



Bergamid™ B80 Natural 003

Polyamide 6

Key Characteristics

General		
Material Status	• Commercial: Active	
Regional Availability	• Europe	
Features	• High Viscosity	
Appearance	• Natural Color	
Forms	• Pellets	
Processing Method	• Extrusion	• Injection Molding

Technical Properties ¹

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density ²	1.13 g/cm ³	1.13 g/cm ³	ISO 1183
Viscosity Number ³	165 to 215 cm ³ /g	165 to 215 cm ³ /g	ISO 307
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus	435000 psi	3000 MPa	ISO 527
Tensile Stress (Break)	11600 psi	80.0 MPa	ISO 527
Tensile Strain (Break)	20 %	20 %	ISO 527
Flexural Stress	18100 psi	125 MPa	ISO 178
Impact	Typical Value (English)	Typical Value (SI)	Test Method
Charpy Notched Impact Strength (73°F (23°C))	3.8 ft·lb/in ²	8.0 kJ/m ²	ISO 179/1eA
Charpy Unnotched Impact Strength 73°F (23°C)	No Break	No Break	ISO 179/1eU
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Heat Deflection Temperature 66 psi (0.45 MPa), Unannealed	347 °F	175 °C	ISO 75-2/B
Heat Deflection Temperature 264 psi (1.8 MPa), Unannealed	149 °F	65.0 °C	ISO 75-2/A
Melting Temperature (DSC)	419 to 437 °F	215 to 225 °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	3.70	3.70	IEC 60250
Dissipation Factor	0.025	0.025	IEC 60250
Comparative Tracking Index	600 V	600 V	IEC 60112
Flammability	Typical Value (English)	Typical Value (SI)	Test Method
Flame Rating (0.13 in (3.2 mm))	HB	HB	UL 94

Processing Information

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

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Notes

¹ Typical values are not to be construed as specifications.

² +/-0.02

³ 96%H₂SO₄

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