

Ecomass® 1050TU96

Ecomass Technologies - Polyamide

General Information

Product Description

Ecomass® Compound 1050TU96. Nontoxic alternative to Lead (Pb), weighting, balancing and radiation shielding applications.

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

General

Material Status	• Commercial: Active
Availability	• Europe • North America
Filler / Reinforcement	• Tungsten
Features	• Good Toughness • 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	935000	psi	ASTM D638
Tensile Strength	4930	psi	ASTM D638
Tensile Elongation (Break)	1.8	%	ASTM D638
Flexural Modulus	720000	psi	ASTM D790
Flexural Strength	7110	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact	2.1	ft·lb/in	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	275	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	250	°F	ASTM D648
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	0.21	ohms	ASTM D257

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	167	°F
Drying Time	4.0	hr
Processing (Melt) Temp	401 to 491	°F
Mold Temperature	131 to 185	°F

Notes

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

