



# Technical Data Sheet

4101 Parkstone Heights Drive, Suite 380  
 Austin, Texas 78746-7482  
 512-306-0020

**Material:** Ecomass<sup>®</sup> Compound 705ZD70

*Nontoxic alternative to Lead (Pb) for radiation shielding applications*

**Description / Features:** High Specific Gravity, Tungsten Filled ABS Compound, Rigid, Good Toughness

**Processing Method:** Injection Molding / Extrusion

## Physical Properties

Test Method	English		SI		
	Value	Units	Value	Units	
<b>Physical Properties</b>					
Product Form	Pellets		Pellets		
Density	ISO 1183	3.00	g/cc	3.00	g/cc
<b>Mechanical Properties</b>					
Tensile Strength	ISO 527	5,075	psi	30	MPa
Tensile Elongation at Break	ISO 527	3.00	%	3.00	%
Flexural Modulus	ISO 178	420,500	psi	2,900	MPa
Izod Impact Strength	ISO 180/A	0.923	ft-lb/in	6.0	kJ/m <sup>2</sup>
<b>Processing Information</b>					
Melt Temperature Range		480 - 550	°F	250 - 287	°C
Mold Temperature Range		100 - 150	°F	35 - 65	°C
Mold Shrinkage Rate (4mm)		.004-.006	in/in	.4 - .6	%
Pre-Drying Conditions		2 - 4 Hours @ 160 - 180 °F		2 - 4 Hours @ 70 - 85 °C	

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.

international patents. Ecomass<sup>®</sup> is a registered trademark.