

# Bergamid™ B70 G35 H grey VN8691CF UV

## Polyamide 6

### Key Characteristics

General	
Material Status	• Commercial: Active
Regional Availability	• Africa & Middle East • Europe • Asia Pacific • North America
Filler / Reinforcement	• Glass Fiber, 35% Filler by Weight
Features	• Heat Stabilized • UV Stabilized
RoHS Compliance	• RoHS Compliant
Forms	• Pellets

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

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density <sup>2</sup> (73°F (23°C))	1.41 g/cm <sup>3</sup>	1.41 g/cm <sup>3</sup>	DIN 53479
Molding Shrinkage			ISO 294-4
Across Flow : 73°F (23°C)	0.60 to 1.0 %	0.60 to 1.0 %	
Flow : 73°F (23°C)	0.20 to 0.50 %	0.20 to 0.50 %	
K-Value <sup>3</sup>	74.0 to 78.0	74.0 to 78.0	
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	1.41E+6 psi	9700 MPa	
Tensile Stress			ISO 527-2/5
Break, 73°F (23°C), 0.157 in (4.00 mm), Injection Molded	22000 psi	152 MPa	
Tensile Strain			ISO 527-2/5
Break, 73°F (23°C), 0.157 in (4.00 mm), Injection Molded	2.3 %	2.3 %	
Impact	Typical Value (English)	Typical Value (SI)	Test Method
Charpy Notched Impact Strength (73°F (23°C))	2.9 ft·lb/in <sup>2</sup>	6.0 kJ/m <sup>2</sup>	ISO 179/A
Charpy Unnotched Impact Strength 73°F (23°C)	22 ft·lb/in <sup>2</sup>	47 kJ/m <sup>2</sup>	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
Maximum Use Temperature - Short Time	374 °F	190 °C	IEC 60216
Melting Temperature (DSC)	433 °F	223 °C	ISO 3146
Electrical	Typical Value (English)	Typical Value (SI)	Test Method
Surface Resistivity	> 1.0E+12 ohms	> 1.0E+12 ohms	IEC 60093
Volume Resistivity	> 1.0E+14 ohms·cm	> 1.0E+14 ohms·cm	IEC 60093
Flammability	Typical Value (English)	Typical Value (SI)	Test Method
Flame Rating 0.03 to 0.12 in (0.8 to 3.0 mm), ALL	HB	HB	UL 94

Flammability	Typical Value (English)	Typical Value (SI)	Test Method
Glow Wire Flammability Index 0.02 to 0.12 in (0.4 to 3.0 mm)	1200 °F	650 °C	IEC 60695-2-12
Glow Wire Ignition Temperature 0.02 to 0.12 in (0.4 to 3.0 mm)	1250 °F	675 °C	IEC 60695-2-13

### 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	464 to 500 °F	240 to 260 °C
Mold Temperature	140 to 176 °F	60 to 80 °C

### Notes

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

<sup>2</sup> ±0.03 g/cm<sup>3</sup>

<sup>3</sup> 96% H<sub>2</sub>SO<sub>4</sub>