

Ecomass® 1700TU96

Ecomass Technologies - Polyamide

General Information

Product Description

Ecomass® Compound 1700TU96. Nontoxic alternative to Lead (Pb), weighting, balancing and radiation shielding applications.

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

General

Material Status	• Commercial: Active		
Availability	• Europe	• North America	
Filler / Reinforcement	• Tungsten		
Features	• Good Rigidity	• High Specific Gravity	• Non-Toxic
Uses	• Radiation Shielding		
Forms	• Pellets		
Processing Method	• Injection Molding		

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	11.0		ASTM D792
Molding Shrinkage - Flow	5.0E-3 to 6.0E-3	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	1.40E+6	psi	ASTM D638
Tensile Strength	6530	psi	ASTM D638
Tensile Elongation (Break)	< 1.0	%	ASTM D638
Flexural Modulus	1.22E+6	psi	ASTM D790
Flexural Strength	9140	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact	1.5	ft-lb/in	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	318	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	311	°F	ASTM D648
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	0.21	ohms	ASTM D257

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	165	°F
Drying Time	4.0	hr
Processing (Melt) Temp	475 to 500	°F
Mold Temperature	150 to 180	°F

Notes

¹ Typical properties: these are not to be construed as specifications.

