



Bergamid™ 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 • Halogen Free • Good Stiffness • Heat Stabilized • High Impact Resistance
RoHS Compliance	• RoHS Compliant
Appearance	• Unspecified Color
Forms	• Pellets
Processing Method	• Injection Molding

Technical Properties ¹

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

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 °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 to 85 °C

Notes

¹ Typical values are not to be construed as specifications.

² ±0.03

³ Bergmann Method

⁴ depend on color

⁵ 0.20 in/min (5.0 mm/min)