Injection	Typical Value (English)	Typical Value (SI)
Processing (Melt) Temp	500 to 536 °F	260 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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