



Bergamid™ A700 G20 HW UF Polyamide 66

Key Characteristics

General	
Material Status	• Commercial: Active
Regional Availability	• Africa & Middle East • Europe • Asia Pacific • North America
Filler / Reinforcement	• Glass Fiber, 20% Filler by Weight
Features	• Flame Retardant • Heat Stabilized • Halogen Free • Hydrolysis Resistant
RoHS Compliance	• RoHS Compliant
UL File Number	• E76261
Forms	• Pellets
Processing Method	• Extrusion • Injection Molding

Technical Properties ¹

Physical	Dry	Conditioned	Unit	Test Method
Density ²	1.34	--	g/cm ³	DIN 53479
Outdoor Suitability (Black)	f1	--		UL 746C
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus (73°F (23°C))	1.16E+6 (8000)	1.04E+6 (7200)	psi (MPa)	ISO 527-2/1
Tensile Stress (Break, 73°F (23°C))	16700 (115)	--	psi (MPa)	ISO 527-2/5
Tensile Strain (Break, 73°F (23°C))	3.0	--	%	ISO 527-2/5
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength (73°F (23°C))	2.6 (5.5)	--	ft·lb/in ² (kJ/m ²)	ISO 179/1eA
Charpy Unnotched Impact Strength 73°F (23°C)	21 (45)	--	ft·lb/in ² (kJ/m ²)	ISO 179/1eU
Thermal	Dry	Conditioned	Unit	Test Method
Heat Deflection Temperature 66 psi (0.45 MPa), Unannealed	482 (250)	--	°F (°C)	ISO 75-2/B
Heat Deflection Temperature 264 psi (1.8 MPa), Unannealed	464 (240)	--	°F (°C)	ISO 75-2/A
Vicat Softening Temperature	473 (245)	--	°F (°C)	ISO 306/A50
--	473 (245)	--	°F (°C)	ISO 306/B50
Melting Temperature (DSC)	502 (261)	--	°F (°C)	ISO 3146

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Thermal	Dry	Conditioned	Unit	Test Method
RTI Elec				UL 746
0.030 in (0.75 mm)	257 (125)	--	°F (°C)	
0.06 in (1.5 mm)	257 (125)	--	°F (°C)	
0.12 in (3.0 mm)	257 (125)	--	°F (°C)	
RTI Imp				UL 746
0.030 in (0.75 mm)	212 (100)	--	°F (°C)	
0.06 in (1.5 mm)	230 (110)	--	°F (°C)	
0.12 in (3.0 mm)	248 (120)	--	°F (°C)	
RTI Str				UL 746
0.030 in (0.75 mm)	221 (105)	--	°F (°C)	
0.06 in (1.5 mm)	239 (115)	--	°F (°C)	
0.12 in (3.0 mm)	257 (125)	--	°F (°C)	
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
Comparative Tracking Index (CTI)	PLC 1	--		UL 746
Flammability	Dry	Conditioned	Unit	Test Method
Flame Rating				UL 94
0.016 in (0.40 mm), ALL	V-0	V-0		
0.030 in (0.75 mm), ALL	V-0	V-0		
0.06 in (1.5 mm), ALL	V-0	V-0		
0.12 in (3.0 mm), ALL	V-0	V-0		
Glow Wire Flammability Index				IEC 60695-2-12
0.016 in (0.40 mm)	1760 (960)	--	°F (°C)	
0.031 in (0.8 mm)	1760 (960)	--	°F (°C)	
0.06 in (1.6 mm)	1760 (960)	--	°F (°C)	
0.12 in (3.0 mm)	1760 (960)	--	°F (°C)	
Glow Wire Ignition Temperature				IEC 60695-2-13
0.031 in (0.8 mm)	1340 (725)	--	°F (°C)	
0.06 in (1.6 mm)	1340 (725)	--	°F (°C)	
0.12 in (3.0 mm)	1380 (750)	--	°F (°C)	

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Processing Information

Injection	Dry (English)	Dry (SI)
Drying Temperature	176 °F	80.0 °C
Drying Time	3.0 to 4.0 hr	3.0 to 4.0 hr
Processing (Melt) Temp	500 to 536 °F	260 to 280 °C
Mold Temperature	140 to 194 °F	60.0 to 90.0 °C
Holding Pressure	5800 to 13100 psi	40.0 to 90.0 MPa

Notes

¹ Typical values are not to be construed as specifications.

² ±0.03 g/cm³

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