



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 ¹

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density / 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 ² (Yield)	13700 psi	94.5 MPa	ASTM D638
Tensile Elongation ² (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 °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	66 to 93 °C

Copyright © 2019 PolyOne Corporation. PolyOne makes no representations, guarantees, or warranties of any kind with respect to the Information contained in this document about its accuracy, suitability for particular applications, or the results obtained or obtainable using the information. Some of the Information arises from laboratory work with small-scale equipment which may not provide a reliable indication of performance or properties obtained or obtainable on larger-scale equipment. Values reported as "typical" or stated without a range do not state minimum or maximum properties; consult your sales representative for property ranges and min/max specifications. Processing conditions can cause material properties to shift from the values stated in the Information. PolyOne makes no warranties or guarantees respecting suitability of either PolyOne's products or the Information for your process or end-use application. You have the responsibility to conduct full-scale end-product performance testing to determine suitability in your application, and you assume all risk and liability arising from your use of the Information and/or use or handling of any product. POLYONE MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, either with respect to the Information or products reflected by the Information. This data sheet shall NOT operate as permission, recommendation, or inducement to practice any patented invention without permission of the patent owner.

Notes¹ Typical values are not to be construed as specifications.² Type I, 0.20 in/min (5.1 mm/min)**CONTACT INFORMATION****Americas**United States - Avon Lake
+1 440 930 1000United States - McHenry
+1 815 385 8500**Asia**China - Guangzhou
+86 20 8732 7260China - Shenzhen
+86 755 2969 2888China - Suzhou
+86 512 6823 24 38China - Suzhou
+86 512 6265 2600Hong Kong -
+852 2690 5332Taiwan - Yonghe City,
+886 9396 99740, +886 2929 1849**Europe**Germany - Gaggenau
+49 7225 6802 0Spain - Barbastro (Huesca)
+34 974 310 314*Beyond Polymers.**Better Business Solutions. SM*

www.polyone.com

PolyOne Americas33587 Walker Road
Avon Lake, Ohio 44012
United States
+1 440 930 1000
+1 866 POLYONE**PolyOne Asia**No. 88 Guoshoujing Road
Z.J Hi-tech Park, Pudong
Shanghai, 201203, China
+86 21 5080 1188**PolyOne Europe**6 Giällewee
+352 269 050 35

Copyright ©, 2019 PolyOne Corporation. PolyOne makes no representations, guarantees, or warranties of any kind with respect to the Information contained in this document about its accuracy, suitability for particular applications, or the results obtained or obtainable using the information. Some of the Information arises from laboratory work with small-scale equipment which may not provide a reliable indication of performance or properties obtained or obtainable on larger-scale equipment. Values reported as "typical" or stated without a range do not state minimum or maximum properties; consult your sales representative for property ranges and min/max specifications. Processing conditions can cause material properties to shift from the values stated in the Information. PolyOne makes no warranties or guarantees respecting suitability of either PolyOne's products or the Information for your process or end-use application. You have the responsibility to conduct full-scale end-product performance testing to determine suitability in your application, and you assume all risk and liability arising from your use of the Information and/or use or handling of any product. POLYONE MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, either with respect to the Information or products reflected by the Information. This data sheet shall NOT operate as permission, recommendation, or inducement to practice any patented invention without permission of the patent owner.