

Bergamid™ B700 G25 H Polyamide 6

Key Characteristics

General			
Material Status	Commercial: Active		
Regional Availability	 Africa & Middle East Asia Pacific Europe 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
K-Value ³	74.0 to 78.0	74.0 to 78.0	5.11 00 17 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	Typical value (Eligibil)	rypical value (61)	ISO 179/A
-22°F (-30°C)	4.8 ft·lb/in²	10 kJ/m²	100 110/11
73°F (23°C)	5.7 ft·lb/in²	12 kJ/m²	
Charpy Unnotched Impact Strength	<u> </u>		ISO 179
-22°F (-30°C)	36 ft·lb/in²	75 kJ/m²	
73°F (23°C)	38 ft·lb/in²	80 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			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			Internal Method
0.03 to 0.12 in (0.8 to 3.0 mm), ALL	НВ	HB	
Electric Strength Relative Permittivity (1 MHz) Comparative Tracking Index (Solution A) Flammability Flame Rating	2000 V/mil 3.70 500 V Typical Value (English)	80 kV/mm 3.70 500 V Typical Value (SI)	IEC 60243-1 IEC 60250 IEC 60112 Test Method

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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	
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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