



Bergamid™ B80 G25 TM-Z UV

Polyamide 6

Key Characteristics

General			
Material Status	• Commercial: Active		
Regional Availability	• Africa & Middle East • Asia Pacific	• Europe • North America	
Filler / Reinforcement	• Glass Fiber, 25% Filler by Weight		
Features	• Heat Stabilized	• High Impact Resistance	• UV Stabilized
RoHS Compliance	• RoHS Compliant		
Forms	• Pellets		

Technical Properties ¹

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density ²	1.32 g/cm ³	1.32 g/cm ³	DIN 53479
K-Value ³	80.0 to 85.0	80.0 to 85.0	
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)	856000 psi	5900 MPa	
Tensile Stress			ISO 527-2/5
Break, 73°F (23°C), 0.157 in (4.00 mm), Injection Molded	10200 psi	70.0 MPa	
Tensile Strain			ISO 527-2/5
Break, 73°F (23°C), 0.157 in (4.00 mm), Injection Molded	> 3.5 %	> 3.5 %	
Impact	Typical Value (English)	Typical Value (SI)	Test Method
Charpy Notched Impact Strength			ISO 179/A
-22°F (-30°C)	5.5 ft·lb/in ²	12 kJ/m ²	
73°F (23°C)	12 ft·lb/in ²	25 kJ/m ²	
Charpy Unnotched Impact Strength			ISO 179
-22°F (-30°C)	38 ft·lb/in ²	80 kJ/m ²	
73°F (23°C)	38 ft·lb/in ²	80 kJ/m ²	
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Heat Deflection Temperature			ISO 75-2/B
66 psi (0.45 MPa), Unannealed	428 °F	220 °C	
Heat Deflection Temperature			ISO 75-2/A
264 psi (1.8 MPa), Unannealed	410 °F	210 °C	
Maximum Use Temperature			IEC 60216
... ⁴	230 °F	110 °C	
Short Time	374 °F	190 °C	
Melting Temperature (DSC)	433 °F	223 °C	ISO 3146
Electrical	Typical Value (English)	Typical Value (SI)	Test Method
Surface Resistivity	> 1.0E+12 ohms	> 1.0E+12 ohms	IEC 60093
Volume Resistivity	> 1.0E+14 ohms·cm	> 1.0E+14 ohms·cm	IEC 60093
Relative Permittivity (1 MHz)	3.70	3.70	IEC 60250
Comparative Tracking Index (Solution A)	550 V	550 V	IEC 60112

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.

Flammability	Typical Value (English)	Typical Value (SI)	Test Method
Flame Rating			Internal Method
0.03 to 0.12 in (0.8 to 3.0 mm), ALL	HB	HB	
Glow Wire Flammability Index			IEC 60695-2-12
0.02 to 0.12 in (0.4 to 3.0 mm)	1200 °F	650 °C	
Glow Wire Ignition Temperature			IEC 60695-2-13
0.02 to 0.12 in (0.4 to 3.0 mm)	1250 °F	675 °C	

Notes¹ Typical values are not to be construed as specifications.² ±0.03 g/cm³³ 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.