



# Gravi-Tech™ GRV-NY-035-SS-GF-BLK

## Polyamide 6

### Key Characteristics

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

### Technical Properties <sup>1</sup>

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Specific Gravity	3.35	3.35	ASTM D792
Molding Shrinkage - Flow	3.0E-3 in/in	0.30 %	ASTM D955
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Strength <sup>2</sup> (Yield)	13700 psi	94.5 MPa	ASTM D638
Tensile Elongation <sup>2</sup> (Break)	1.0 %	1.0 %	ASTM D638
Flexural Modulus	2.24E+6 psi	15400 MPa	ASTM D790
Flexural Strength	21000 psi	145 MPa	ASTM D790
Impact	Typical Value (English)	Typical Value (SI)	Test Method
Notched Izod Impact 73°F (23°C), 0.250 in (6.35 mm), Injection Molded	1.0 ft·lb/in	53 J/m	ASTM D256A
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Deflection Temperature Under Load 66 psi (0.45 MPa), Annealed	417 °F	214 °C	ASTM D648
Deflection Temperature Under Load 264 psi (1.8 MPa), Unannealed	388 °F	198 °C	ASTM D648

### Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Drying Temperature	180 °F	82.2 °C
Drying Time	4.0 to 5.0 hr	4.0 to 5.0 hr
Suggested Max Moisture	0.095 to 0.20 %	0.095 to 0.20 %
Rear Temperature	430 to 500 °F	221 to 260 °C
Middle Temperature	440 to 500 °F	227 to 260 °C
Front Temperature	460 to 510 °F	238 to 266 °C
Nozzle Temperature	460 to 520 °F	238 to 271 °C
Mold Temperature	150 to 200 °F	65.6 to 93.3 °C

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**Notes**<sup>1</sup> Typical values are not to be construed as specifications.<sup>2</sup> Type I, 0.20 in/min (5.1 mm/min)**CONTACT INFORMATION****Americas**United States - Avon Lake  
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