



Technical Data Sheet

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

Material: Ecomass[®] Compound 4703ZB92

Nontoxic alternative to Lead (Pb), radiation shielding applications

Description / Features: Moderate Specific Gravity, Filled Polyurethane (TPU) Base Resin

Processing Method: Injection Molding

Physical Properties

Test Method	English		SI		
	Value	Units	Value	Units	
Physical Properties					
Product Form	Pellets		Pellets		
Density	ASTM D792	6.90	g/cc	6.90	g/cc
Mechanical Properties					
Tensile Strength	ASTM D638	1,600	psi	11	MPa
Tensile Modulus	ASTM D638	97,000	psi	669	MPa
Tensile Elongation at Break	ASTM D638	15	%	15	%
Flexural Modulus	ASTM D790	65,000	psi	448	MPa
Flexural Strength	ASTM D790	3,000	psi	21	MPa
Izod Impact Strength, notched	ASTM D256	3.0	ft-lb/in	160	J/m
Processing Information					
Melt Temperature Range		400 - 430	°F	205 - 220	°C
Mold Temperature Range		50 - 80	°F	10 - 25	°C
Mold Shrinkage Rate		0.003 - 0.005	in/in	0.3 - 0.5	%
Pre-Drying Conditions	(do not over-dry)	2 hrs at 185°F		2 hrs at 80 °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.

Ecomass[®] is a registered trademark