Bergamid™ B70 G/Mi20 UF

Polyamide 6

Key Characteristics

General			
Material Status	• Commercial: Active		
Regional Availability	• Africa & Middle East	• Asia Pacific	• Europe
Filler / Reinforcement	• Glass\Mineral, 20% Filler by Weight		
Features	• Flame Retardant	• Halogen Free	• Low (to None) Phosphorus Content
RoHS Compliance	• RoHS Compliant		
Forms	• Pellets		

Technical Properties [1]

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density [2]	1.35 g/cm³	1.35 g/cm³	DIN 53479
Ash Content	20 %	20 %	ISO 3451
Mechanical	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Tensile Modulus (73°F (23°C))	914000 psi	6300 MPa	ISO 527-2/1
Tensile Stress (Break, 73°F (23°C))	13100 psi	90.0 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 (73°F (23°C))	1.9 ft·lb/in²	4.0 kJ/m²	ISO 179/1eA
Charpy Unnotched Impact Strength			ISO 179/1eU
73°F (23°C)	21 ft·lb/in²	45 kJ/m²	
Thermal	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Heat Deflection Temperature			ISO 75-2/B
66 psi (0.45 MPa), Unannealed	401 °F	205 °C	
Heat Deflection Temperature			ISO 75-2/A
264 psi (1.8 MPa), Unannealed	320 °F	160 °C	
Maximum Use Temperature			IEC 60216
-- [3]	203 °F	95 °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
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	V-2	V-2	
Glow Wire Flammability Index			IEC 60695-2-12
0.03 to 0.12 in (0.8 to 3.0 mm)	1760 °F	960 °C	

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Drying Temperature	176 °F	80 °C
Drying Time	3.0 to 4.0 hr	3.0 to 4.0 hr
Processing (Melt) Temp	464 °F	240 °C
Mold Temperature	140 to 176 °F	60 to 80 °C

Notes

[1] Typical values are not to be construed as specifications.

[2] ±0.03 g/cm³

[3] Continuous (GTP 50% Tensile)