Bergamid™ B700 UF black

Polyamide 6

Key Characteristics

General			
Material Status	• Commercial: Active		
Regional Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Flame Retardant	• Halogen Free	• Low (to None) Phosphorus Content
RoHS Compliance	• RoHS Compliant		
Forms	• Pellets		
Processing Method	• Extrusion	• Injection Molding	

Technical Properties [1]

Physical	Dry	Conditioned	Unit	Test Method
Density [2]	1.18	1.18	g/cm³	DIN 53479
K-Value [3]	74.0 to 78.0	74.0 to 78.0		
Mechanical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Tensile Modulus (73°F (23°C))	218000 (1500)	218000 (1500)	psi (MPa)	ISO 527-2/1
Tensile Stress (Break, 73°F (23°C))	7980 (55.0)	7980 (55.0)	psi (MPa)	ISO 527-2/5
Tensile Strain (Break, 73°F (23°C))	20	20	%	ISO 527-2/5
Impact	**Dry**	**Conditioned**	**Unit**	**Test Method**
Charpy Notched Impact Strength				ISO 179/1eA
-22°F (-30°C)	3.0 (6.3)	3.0 (6.3)	ft·lb/in² (kJ/m²)	
73°F (23°C)	4.0 (8.4)	4.0 (8.4)	ft·lb/in² (kJ/m²)	
Charpy Unnotched Impact Strength				ISO 179/1eU
73°F (23°C)	No Break	No Break		
Thermal	**Dry**	**Conditioned**	**Unit**	**Test Method**
Heat Deflection Temperature				ISO 75-2/B
66 psi (0.45 MPa), Unannealed	374 (190)	374 (190)	°F (°C)	
Heat Deflection Temperature				ISO 75-2/A
264 psi (1.8 MPa), Unannealed	176 (80.0)	176 (80.0)	°F (°C)	
Maximum Use Temperature				IEC 60216
-- [4]	185 (85)	185 (85)	°F (°C)	
Short Time	320 (160)	320 (160)	°F (°C)	
Melting Temperature (DSC)	433 (223)	433 (223)	°F (°C)	ISO 3146

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Electrical	Dry	Conditioned	Unit	Test Method
Surface Resistivity	1.0E+10	1.0E+10	ohms	IEC 60093
Volume Resistivity	1.0E+12	1.0E+12	ohms·cm	IEC 60093
Electric Strength	1100 (45)	1100 (45)	V/mil (kV/mm)	IEC 60243-1
Relative Permittivity (1 MHz)	7.00	7.00		IEC 60250
Comparative Tracking Index (Solution A)	600	600	V	IEC 60112
Flammability	**Dry**	**Conditioned**	**Unit**	**Test Method**
Flame Rating (0.031 in (0.8 mm), ALL)	V-0	V-0		Internal Method
Glow Wire Ignition Temperature [5]				IEC 60695-2-13
0.12 in (3.0 mm)	1760 (960)	1760 (960)	°F (°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)

[5] 0.8 mm wire

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