

Ecomass® 4703ZD90
Ecomass Technologies - Thermoplastic Polyurethane Elastomer
General Information
Product Description

Ecomass® Compound 4703ZD90. Nontoxic alternative to Lead (Pb), weighting, balancing and radiation shielding applications.

Features: Moderate Specific Gravity, Tungsten Filled Polyurethane (TPU).

General

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

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	7.92		ASTM D792
Molding Shrinkage - Flow	3.0E-3 to 5.0E-3	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	95000	psi	ASTM D638
Tensile Strength	2470	psi	ASTM D638
Tensile Elongation (Break)	40	%	ASTM D638
Flexural Modulus	100000	psi	ASTM D790
Flexural Strength	3050	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact	4.0	ft·lb/in	ASTM D256

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.

