



Gravi-Tech™ GRV-UR-060-W-BLK

Polyurethane

Key Characteristics

General	
Material Status	• Commercial: Active
Regional Availability	• North America
Features	• High Density • Non-Toxic
Uses	• Industrial Applications • Projectiles • Medical/Healthcare Applications • Sporting Goods • Weighting & Balancing
Forms	• Pellets
Processing Method	• Injection Molding

Technical Properties ¹

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density / Specific Gravity	6.00	6.00	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
Flexural Modulus	31000 psi	214 MPa	ASTM D790
Flexural Strength ² (Yield)	1370 psi	9.47 MPa	ASTM D790
Elastomers	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Stress (100% Strain)	2030 psi	14.0 MPa	ASTM D412
Tensile Strength (Yield)	2080 psi	14.3 MPa	ASTM D412
Tensile Elongation ³ (Break, 73°F (23°C))	200 %	200 %	ASTM D412
Impact	Typical Value (English)	Typical Value (SI)	Test Method
Notched Izod Impact 73°F (23°C), 0.125 in (3.18 mm)	7.3 ft-lb/in	390 J/m	ASTM D256
Hardness	Typical Value (English)	Typical Value (SI)	Test Method
Durometer Hardness (Shore D, 10 sec)	50	50	ASTM D2240

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Drying Temperature	180 °F	82 °C
Drying Time	2.0 to 3.0 hr	2.0 to 3.0 hr
Suggested Max Moisture	0.010 to 0.030 %	0.010 to 0.030 %
Rear Temperature	330 to 340 °F	166 to 171 °C
Middle Temperature	350 to 360 °F	177 to 182 °C
Front Temperature	360 to 370 °F	182 to 188 °C
Nozzle Temperature	380 to 390 °F	193 to 199 °C
Mold Temperature	60 to 140 °F	16 to 60 °C

Notes

¹ Typical values are not to be construed as specifications.

² 0.50 in/min (13 mm/min)

³ 20 in/min (510 mm/min)