



Technical Data Sheet

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Preliminary

Material: Ecomass® Compound 1700ZC89

Nontoxic alternative to Lead (Pb), weighting, balancing and radiation shielding applications

Description / Features: High Specific Gravity, Stainless Steel Powder Filled Polyamide (PA), Rigid

Processing Method: Injection Molding

Physical Properties

	Test Method	Value	Units
Physical Properties			
Product Form		Pellets	
Specific Gravity	ASTM D792	4.50	

Mechanical Properties			
Tensile Strength	ASTM D638	7,500	psi
Tensile Modulus	ASTM D638	1,500,000	psi
Tensile Elongation at Break	ASTM D638	1.25	%
Flexural Modulus	ASTM D790	1,200,000	psi
Flexural Strength	ASTM D790	9,500	psi
Izod Impact Strength, notched	ASTM D256	1.5	ft-lb/in

Thermal Properties			
Heat Deflection Temperature at 66 psi	ASTM D648	318	°F
Heat Deflection Temperature at 264 psi	ASTM D648	311	°F

Electrical Properties			
Surface Resistivity	ASTM D257	0.2	ohms/sq

Processing Information			
Melt Temperature Range		400 - 490	°F
Mold Temperature Range		135 - 175	°F
Mold Shrinkage Rate	ASTM D955	0.005 - 0.006	in/in
Pre-Drying Conditions		4 hrs @ 165°F	

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