Bergamid™ B700 G15 H

Polyamide 6

Key Characteristics

General	
Material Status	• Commercial: Active
Regional Availability	• Africa & Middle East • Europe • Asia Pacific • North America
Filler / Reinforcement	• Glass Fiber, 15% 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]	1.23 g/cm³	1.23 g/cm³	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))	870000 psi	6000 MPa	ISO 527-2/1
Tensile Stress (Break, 73°F (23°C))	18900 psi	130 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)	2.4 ft·lb/in²	5.0 kJ/m²	
73°F (23°C)	2.4 ft·lb/in²	5.0 kJ/m²	
Charpy Unnotched Impact Strength			ISO 179
-22°F (-30°C)	17 ft·lb/in²	35 kJ/m²	
73°F (23°C)	17 ft·lb/in²	35 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	401 °F	205 °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
Electric Strength	2000 V/mil	80 kV/mm	IEC 60243-1
Relative Permittivity (1 MHz)	3.70	3.70	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	

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	

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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