Gravi-Tech™ GRV-NY-060-CU

Polyamide 6

Key Characteristics

General			
Material Status	• Commercial: Active		
Regional Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Non-Toxic		
Uses	• Industrial Applications • Medical/Healthcare Applications	• Projectiles • Sporting Goods	• Weighting & Balancing
Forms	• Pellets		
Processing Method	• Injection Molding		

Technical Properties [1]

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density / Specific Gravity	6.00	6.00	ASTM D792
Molding Shrinkage - Flow	3.0E-3 to 5.0E-3 in/in	0.30 to 0.50 %	ASTM D955
Mechanical	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Tensile Modulus [2]	2.40E+6 psi	16500 MPa	ASTM D638
Tensile Strength [2] (Yield)	6600 psi	45.5 MPa	ASTM D638
Tensile Elongation [2] (Break)	1.2 %	1.2 %	ASTM D638
Flexural Modulus	2.11E+6 psi	14500 MPa	ASTM D790
Flexural Strength (Yield)	> 10200 psi	> 70.0 MPa	ASTM D790
Impact	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Charpy Notched Impact Strength (73°F (23°C))	> 1.2 ft·lb/in²	> 2.5 kJ/m²	ISO 179
Charpy Unnotched Impact Strength			ISO 179
73°F (23°C)	> 2.9 ft·lb/in²	> 6.0 kJ/m²	
Thermal	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Deflection Temperature Under Load			ASTM D648
66 psi (0.45 MPa), Unannealed, 0.250 in (6.35 mm)	305 °F	152 °C	

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Drying Temperature	175 °F	79 °C
Drying Time	4.0 hr	4.0 hr
Processing (Melt) Temp	500 to 550 °F	260 to 288 °C
Mold Temperature	180 to 300 °F	82 to 149 °C

Notes

[1] Typical values are not to be construed as specifications.

[2] Type I, 0.20 in/min (5.1 mm/min)