



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	Typical Value (English)	Typical Value (SI)	Test Method
Density ²	1.18 g/cm ³	1.18 g/cm ³	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))	508000 psi	3500 MPa	ISO 527-2/1
Tensile Stress (Break, 73°F (23°C))	10200 psi	70.0 MPa	ISO 527-2/5
Tensile Strain (Break, 73°F (23°C))	> 4.0 %	> 4.0 %	ISO 527-2/5
Impact	Typical Value (English)	Typical Value (SI)	Test Method
Charpy Notched Impact Strength (73°F (23°C))	2.1 ft·lb/in ²	4.5 kJ/m ²	ISO 179/1eA
Charpy Unnotched Impact Strength 73°F (23°C)	> 38 ft·lb/in ²	> 80 kJ/m ²	ISO 179/1eU
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Heat Deflection Temperature 66 psi (0.45 MPa), Unannealed	374 °F	190 °C	ISO 75-2/B
Heat Deflection Temperature 264 psi (1.8 MPa), Unannealed	176 °F	80.0 °C	ISO 75-2/A
Maximum Use Temperature -- ⁴	185 °F	85 °C	IEC 60216
Short Time	320 °F	160 °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
Relative Permittivity (1 MHz)	7.00	7.00	IEC 60250
Comparative Tracking Index (Solution A)	600 V	600 V	IEC 60112
Flammability	Typical Value (English)	Typical Value (SI)	Test Method
Flame Rating 0.02 to 0.12 in (0.4 to 3.0 mm), ALL	V-0	V-0	Internal Method
Glow Wire Flammability Index 0.02 to 0.12 in (0.4 to 3.0 mm)	1760 °F	960 °C	IEC 60695-2-12

Notes

¹ Typical values are not to be construed as specifications.

² $\pm 0.03 \text{ g/cm}^3$

³ 96% H₂SO₄

⁴ Continuous (GTP 50% Tensile)
