



The strength of chemicals.

4917 Golden Parkway - Suite 300  
Buford, GA 30518  
770-237-2311



# Technical Data Sheet

**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)		

The information provided above is based on laboratory testing using test methods indicated and is believed to represent nominal results of those tests. Because conditions under which this material may be processed, tested or used cannot be anticipated, no warranty is given, either expressed or implied, as to the accuracy or reproducibility of this information or for the fitness of this material for any particular use. This material is sold with the express understanding that purchasers, processors or other users of this material have sole responsibility, through performance of their own testing, to determine the suitability of this material for any particular use.