



# Technical Data Sheet

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**Material:** Ecomass<sup>®</sup> Compound 4703ZD90

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

**Description / Features:** Moderate Specific Gravity, Tungsten Filled Polyurethane (TPU)

**Processing Method:** Injection Molding

## Physical Properties

	Test Method	Value	Units
<b>Physical Properties</b>			
Product Form		Pellets	
Specific Gravity	ASTM D792	7.90	
<b>Mechanical Properties</b>			
Tensile Strength	ASTM D638	2,400	psi
Tensile Modulus	ASTM D638	95,000	psi
Tensile Elongation at Break	ASTM D638	40	%
Flexural Modulus	ASTM D790	12,000	psi
Flexural Strength	ASTM D790	3,000	psi
Izod Impact Strength, notched	ASTM D256	4	ft-lb/in
<b>Thermal Properties</b>			
Heat Deflection Temperature at 66 psi	ASTM D648	N/A	°F
Heat Deflection Temperature at 264 psi	ASTM D648	N/A	°F
<b>Electrical Properties</b>			
Surface Resistivity	ASTM D257	N/A	ohms/sq
<b>Processing Information</b>			
Melt Temperature Range		400 - 430	°F
Mold Temperature Range		50 -80	°F
Mold Shrinkage Rate	ASTM D955	0.003 - 0.005	in/in
Pre-Drying Conditions		2 hrs at 200°F then reduce to 160°F (do not over-dry)	

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