Bergamid™ B700 UF V2

Polyamide 6

Key Characteristics

General			
Material Status	• Commercial: Active		
Regional Availability	• Africa & Middle East	• Asia Pacific	• Europe
Features	• Flame Retardant	• Halogen Free	
RoHS Compliance	• RoHS Compliant		
Forms	• Pellets		
Processing Method	• Injection Molding		

Technical Properties [1]

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density [2]	1.13 g/cm³	1.13 g/cm³	DIN 53479
Mechanical	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Tensile Modulus (73°F (23°C))	435000 psi	3000 MPa	ISO 527-2/1
Tensile Stress (Yield, 73°F (23°C))	11600 psi	80.0 MPa	ISO 527-2/50
Tensile Strain (Yield, 73°F (23°C))	4.0 %	4.0 %	ISO 527-2/50
Impact	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Charpy Notched Impact Strength (73°F (23°C))	2.4 ft·lb/in²	5.0 kJ/m²	ISO 179/1eA
Charpy Unnotched Impact Strength			ISO 179
73°F (23°C)	41 ft·lb/in²	87 kJ/m²	
Thermal	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Heat Deflection Temperature			ISO 75-2/B
66 psi (0.45 MPa), Unannealed	338 °F	170 °C	
Heat Deflection Temperature			ISO 75-2/A
264 psi (1.8 MPa), Unannealed	149 °F	65.0 °C	
Maximum Use Temperature			IEC 60216
-- [3]	167 °F	75 °C	
Short Time	347 °F	175 °C	
Melting Temperature (DSC)	433 °F	223 °C	ISO 3146
Electrical	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Surface Resistivity	1.0E+10 ohms	1.0E+10 ohms	IEC 60093
Volume Resistivity	1.0E+12 ohms·cm	1.0E+12 ohms·cm	IEC 60093
Flammability	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Flame Rating			UL 94
0.031 in (0.8 mm), ALL	V-2	V-2	
0.06 in (1.6 mm)	V-2	V-2	
0.12 in (3.0 mm)	V-2	V-2	
Glow Wire Flammability Index			IEC 60695-2-12
0.031 in (0.8 mm)	> 1560 °F	> 850 °C	
0.06 in (1.6 mm)	> 1560 °F	> 850 °C	
0.12 in (3.0 mm)	> 1560 °F	> 850 °C	

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Drying Temperature	176 °F	80 °C
Drying Time	2.0 to 4.0 hr	2.0 to 4.0 hr
Processing (Melt) Temp	500 °F	260 °C
Mold Temperature	104 to 176 °F	40 to 80 °C
Injection Rate	Moderate	Moderate

Notes

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

[2] ±0.03 g/cm³

[3] Continuous (GTP 50% Tensile)