Bergamid™ B80 G25 TM-Z UV

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	• High Impact Resistance	• UV Stabilized
RoHS Compliance	• RoHS Compliant		
Forms	• Pellets		

Technical Properties [1]

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density [2]	1.32 g/cm³	1.32 g/cm³	DIN 53479
K-Value [3]	80.0 to 85.0	80.0 to 85.0	
Mechanical	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Tensile Modulus			ISO 527-2/1
73°F (23°C), 0.157 in (4.00 mm)	856000 psi	5900 MPa	
Tensile Stress			ISO 527-2/5
Break, 73°F (23°C), 0.157 in (4.00 mm), Injection Molded	10200 psi	70.0 MPa	
Tensile Strain			ISO 527-2/5
Break, 73°F (23°C), 0.157 in (4.00 mm), Injection Molded	> 3.5 %	> 3.5 %	
Impact	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Charpy Notched Impact Strength			ISO 179/A
-22°F (-30°C)	5.5 ft·lb/in²	12 kJ/m²	
73°F (23°C)	12 ft·lb/in²	25 kJ/m²	
Charpy Unnotched Impact Strength			ISO 179
-22°F (-30°C)	38 ft·lb/in²	80 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]	230 °F	110 °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)	550 V	550 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	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)