

Ecomass® 4301TU74

Ecomass Technologies - Polyphthalamide

General Information
Product Description

Ecomass® Compound 4301TU74. Nontoxic alternative to Lead (Pb), weighting, balancing and radiation shielding applications.

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

General

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

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	3.80	g/cm ³	Internal Method
Molding Shrinkage	0.50 to 0.70	%	Internal Method
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	639000	psi	ISO 527-1
Tensile Stress	11900	psi	ISO 527-2
Tensile Strain (Break)	3.6	%	ISO 527-2
Flexural Modulus	605000	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact Strength	2.9	ft·lb/in ²	ISO 180/A

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	248	°F
Drying Time	4.0 to 8.0	hr
Suggested Max Moisture	< 0.10	%
Processing (Melt) Temp	590 to 626	°F
Mold Temperature	266 to 284	°F

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