

Bergamid™ B70 G35 H grey VN8691CF UV Polyamide 6

Key Characteristics

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

Technical Properties 1

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Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density ² (73°F (23°C))	1.41 g/cm ³	1.41 g/cm³	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 ³	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 %	
mpact	Typical Value (English)	Typical Value (SI)	Test Method
Charpy Notched Impact Strength (73°F (23°C))	2.9 ft·lb/in²	6.0 kJ/m²	ISO 179/A
Charpy Unnotched Impact Strength			ISO 179
73°F (23°C)	22 ft·lb/in²	47 kJ/m²	
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	
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			UL 94

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Technical Data Sheet

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

Processing Information

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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

¹ Typical values are not to be construed as specifications.

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² ±0.03 g/cm³

^{3 96%} H2SO4