



Bergamid™ B700 G30 H

Polyamide 6

Key Characteristics

General	
Material Status	• Commercial: Active
Regional Availability	• Africa & Middle East • Europe • Asia Pacific • North America
Filler / Reinforcement	• Glass Fiber, 30% 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	1.35 g/cm ³	1.35 g/cm ³	DIN 53479
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))	1.38E+6 psi	9500 MPa	ISO 527-2/1
Tensile Stress (Break, 73°F (23°C))	26100 psi	180 MPa	ISO 527-2/5
Tensile Strain (Break, 73°F (23°C))	3.0 %	3.0 %	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)	29 ft·lb/in ²	60 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)	3.80	3.80	IEC 60250
Comparative Tracking Index (Solution A)	500 V	500 V	IEC 60112
Flammability	Typical Value (English)	Typical Value (SI)	Test Method
Flame Rating			UL 94
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	

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

Notes

¹ Typical values are not to be construed as specifications.

² ±0.03 g/cm³

³ 96% H₂SO₄

⁴ Continuous (GTP 50% Tensile)