Bergamid™ B70 BLACK TM-X

Polyamide 6

Key Characteristics

General	
Material Status	• Commercial: Active
Regional Availability	• Europe
Features	• Impact Modified
Appearance	• Black
Forms	• Pellets
Processing Method	• Injection Molding

Technical Properties [1]

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density	1.11 g/cm³	1.11 g/cm³	ISO 1183
Molding Shrinkage	1.2 %	1.2 %	ISO 294-4
Mechanical	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Tensile Modulus	334000 psi	2300 MPa	ISO 527-2
Tensile Stress (Yield)	9430 psi	65.0 MPa	ISO 527-2
Tensile Strain (Yield)	4.0 %	4.0 %	ISO 527-2
Impact	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Charpy Notched Impact Strength (73°F (23°C))	6.7 ft·lb/in²	14 kJ/m²	ISO 179
Charpy Unnotched Impact Strength			ISO 179
73°F (23°C)	48 ft·lb/in²	100 kJ/m²	
Thermal	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Heat Deflection Temperature			ISO 75-2/B
66 psi (0.45 MPa), Unannealed	347 °F	175 °C	
Heat Deflection Temperature			ISO 75-2/A
264 psi (1.8 MPa), Unannealed	140 °F	60.0 °C	
Melting Temperature (DSC)	433 °F	223 °C	ISO 3146
Electrical	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Surface Resistivity	1.0E+13 ohms	1.0E+13 ohms	IEC 60093
Volume Resistivity	1.0E+15 ohms·cm	1.0E+15 ohms·cm	IEC 60093
Relative Permittivity (1 MHz)	3.70	3.70	IEC 60250
Dissipation Factor (1 MHz)	0.030	0.030	IEC 60250
Comparative Tracking Index	600 V	600 V	IEC 60112
Flammability	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Flame Rating			UL 94
0.03 to 0.06 in (0.8 to 1.6 mm)	HB	HB	

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	482 to 536 °F	250 to 280 °C
Mold Temperature	104 to 176 °F	40 to 80 °C
Holding Pressure	7250 to 14500 psi	50.0 to 100 MPa

Notes

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