Gravi-Tech™ GRV NJ-080-W Grey

Polyamide 12

Key Characteristics

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

Technical Properties [1]

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density	8.00 g/cm³	8.00 g/cm³	ISO 1183
Molding Shrinkage (0.157 in (4.00 mm))	0.80 to 1.2 %	0.80 to 1.2 %	ISO 294-4
Mechanical	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Tensile Modulus (73°F (23°C))	725000 psi	5000 MPa	ISO 527-1
Tensile Stress (Yield, 73°F (23°C))	5800 psi	40.0 MPa	ISO 527-2
Tensile Strain (Yield, 73°F (23°C))	1.0 to 2.0 %	1.0 to 2.0 %	ISO 527-2
Flexural Modulus (73°F (23°C))	696000 psi	4800 MPa	ISO 178
Flexural Stress (73°F (23°C))	8700 psi	60.0 MPa	ISO 178
Impact	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Charpy Notched Impact Strength (73°F (23°C))	2.4 ft·lb/in²	5.0 kJ/m²	ISO 179
Charpy Unnotched Impact Strength			ISO 179
73°F (23°C)	7.1 ft·lb/in²	15 kJ/m²	
Thermal	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Deflection Temperature Under Load			ISO 75-2/B
66 psi (0.45 MPa), Unannealed	284 °F	140 °C	
Deflection Temperature Under Load			ISO 75-2/A
264 psi (1.8 MPa), Unannealed	212 °F	100 °C	

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Drying Temperature	176 °F	80 °C
Drying Time	3.0 to 4.0 hr	3.0 to 4.0 hr
Suggested Max Moisture	1.0 %	1.0 %
Processing (Melt) Temp	446 to 536 °F	230 to 280 °C
Mold Temperature	140 to 194 °F	60 to 90 °C

Notes

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

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