



Bergamid™ B80 TM-Z UV

Polyamide 6

Key Characteristics

General		
Material Status	• Commercial: Active	
Regional Availability	• Africa & Middle East • Asia Pacific	• Europe • North America
Features	• Heat Aging Resistant • High Impact Resistance	• High Viscosity • UV Stabilized
RoHS Compliance	• RoHS Compliant	
Appearance	• Natural Color	
Forms	• Pellets	
Processing Method	• Extrusion	• Injection Molding

Technical Properties ¹

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density ²	1.05 g/cm ³	1.05 g/cm ³	ISO 1183
K-Value ³	80.0 to 85.0	80.0 to 85.0	
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus	319000 psi	2200 MPa	ISO 527-2
Tensile Stress (Break)	7250 psi	50.0 MPa	ISO 527-2
Tensile Strain (Break)	> 60 %	> 60 %	ISO 527-2
Impact	Typical Value (English)	Typical Value (SI)	Test Method
Charpy Notched Impact Strength			
-22°F (-30°C)	> 4.8 ft·lb/in ²	> 10 kJ/m ²	ISO 179
73°F (23°C)	> 12 ft·lb/in ²	> 25 kJ/m ²	ISO 179/1eA
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	266 °F	130 °C	
Heat Deflection Temperature			ISO 75-2/A
264 psi (1.8 MPa), Unannealed	140 °F	60.0 °C	
Continuous Use Temperature ⁴	194 °F	90.0 °C	IEC 60216
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	600 V	600 V	IEC 60112
Flammability	Typical Value (English)	Typical Value (SI)	Test Method
Flame Rating	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 500 °F	250 to 260 °C

Copyright © 2019 PolyOne Corporation. PolyOne makes no representations, guarantees, or warranties of any kind with respect to the Information contained in this document about its accuracy, suitability for particular applications, or the results obtained or obtainable using the information. Some of the Information arises from laboratory work with small-scale equipment which may not provide a reliable indication of performance or properties obtained or obtainable on larger-scale equipment. Values reported as "typical" or stated without a range do not state minimum or maximum properties; consult your sales representative for property ranges and min/max specifications. Processing conditions can cause material properties to shift from the values stated in the Information. PolyOne makes no warranties or guarantees respecting suitability of either PolyOne's products or the Information for your process or end-use application. You have the responsibility to conduct full-scale end-product performance testing to determine suitability in your application, and you assume all risk and liability arising from your use of the Information and/or use or handling of any product. POLYONE MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, either with respect to the Information or products reflected by the Information. This data sheet shall NOT operate as permission, recommendation, or inducement to practice any patented invention without permission of the patent owner.

Injection	Typical Value (English)	Typical Value (SI)
Mold Temperature	104 to 176 °F	40 to 80 °C

Notes¹ Typical values are not to be construed as specifications.² +/-0.02³ 96% H₂SO₄⁴ continuous (GTP 50% Tensile)**CONTACT INFORMATION****Americas**United States - Avon Lake
+1 440 930 1000United States - McHenry
+1 815 385 8500**Asia**China - Guangzhou
+86 20 8732 7260China - Shenzhen
+86 755 2969 2888China - Suzhou
+86 512 6823 24 38China - Suzhou
+86 512 6265 2600Hong Kong -
+852 2690 5332Taiwan - Yonghe City,
+886 9396 99740, +886 2929 1849**Europe**Germany - Gaggenau
+49 7225 6802 0Spain - Barbastro (Huesca)
+34 974 310 314*Beyond Polymers.**Better Business Solutions.™*

www.polyone.com

PolyOne Americas33587 Walker Road
Avon Lake, Ohio 44012
United States
+1 440 930 1000
+1 866 POLYONE**PolyOne Asia**No. 88 Guoshoujing Road
Z.J Hi-tech Park, Pudong
Shanghai, 201203, China
+86 21 5080 1188**PolyOne Europe**6 Giällewee
+352 269 050 35

Copyright ©, 2019 PolyOne Corporation. PolyOne makes no representations, guarantees, or warranties of any kind with respect to the Information contained in this document about its accuracy, suitability for particular applications, or the results obtained or obtainable using the information. Some of the Information arises from laboratory work with small-scale equipment which may not provide a reliable indication of performance or properties obtained or obtainable on larger-scale equipment. Values reported as "typical" or stated without a range do not state minimum or maximum properties; consult your sales representative for property ranges and min/max specifications. Processing conditions can cause material properties to shift from the values stated in the Information. PolyOne makes no warranties or guarantees respecting suitability of either PolyOne's products or the Information for your process or end-use application. You have the responsibility to conduct full-scale end-product performance testing to determine suitability in your application, and you assume all risk and liability arising from your use of the Information and/or use or handling of any product. POLYONE MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, either with respect to the Information or products reflected by the Information. This data sheet shall NOT operate as permission, recommendation, or inducement to practice any patented invention without permission of the patent owner.