



Technical Data Sheet

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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	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	11,890	psi	82	MPa
Tensile Modulus	ISO 527	639,305	psi	4409	MPa
Tensile Elongation at Break	ISO 527	3.6	%	3.6	%
Flexural Modulus	ISO 178	604,505	psi	4169	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	0.005 - 0.007	in/in	0.5 - 0.7	%
Pre-Drying Conditions	target moisture < 0.10%	4 - 8 hrs @ 250 °F		4 - 8 hrs @ 120°C	

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