

# Bergamid<sup>™</sup> B700 G30 TM-Z colored Polyamide 6

### **Key Characteristics**

Product Description		
6016158		
General		
Material Status	Commercial: Active	
Regional Availability	Europe	
Filler / Reinforcement	Glass Fiber, 30% Filler by Weight	
Features	Good Dimensional Stability  Heat Stabilized Good Stiffness High Impact Resistance	
RoHS Compliance	RoHS Compliant	
Appearance	Unspecified Color	
Forms	Pellets	
Processing Method	Injection Molding	

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

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Specific Gravity <sup>2</sup>	1.30	1.30	ISO 1183
Molding Shrinkage - Flow <sup>3</sup>			ASTM D955
73°F (23°C), 0.157 in (4.00 mm), Injection Molded	4.0E-3 to 8.0E-3 in/in	0.40 to 0.80 %	
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus <sup>4</sup>			ISO 527-2/1
73°F (23°C), 0.157 in (4.00 mm), Injection Molded	986000 to <sub>psi</sub> 1.16E+6	6800 to 8000 MPa	
Tensile Strength <sup>5, 4</sup>			ISO 527
73°F (23°C), 0.157 in (4.00 mm)	14500 to 17400 psi	100 to 120 MPa	
Tensile Elongation <sup>5</sup>			ISO 527
Break, 73°F (23°C), 0.157 in (4.00 mm)	> 4.0 %	> 4.0 %	
Flexural Modulus (73°F (23°C))	943000 to 1.16E+6	6500 to 8000 MPa	ISO 178
Flexural Stress (73°F (23°C))	23200 to 26100 psi	160 to 180 MPa	ISO 178
Impact	Typical Value (English)	Typical Value (SI)	Test Method
Charpy Notched Impact Strength <sup>4</sup>			
-22°F (-30°C)	4.8 to 7.1 ft·lb/in <sup>2</sup>	10 to 15 kJ/m <sup>2</sup>	ISO 179
73°F (23°C)	9.5 to 14 ft·lb/in <sup>2</sup>	20 to 30 kJ/m <sup>2</sup>	ISO 179/1eA
Charpy Unnotched Impact Strength <sup>4</sup>			ISO 179
-22°F (-30°C), Injection Molded	38 to 48 ft·lb/in <sup>2</sup>	80 to 100 kJ/m <sup>2</sup>	
73°F (23°C), Injection Molded	36 to 48 ft·lb/in <sup>2</sup>	75 to 100 kJ/m <sup>2</sup>	
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Deflection Temperature Under Load			ISO 75-2
66 psi (0.45 MPa), Unannealed, 0.157 ir (4.00 mm)	401 °F	205 °C	
Deflection Temperature Under Load			ISO 75-2
264 psi (1.8 MPa), Unannealed, 0.157 ir (4.00 mm)	374 °F	190 °C	

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### **Technical Data Sheet**

Electrical	Typical Value (English)	Typical Value (SI)	Test Method
Surface Resistivity	1.0E+15 ohms	1.0E+15 ohms	ASTM D257
Volume Resistivity	1.0E+15 ohms · cm	1.0E+15 ohms cm	ASTM D257
Flammability	Typical Value (English)	Typical Value (SI)	Test Method
Flame Rating (0.13 in (3.2 mm), ALL)	HB	HB	Internal Method

Processing Information					
Injection	Typical Value (English)	Typical Value (SI)			
Drying Temperature	176 °F	80.0 °C			
Drying Time	4.0 hr	4.0 hr			
Processing (Melt) Temp	464 to 536 °F	240 to 280 °C			
Mold Temperature	149 to 185 °F	65.0 to 85.0 °C			

#### Notes

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

<sup>2</sup> ±0.03

<sup>3</sup> Bergmann Method

<sup>4</sup> depend on color

<sup>5</sup> 0.20 in/min (5.0 mm/min)

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