



# Bergamid™ A700 G20 U-SO

## Polyamide 66

### Key Characteristics

General			
Material Status	• Commercial: Active		
Regional Availability	• Africa & Middle East	• Asia Pacific	• Europe
Filler / Reinforcement	• Glass Fiber, 20% Filler by Weight		
Additive	• Heat Stabilizer		
Features	• Flame Retardant	• Halogen Free	• Heat Stabilized
RoHS Compliance	• RoHS Compliant		
Forms	• Pellets		

### Technical Properties <sup>1</sup>

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density <sup>2</sup>	1.34 g/cm <sup>3</sup>	1.34 g/cm <sup>3</sup>	DIN 53479
Ash Content	20 %	20 %	ISO 3451
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus (73°F (23°C))	1.09E+6 psi	7500 MPa	ISO 527-2/1
Tensile Stress (Break, 73°F (23°C))	19600 psi	135 MPa	ISO 527-2/5
Tensile Strain (Break, 73°F (23°C))	3.0 %	3.0 %	ISO 527-2/5
Impact	Typical Value (English)	Typical Value (SI)	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F (-30°C)	2.9 ft·lb/in <sup>2</sup>	6.0 kJ/m <sup>2</sup>	
73°F (23°C)	3.3 ft·lb/in <sup>2</sup>	7.0 kJ/m <sup>2</sup>	
Charpy Unnotched Impact Strength			ISO 179/1eA
-22°F (-30°C)	29 ft·lb/in <sup>2</sup>	60 kJ/m <sup>2</sup>	
73°F (23°C) <sup>3</sup>	21 ft·lb/in <sup>2</sup>	45 kJ/m <sup>2</sup>	
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Heat Deflection Temperature			ISO 75-2/B
66 psi (0.45 MPa), Unannealed	482 °F	250 °C	
Maximum Use Temperature			IEC 60216
-- <sup>4</sup>	248 °F	120 °C	
Short Time	428 °F	220 °C	
Melting Temperature (DSC)	502 °F	261 °C	ISO 3146
Electrical	Typical Value (English)	Typical Value (SI)	Test Method
Surface Resistivity	1.0E+13 ohms	1.0E+13 ohms	IEC 60093
Volume Resistivity	1.0E+15 ohms·cm	1.0E+15 ohms·cm	IEC 60093
Electric Strength	2000 V/mil	80 kV/mm	IEC 60243-1
Relative Permittivity (1 MHz)	3.50	3.50	IEC 60250
Dissipation Factor (1 MHz)	0.015	0.015	IEC 60250
Comparative Tracking Index (Solution A)	400 V	400 V	IEC 60112
Flammability	Typical Value (English)	Typical Value (SI)	Test Method
Flame Rating (0.12 in (3.0 mm), ALL)	V-0	V-0	Internal Method
Glow Wire Flammability Index			IEC 60695-2-12
0.03 to 0.12 in (0.8 to 3.0 mm)	1760 °F	960 °C	

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Flammability	Typical Value (English)	Typical Value (SI)	Test Method
Glow Wire Ignition Temperature 0.12 in (3.0 mm)	1430 °F	775 °C	IEC 60695-2-13

**Notes**

<sup>1</sup> Typical values are not to be construed as specifications.

<sup>2</sup> ±0.02 g/cm³

<sup>3</sup> Type 1

<sup>4</sup> Continuous (GTP 50% Tensile)

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