



# Bergamid™ B700 W25

## Polyamide 6

### Key Characteristics

General		
Material Status	• Commercial: Active	
Regional Availability	• Africa & Middle East • Asia Pacific	• Europe • North America
Features	• Impact Modified	
RoHS Compliance	• RoHS Compliant	
UL File Number	• QMFZ2.E76261	
Forms	• Pellets	

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

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density <sup>2</sup>	1.10 g/cm <sup>3</sup>	1.10 g/cm <sup>3</sup>	DIN 53479
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus (73°F (23°C))	421000 psi	2900 MPa	ISO 527-2/1
Tensile Stress (Yield, 73°F (23°C))	10200 psi	70.0 MPa	ISO 527-2/50
Tensile Strain (Yield, 73°F (23°C))	4.0 %	4.0 %	ISO 527-2/50
Tensile Strain (Break, 73°F (23°C))	25 %	25 %	ISO 527-2/5
Impact	Typical Value (English)	Typical Value (SI)	Test Method
Charpy Notched Impact Strength (73°F (23°C))	4.8 ft·lb/in <sup>2</sup>	10 kJ/m <sup>2</sup>	ISO 179/A
Charpy Unnotched Impact Strength 73°F (23°C)	No Break	No Break	ISO 179
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Heat Deflection Temperature 66 psi (0.45 MPa), Unannealed	338 °F	170 °C	ISO 75-2/B
Heat Deflection Temperature 264 psi (1.8 MPa), Unannealed	149 °F	65.0 °C	ISO 75-2/A
Maximum Use Temperature -- <sup>3</sup>	149 °F	65 °C	IEC 60216
Short Time	320 °F	160 °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
Electric Strength	2500 V/mil	100 kV/mm	IEC 60243-1
Relative Permittivity (1 MHz)	3.40	3.40	IEC 60250
Comparative Tracking Index (Solution A)	600 V	600 V	IEC 60112
Flammability	Typical Value (English)	Typical Value (SI)	Test Method
Flame Rating 0.03 to 0.12 in (0.8 to 3.0 mm), ALL	HB	HB	UL 94
Glow Wire Flammability Index 0.02 to 0.12 in (0.4 to 3.0 mm)	1200 °F	650 °C	IEC 60695-2-12
Glow Wire Ignition Temperature 0.02 to 0.12 in (0.4 to 3.0 mm)	1250 °F	675 °C	IEC 60695-2-13

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## Notes

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

<sup>2</sup> ±0.03 g/cm<sup>3</sup>

<sup>3</sup> Continuous (GTP 50% Tensile)

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