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 • Good Stiffness	• Halogen Free • 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]			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 [4]			ISO 527-2/1
73°F (23°C), 0.157 in (4.00 mm), Injection Molded	986000 to 1.16E+6 psi	6800 to 8000 MPa	
Tensile Strength [5, 4]			ISO 527
73°F (23°C), 0.157 in (4.00 mm)	14500 to 17400 psi	100 to 120 MPa	
Tensile Elongation [5]			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 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/in²	10 to 15 kJ/m²	ISO 179
73°F (23°C)	9.5 to 14 ft·lb/in²	20 to 30 kJ/m²	ISO 179/1eA
Charpy Unnotched Impact Strength [4]			ISO 179
-22°F (-30°C), Injection Molded	38 to 48 ft·lb/in²	80 to 100 kJ/m²	
73°F (23°C), Injection Molded	36 to 48 ft·lb/in²	75 to 100 kJ/m²	
Thermal	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Deflection Temperature Under Load			ISO 75-2
66 psi (0.45 MPa), Unannealed, 0.157 in (4.00 mm)	401 °F	205 °C	
Deflection Temperature Under Load			ISO 75-2
264 psi (1.8 MPa), Unannealed, 0.157 in (4.00 mm)	374 °F	190 °C	

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)

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