

Technical Data Sheet

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Material: Ecomass® Compound 1700TU96

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

Description / Features: High Specific Gravity, Tungsten Powder Filled Polyamide (PA), Rigid

Processing Method: Injection Molding

Physical Properties					
		English		SI	
	Test Method	Value	Units	Value	Units
Physical Properties					
Product Form		Pellets		Pellets	
Density	ASTM D792	11.00	g/cc	11.00	g/cc
Mechanical Properties					
Tensile Strength	ASTM D638	6,500	psi	45	MPa
Tensile Modulus	ASTM D638	1,400,000	psi	9,655	MPa
Tensile Elongation at Break	ASTM D638	< 1	%	< 1	%
Flexural Modulus	ASTM D790	1,220,000	psi	8,414	MPa
Flexural Strength	ASTM D790	9,200	psi	63	MPa
Izod Impact Strength, notched	ASTM D256	1.5	ft-lb/in	78	J/m
Thermal Properties					
Heat Deflection Temperature at 66 psi	ASTM D648	318	°F	159	°C
Heat Deflection Temperature at 264 psi	ASTM D648	311	°F	155	°C
Electrical Properties					
Surface Resistivity	ASTM D257	1x10 ⁵	ohms/sq	1x10 ⁵	ohms/sq
Processing Information					
Melt Temperature Range		475 - 500	°F	246 - 260	°C
Mold Temperature Range		150 - 180	°F	66 - 82	°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 @ 74°C	

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