



Gravi-Tech™ GRV-TE1-090-W-NAT

Styrene Isoprene Styrene Block Copolymer

Key Characteristics

Product Description

Gravi-Tech™ polymer-metal composites offer a high-performance thermoplastic-based alternative to lead and traditional metals. Using a variety of metallic fillers, these compounds have densities similar to traditional metals, while offering design and processing flexibility.

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	9.00	9.00	ASTM D792
Molding Shrinkage - Flow	1.0E-3 to 4.0E-3 in/in	0.10 to 0.40 %	ASTM D955
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Elongation (Break)	370 %	370 %	ASTM D1708
Elastomers	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Stress (50% Strain)	227 psi	1.57 MPa	ASTM D412
Tensile Stress (100% Strain)	224 psi	1.54 MPa	ASTM D412
Tensile Stress (200% Strain)	205 psi	1.41 MPa	ASTM D412
Hardness	Typical Value (English)	Typical Value (SI)	Test Method
Durometer Hardness (Shore A)	65	65	ASTM D2240

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Drying Temperature	176 °F	80.0 °C
Drying Time	2.0 hr	2.0 hr
Rear Temperature	360 to 390 °F	182 to 199 °C
Middle Temperature	370 to 400 °F	188 to 204 °C
Front Temperature	380 to 410 °F	193 to 210 °C
Nozzle Temperature	390 to 420 °F	199 to 216 °C
Mold Temperature	80.0 to 150 °F	26.7 to 65.6 °C

Notes

¹ Typical values are not to be construed as specifications.

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