



Technical Data Sheet

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

Material: Ecomass® Compound 4301ZC82

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

Description / Features: Stainless Steel Powder Filled Polyphthalamide (PPA), Good Toughness

Processing Method: Injection Molding

Physical Properties					
Test Method	English		SI		
	Value	Units	Value	Units	
Physical Properties					
Product Form	Pellets		Pellets		
Density	Internal	3.80	g/cc	3.80	g/cc
Mechanical Properties					
Tensile Strength	ISO 527	7,540	psi	52	MPa
Tensile Modulus	ISO 527	1,794,085	psi	12373	MPa
Tensile Elongation at Break	ISO 527	0.6	%	0.6	%
Flexural Modulus	ISO 178	1,471,605	psi	10149	MPa
Izod Impact Strength, notched	ISO 180/A	0.923	ft-lb/in	6.0	KJ/m
Processing Information					
Melt Temperature Range		590 - 625	°F	310 - 330	°C
Mold Temperature Range		265 - 285	°F	130 - 140	°C
Mold Shrinkage Rate	Internal	0.003 - 0.005	in/in	0.3 - 0.5	%
Pre-Drying Conditions	target moisture < 0.045%	4 - 8 hrs @ 250 °F		4 - 8 hrs @ 120°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