



Gravi-Tech™ GRV PP-030-IO Black

Polypropylene Homopolymer

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	• Appliance Components • Automotive Applications • Consumer Applications • Handles	• Industrial Applications • Knobs • Medical/Healthcare Applications • Metal Replacement	• 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	3.00	3.00	ASTM D792
Density	2.80 to 3.20 g/cm ³	2.80 to 3.20 g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (230°C/5.0 kg)	10 g/10 min	10 g/10 min	ISO 1133
Melt Volume-Flow Rate (MVR) (230°C/5.0 kg)	5.00 cm ³ /10min	5.00 cm ³ /10min	ISO 1133
Molding Shrinkage - Flow	5.0E-3 to 0.010 in/in	0.50 to 1.0 %	ASTM D955
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus ²	363000 psi	2500 MPa	ASTM D638
Tensile Modulus	334000 psi	2300 MPa	ISO 527-2
Tensile Strength ³ (Yield)	1450 psi	10.0 MPa	ASTM D638
Tensile Stress	1450 psi	10.0 MPa	ISO 527-2
Tensile Elongation ³ (Break)	0.50 to 1.0 %	0.50 to 1.0 %	ASTM D638
Tensile Strain (Break)	1.0 %	1.0 %	ISO 527-2
Flexural Modulus	464000 psi	3200 MPa	ASTM D790
Flexural Modulus	464000 psi	3200 MPa	ISO 178
Flexural Strength	2610 psi	18.0 MPa	ASTM D790
Flexural Stress	2610 psi	18.0 MPa	ISO 178
Impact	Typical Value (English)	Typical Value (SI)	Test Method
Charpy Notched Impact Strength	1.4 ft·lb/in ²	3.0 kJ/m ²	ISO 179
Charpy Unnotched Impact Strength	2.4 ft·lb/in ²	5.0 kJ/m ²	ISO 179
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Heat Deflection Temperature 66 psi (0.45 MPa), Unannealed	266 °F	130 °C	ISO 75-2/B
Heat Deflection Temperature 264 psi (1.8 MPa), Unannealed	194 °F	90.0 °C	ISO 75-2/A

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Drying Temperature	176 °F	80 °C
Drying Time	2.0 hr	2.0 hr
Processing (Melt) Temp	374 to 464 °F	190 to 240 °C
Mold Temperature	86 to 158 °F	30 to 70 °C

Notes

¹ Typical values are not to be construed as specifications.

² Type I, 0.039 in/min (1.0 mm/min)

³ Type I, 0.20 in/min (5.1 mm/min)



Beyond Polymers.

Better Business Solutions.™