



# Technical Data Sheet

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**Material:** Ecomass® Compound 1700TU96

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

**Description / Features:** High Specific Gravity, Tungsten Powder Filled Polyamide (PA), Rigid

**Processing Method:** Injection Molding

## Physical Properties

	Test Method	English		SI	
		Value	Units	Value	Units
<b>Physical Properties</b>					
Product Form		Pellets		Pellets	
Density	ASTM D792	11.00	g/cc	11.00	g/cc
<b>Mechanical Properties</b>					
Tensile Strength	ASTM D638	6,500	psi	45	MPa
Tensile Modulus	ASTM D638	1,400,000	psi	9,655	MPa
Tensile Elongation at Break	ASTM D638	< 1	%	< 1	%
Flexural Modulus	ASTM D790	1,220,000	psi	8,414	MPa
Flexural Strength	ASTM D790	9,200	psi	63	MPa
Izod Impact Strength, notched	ASTM D256	1.5	ft-lb/in	78	J/m
<b>Thermal Properties</b>					
Heat Deflection Temperature at 66 psi	ASTM D648	318	°F	159	°C
Heat Deflection Temperature at 264 psi	ASTM D648	311	°F	155	°C
<b>Electrical Properties</b>					
Surface Resistivity	ASTM D257	0.21	ohms/sq	0.21	ohms/sq
<b>Processing Information</b>					
Melt Temperature Range		475 - 500	°F	246 - 260	°C
Mold Temperature Range		150 - 180	°F	66 - 82	°C
Mold Shrinkage Rate	ASTM D955	0.005 - 0.006	in/in	0.5 - 0.6	%
Pre-Drying Conditions		4 hrs @ 165°F		4 hrs @ 74°C	

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