



Bergamid™ B700 G25 H

Polyamide 6

Key Characteristics

General	
Material Status	• Commercial: Active
Regional Availability	• Africa & Middle East • Europe • Asia Pacific • North America
Filler / Reinforcement	• Glass Fiber, 25% Filler by Weight
Features	• Heat Stabilized
RoHS Compliance	• RoHS Compliant
UL File Number	• QMFZ2.E76261
Forms	• Pellets

Technical Properties ¹

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density ²	1.32 g/cm ³	1.32 g/cm ³	DIN 53479
Molding Shrinkage			ISO 294-4
Across Flow	0.80 to 1.2 %	0.80 to 1.2 %	
Flow	0.30 to 0.70 %	0.30 to 0.70 %	
K-Value ³	74.0 to 78.0	74.0 to 78.0	
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus (73°F (23°C))	1.16E+6 psi	8000 MPa	ISO 527-2/1
Tensile Stress (Break, 73°F (23°C))	23200 psi	160 MPa	ISO 527-2/5
Tensile Strain (Break, 73°F (23°C))	3.5 %	3.5 %	ISO 527-2/5
Impact	Typical Value (English)	Typical Value (SI)	Test Method
Charpy Notched Impact Strength			ISO 179/A
-22°F (-30°C)	4.8 ft·lb/in ²	10 kJ/m ²	
73°F (23°C)	5.7 ft·lb/in ²	12 kJ/m ²	
Charpy Unnotched Impact Strength			ISO 179
-22°F (-30°C)	36 ft·lb/in ²	75 kJ/m ²	
73°F (23°C)	38 ft·lb/in ²	80 kJ/m ²	
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			IEC 60216
-- ⁴	248 °F	120 °C	
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+12 ohms	> 1.0E+12 ohms	IEC 60093
Volume Resistivity	> 1.0E+14 ohms·cm	> 1.0E+14 ohms·cm	IEC 60093
Relative Permittivity (1 MHz)	3.70	3.70	IEC 60250
Comparative Tracking Index (Solution A)	500 V	500 V	IEC 60112

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Flammability	Typical Value (English)	Typical Value (SI)	Test Method
Flame Rating			Internal Method
0.03 to 0.12 in (0.8 to 3.0 mm), ALL	HB	HB	
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	

Notes

¹ Typical values are not to be construed as specifications.

² ±0.03 g/cm³

³ 96% H₂SO₄

⁴ Continuous (GTP 50% Tensile)

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