



Bergamid™ B80 black

Polyamide 6

Key Characteristics

General	
Material Status	• Commercial: Active
Regional Availability	• Europe
Features	• High Viscosity
RoHS Compliance	• RoHS Compliant
Forms	• Pellets

Technical Properties ¹

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density ²	1.13 g/cm ³	1.13 g/cm ³	DIN 53479
K-Value ³	76.0 to 81.0	76.0 to 81.0	
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus			ISO 527-2/1
73°F (23°C), 0.157 in (4.00 mm), Injection Molded	435000 psi	3000 MPa	
Tensile Stress			ISO 527-2/50
Yield, 73°F (23°C), 0.157 in (4.00 mm), Injection Molded	11600 psi	80.0 MPa	
Tensile Strain			ISO 527-2/50
Yield, 73°F (23°C), 0.157 in (4.00 mm), Injection Molded	4.0 %	4.0 %	
Impact	Typical Value (English)	Typical Value (SI)	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F (-30°C)	2.4 ft·lb/in ²	5.0 kJ/m ²	
73°F (23°C)	3.3 ft·lb/in ²	7.0 kJ/m ²	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F (-30°C)	No Break	No Break	
73°F (23°C)	No Break	No Break	
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
-- ⁴	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+13 ohms	1.0E+13 ohms	IEC 60093
Volume Resistivity	1.0E+15 ohms·cm	1.0E+15 ohms·cm	IEC 60093

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Drying Temperature	176 °F	80 °C

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Injection	Typical Value (English)	Typical Value (SI)
Drying Time	< 4.0 hr	< 4.0 hr
Processing (Melt) Temp	482 to 536 °F	250 to 280 °C
Mold Temperature	104 to 176 °F	40 to 80 °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)

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