

Bergamid™ B80 GRAU VN5092CF UV SO1

Polyamide 6

Key Characteristics

General			
Material Status	• Commercial: Active		
Regional Availability	• Europe		
Appearance	• Black		
Forms	• Pellets		
Processing Method	• Blow Molding	• Extrusion	• Injection Molding

Technical Properties ¹

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density	1.11 to 1.15 g/cm ³	1.11 to 1.15 g/cm ³	ISO 1183
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus	363000 psi	2500 MPa	ISO 527-2
Tensile Strength	10900 psi	75.0 MPa	ISO 527
Tensile Strain (Break)	> 20 %	> 20 %	ISO 527-2
Impact	Typical Value (English)	Typical Value (SI)	Test Method
Charpy Notched Impact Strength (73°F (23°C))	2.9 ft·lb/in ²	6.0 kJ/m ²	ISO 179
Charpy Unnotched Impact Strength 73°F (23°C)	No Break	No Break	ISO 179
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Deflection Temperature Under Load 66 psi (0.45 MPa), Unannealed	338 °F	170 °C	ISO 75-2
Deflection Temperature Under Load 264 psi (1.8 MPa), Unannealed	158 °F	70.0 °C	ISO 75-2
Melting Temperature (DSC)	419 to 437 °F	215 to 225 °C	ISO 3146
Electrical	Typical Value (English)	Typical Value (SI)	Test Method
Comparative Tracking Index	500 V	500 V	IEC 60112
Flammability	Typical Value (English)	Typical Value (SI)	Test Method
Flame Rating (0.13 in (3.2 mm))	HB	HB	UL 94
FMVSS Flammability	< 3.9 in/min	< 100 mm/min	DIN 75200

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.