

Ecomass® 4703TU95

Ecomass Technologies - Thermoplastic Polyurethane Elastomer

General Information

Product Description

Ecomass® Compound 4703TU95. Nontoxic alternative to Lead (Pb), weighting, balancing and radiation shielding applications.

Features: High Specific Gravity, Tungsten Powder Filled Polyurethane (TPU), Flexible.

General

Material Status	• Commercial: Active
Availability	• Europe • North America
Filler / Reinforcement	• Tungsten
Features	• Good Flexibility • 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	3.0E-3 to 5.0E-3	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	96900	psi	ASTM D638
Tensile Strength	1740	psi	ASTM D638
Tensile Elongation (Break)	12	%	ASTM D638
Flexural Modulus	116000	psi	ASTM D790
Flexural Strength	3340	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact	5.0	ft·lb/in	ASTM D256
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	0.20	ohms	ASTM D257

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	185	°F
Drying Time	2.0	hr
Processing (Melt) Temp	401 to 428	°F
Mold Temperature	50 to 77	°F

Notes

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

