



Gravi-Tech™ GRV NJ-090-W Black SO1

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	8.85 g/cm ³	8.85 g/cm ³	ISO 1183
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus 73°F (23°C), 0.157 in (4.00 mm)	1.67E+6 psi	11500 MPa	ISO 527-2/1
Tensile Stress Break, 73°F (23°C), 0.157 in (4.00 mm)	8700 psi	60.0 MPa	ISO 527-2/5
Tensile Strain Break, 73°F (23°C), 0.157 in (4.00 mm)	0.50 to 1.2 %	0.50 to 1.2 %	ISO 527-2/5
Flexural Modulus ² 73°F (23°C), 0.157 in (4.00 mm)	1.80E+6 psi	12400 MPa	ISO 178
Flexural Stress ² 73°F (23°C), 0.157 in (4.00 mm)	13800 psi	95.0 MPa	ISO 178
Impact	Typical Value (English)	Typical Value (SI)	Test Method
Charpy Notched Impact Strength (73°F (23°C))	2.9 ft·lb/in ²	6.0 kJ/m ²	ISO 179
Charpy Unnotched Impact Strength 73°F (23°C)	5.7 ft·lb/in ²	12 kJ/m ²	ISO 179

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Drying Temperature	176 °F	80.0 °C
Drying Time	3.0 to 4.0 hr	3.0 to 4.0 hr

Notes

¹ Typical values are not to be construed as specifications.

² 0.079 in/min (2.0 mm/min)

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