



Bergamid™ A700 TM-YF

Polyamide 66

Key Characteristics

General			
Material Status	• Commercial: Active		
Regional Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
RoHS Compliance	• RoHS Compliant		
UL File NumberGlobal	• E76261		
Forms	• Pellets		
Processing Method	• Extrusion	• Injection Molding	

Technical Properties ¹

Physical	Dry	Conditioned	Unit	Test Method
Density ²	1.08	--	g/cm ³	DIN 53479
Water Absorption (Saturation, 73°F (23°C))	6.7	--	%	ISO 62
Water Absorption Equilibrium, 73°F (23°C), 50% RH	2.2	--	%	ISO 62
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus ³ (73°F (23°C))	290000 (2000)	174000 (1200)	psi (MPa)	ISO 527-2/1
Tensile Stress ³ (Yield, 73°F (23°C))	7250 (50.0)	5800 (40.0)	psi (MPa)	ISO 527-2/50
Tensile Strain ³ (Yield, 73°F (23°C))	6.0	40	%	ISO 527-2/50
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
-22°F (-30°C)	1.9 (4.0)	--	ft·lb/in ² (kJ/m ²)	
73°F (23°C)	12 (25)	--	ft·lb/in ² (kJ/m ²)	
Charpy Unnotched Impact Strength				ISO 179/1eU
-22°F (-30°C)	No Break	--		
73°F (23°C)	No Break	No Break		
Thermal	Dry	Conditioned	Unit	Test Method
Heat Deflection Temperature				ISO 75-2/B
66 psi (0.45 MPa), Unannealed	392 (200)	--	°F (°C)	
Heat Deflection Temperature				ISO 75-2/A
264 psi (1.8 MPa), Unannealed	158 (70.0)	--	°F (°C)	
Maximum Use Temperature				IEC 60216
-- ⁴	176 (80)	--	°F (°C)	
Short Time	356 (180)	--	°F (°C)	

Copyright © 2016 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.

Thermal	Dry	Conditioned	Unit	Test Method
Melting Temperature (DSC)	502 (261)	--	°F (°C)	ISO 3146
Electrical	Dry	Conditioned	Unit	Test Method
Surface Resistivity	1.0E+13	1.0E+10	ohms	IEC 60093
Volume Resistivity	1.0E+15	1.0E+12	ohms·cm	IEC 60093
Electric Strength	2300 (90)	1400 (55)	V/mil (kV/mm)	IEC 60243-1
Relative Permittivity (1 MHz)	3.30	3.60		IEC 60250
Dissipation Factor (1 MHz)	0.016	0.060		IEC 60250
Comparative Tracking Index (Solution A)	--	600	V	IEC 60112
Flammability	Dry	Conditioned	Unit	Test Method
Flame Rating (0.031 in (0.8 mm))	HB	--		UL 94

Processing Information

Injection	Dry (English)	Dry (SI)
Drying Temperature	176 °F	80.0 °C
Drying Time - Desiccant Dryer	4.0 to 8.0 hr	4.0 to 8.0 hr
Processing (Melt) Temp	518 to 554 °F	270 to 290 °C
Mold Temperature	104 to 176 °F	40.0 to 80.0 °C
Back Pressure	7250 to 21800 psi	50.0 to 150 MPa

Notes

¹ Typical values are not to be construed as specifications.

² ±0.02 g/cm³

³ dry as moulded

⁴ Continuous (GTP 50% Tensile)

CONTACT INFORMATION

Americas

United States - Avon Lake
+1 440 930 1000

United States - McHenry
+1 815 385 8500

Asia

China - Guangzhou
+86 20 8732 7260

China - Shenzhen
+86 755 2969 2888

China - Suzhou
+86 512 6823 24 38

China - Suzhou
+86 512 6265 2600

Hong Kong -
+852 2690 5332

Taiwan - Yonghe City,
+886 9396 99740, +886 2929 1849

Europe

Germany - Gaggenau
+49 7225 6802 0

Spain - Barbastro (Huesca)
+34 974 310 314



Beyond Polymers.

Better Business Solutions. SM

www.polyone.com

PolyOne Americas

33587 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 ©, 2016 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.