



Bergamid™ B700 G20 H UF grey VN8633 CF LS SO

Polyamide 6

Key Characteristics

General			
Material Status	• Commercial: Active		
Regional Availability	• Africa & Middle East	• Asia Pacific	• Europe
Filler / Reinforcement	• Glass Fiber, 20% Filler by Weight		
Additive	• Heat Stabilizer		
Features	• Flame Retardant • Halogen Free	• Heat Stabilized • Laser Markable	• Low (to None) Phosphorus Content • Specialty Grade
RoHS Compliance	• RoHS Compliant		
Forms	• Pellets		

Technical Properties ¹

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density ²	1.37 g/cm ³	1.37 g/cm ³	DIN 53479
Molding Shrinkage - Flow (0.118 in (3.00 mm))	5.1E-3 to 6.3E-3 in/in	0.51 to 0.63 %	Internal Method
Molding Shrinkage - Across Flow (0.118 in (3.00 mm))	5.9E-3 to 7.2E-3 in/in	0.59 to 0.72 %	Internal Method
Ash Content	20 %	20 %	ISO 3451
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus (73°F (23°C))	1.28E+6 psi	8800 MPa	ISO 527-2/1
Tensile Stress (Break, 73°F (23°C))	14400 psi	99.0 MPa	ISO 527-2/5
Tensile Strain (Break, 73°F (23°C))	1.9 %	1.9 %	ISO 527-2/5
Impact	Typical Value (English)	Typical Value (SI)	Test Method
Charpy Notched Impact Strength (73°F (23°C))	2.0 ft·lb/in ²	4.2 kJ/m ²	ISO 179/1eA
Charpy Unnotched Impact Strength 73°F (23°C)	15 ft·lb/in ²	31 kJ/m ²	ISO 179/1eU
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
Maximum Use Temperature -- ³	230 °F	110 °C	IEC 60216
Short Time	374 °F	190 °C	
Melting Temperature (DSC)	433 °F	223 °C	ISO 3146
Electrical	Typical Value (English)	Typical Value (SI)	Test Method
Surface Resistivity	1.0E+10 ohms	1.0E+10 ohms	IEC 60093
Volume Resistivity	1.0E+12 ohms·cm	1.0E+12 ohms·cm	IEC 60093
Comparative Tracking Index (Solution A)	600 V	600 V	IEC 60112
Flammability	Typical Value (English)	Typical Value (SI)	Test Method
Flame Rating			UL 94
0.031 in (0.8 mm), NC, RD, WT	V-2	V-2	
0.031 in (0.8 mm), BK	V-0	V-0	
0.06 in (1.5 mm), ALL	V-0	V-0	

Flammability	Typical Value (English)	Typical Value (SI)	Test Method
Glow Wire Ignition Temperature ⁴ 0.12 in (3.0 mm)	1760 °F	960 °C	IEC 60695-2-13

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Drying Temperature	176 °F	80 °C
Drying Time	3.0 to 4.0 hr	3.0 to 4.0 hr
Processing (Melt) Temp	464 to 509 °F	240 to 265 °C
Mold Temperature	104 to 176 °F	40 to 80 °C

Notes

¹ Typical values are not to be construed as specifications.

² ±0.03 g/cm³

³ Continuous (GTP 50% Tensile)

⁴ 0.8 mm wire