



Technical Data Sheet

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

Material: Ecomass® Compound 1050ZD96

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

Description / Features: High Specific Gravity, Tungsten Powder Filled Polyamide (PA) Alloy, Good Toughness

Processing Method: Injection Molding

Physical Properties					
Test Method	English		SI		
	Value	Units	Value	Units	
Physical Properties					
Product Form	Pellets		Pellets		
Density	ASTM D792	10.00	g/cc	10.00	g/cc
Mechanical Properties					
Tensile Strength	ASTM D638	5,000	psi	34	MPa
Tensile Modulus	ASTM D638	935,000	psi	6,448	MPa
Tensile Elongation at Break	ASTM D638	1.7	%	1.7	%
Flexural Modulus	ASTM D790	725,000	psi	5,000	MPa
Flexural Strength	ASTM D790	7,100	psi	49	MPa
Izod Impact Strength, notched	ASTM D256	2.1	ft-lb/in	112	J/m
Thermal Properties					
Heat Deflection Temperature at 66 psi	ASTM D648	275	°F	135	°C
Heat Deflection Temperature at 264 psi	ASTM D648	250	°F	121	°C
Electrical Properties					
Surface Resistivity	ASTM D257	0.25	ohms/sq	0.25	ohms/sq
Processing Information					
Melt Temperature Range		400 - 490	°F	205 - 255	°C
Mold Temperature Range		135 - 180	°F	55 - 85	°C
Mold Shrinkage Rate	ASTM D955	0.005 - 0.006	in/in	0.5 - 0.6	%
Pre-Drying Conditions		4 hrs @ 165°F		4 hrs @ 75 °C	

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