



Technical Data Sheet

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Preliminary

Material: Ecomass® Compound 4301TU74

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

Description / Features: Tungsten Powder Filled Polyphthalamide (PPA), Very Good Toughness

Processing Method: Injection Molding

Physical Properties

	Test Method	Value	Units
Physical Properties			
Product Form		Pellets	
Specific Gravity	Internal	3.80	
Mechanical Properties			
Tensile Strength	ISO 527	82	Mpa
Tensile Modulus	ISO 527	4409	Mpa
Tensile Elongation at Break	ISO 527	3.6	%
Flexural Modulus	ISO 178	4169	Mpa
Izod Impact Strength, notched	ISO 180/A	6.0	KJ/m
Thermal Properties			
Heat Deflection Temperature at 66 psi	ASTM D648	N/A	°C
Heat Deflection Temperature at 264 psi	ASTM D648	N/A	°C
Electrical Properties			
Surface Resistivity		N/A	ohms/sq
Processing Information			
Melt Temperature Range		310 - 330	°C
Mold Temperature Range		250 - 280	°C
Mold Shrinkage Rate	Internal	0.005 - 0.007	mm/mm
Pre-Drying Conditions		4 - 8 hrs @ 80°C, target moisture < 0.10%	

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