

Bergamid™ B700 G30 H Polyamide 6

Key Characteristics

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General			
Material Status	Commercial: Active		
Regional Availability	 Africa & Middle East Asia Pacific Europe 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

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Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density ²	1.35 g/cm³	1.35 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))	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
mpact	Typical Value (English)	Typical Value (SI)	Test Method
Charpy Notched Impact Strength			ISO 179/A
-22°F (-30°C)	4.8 ft·lb/in²	10 kJ/m²	
73°F (23°C)	5.7 ft·lb/in²	12 kJ/m²	
Charpy Unnotched Impact Strength			ISO 179
-22°F (-30°C)	29 ft·lb/in²	60 kJ/m²	
73°F (23°C)	38 ft·lb/in²	80 kJ/m²	
Thermal 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)	3.80	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			Internal Method
0.03 to 0.12 in (0.8 to 3.0 mm), ALL	НВ	НВ	

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Bergamid™ B700 G30 H

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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