



Gravi-Tech™ GRV-NY-085-W-NAT

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 ¹

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Specific Gravity	8.50	8.50	ASTM D792
Molding Shrinkage - Flow	5.0E-3 to 0.011 in/in	0.50 to 1.1 %	ASTM D955
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus ²	1.60E+6 psi	11000 MPa	ASTM D638
Tensile Strength ² (Yield)	9000 psi	62.1 MPa	ASTM D638
Tensile Elongation ² (Break)	1.0 %	1.0 %	ASTM D638
Flexural Modulus	1.40E+6 psi	9650 MPa	ASTM D790
Flexural Strength	15500 psi	107 MPa	ASTM D790
Impact	Typical Value (English)	Typical Value (SI)	Test Method
Notched Izod Impact			ASTM D256A
73°F (23°C), 0.125 in (3.18 mm), Injection Molded	1.2 ft·lb/in	64 J/m	
Unnotched Izod Impact			ASTM D256
73°F (23°C), 0.125 in (3.18 mm), Injection Molded	5.5 ft·lb/in	290 J/m	
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
66 psi (0.45 MPa), Unannealed	378 °F	192 °C	
Deflection Temperature Under Load			ASTM D648
264 psi (1.8 MPa), Unannealed	275 °F	135 °C	

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

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Injection	Typical Value (English)	Typical Value (SI)
Mold Temperature	150 to 200 °F	65.6 to 93.3 °C

Notes

¹ Typical values are not to be construed as specifications.

² Type I, 0.20 in/min (5.1 mm/min)

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