

# Gravi-Tech™ GRV-NY-030-SS Polyamide 6

# **Key Characteristics**

Seneral	
Material Status	Commercial: Active
Regional Availability	Asia Pacific
Features	Non-Toxic
Uses	<ul> <li>Industrial Applications</li> <li>Medical/Healthcare Applications</li> <li>Projectiles</li> <li>Sporting Goods</li> <li>Weighting &amp; Balancing</li> </ul>
Forms	Pellets
Processing Method	Injection Molding

## Technical Properties 1

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Physical	Typical Value (English)	Typical Value (SI)	Test Method		
Specific Gravity	3.00	3.00	ASTM D792		
Molding Shrinkage - Flow	6.0E-3 to 9.0E-3 in/in	0.60 to 0.90 %	ASTM D955		
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method		
Tensile Modulus <sup>2</sup>	1.05E+6 psi	7240 MPa	ASTM D638		
Tensile Strength <sup>2</sup> (Yield)	9900 psi	68.3 MPa	ASTM D638		
Tensile Elongation <sup>2</sup> (Break)	1.7 %	1.7 %	ASTM D638		
Flexural Modulus	830000 psi	5720 MPa	ASTM D790		
Impact	Typical Value (English)	Typical Value (SI)	Test Method		
Notched Izod Impact			ASTM D256A		
73°F (23°C), 0.250 in (6.35 mm), Injection Molded	1.0 ft·lb/in	53 J/m			
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)	300 °F	149 °C			

## **Processing Information**

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Injection	Typical Value (English)	Typical Value (SI)			
Drying Temperature	175°F	79.4 °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	82.2 to 149 °C			

#### Notes

<sup>1</sup> Typical values are not to be construed as specifications.

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Rev: 2009-04-24 Page: 1 of 2

<sup>&</sup>lt;sup>2</sup> Type I, 0.20 in/min (5.1 mm/min)

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Rev: 2009-04-24 Page: 2 of 2