



Technical Data Sheet

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Material: Ecomass® Compound 4703BI74

Nontoxic alternative to Lead (Pb), radiation shielding applications

Description / Features: Moderate Specific Gravity, Filled Polyurethane (TPU), Good Flexibility

Processing Method: Injection Molding

Physical Properties

Test Method	English		SI		
	Value	Units	Value	Units	
Physical Properties					
Product Form	Pellets		Pellets		
Density	ASTM D792	2.60	g/cc	2.60	g/cc
Mechanical Properties					
Tensile Strength	ASTM D638	2,800	psi	19	MPa
Tensile Modulus	ASTM D638	80,000	psi	552	MPa
Tensile Elongation at Break	ASTM D638	200	%	200	%
Flexural Modulus	ASTM D790	25,000	psi	172	MPa
Flexural Strength	ASTM D790	6,400	psi	44	MPa
Izod Impact Strength	ASTM D256	4.50	ft-lb/in	241	J/m
Processing Information					
Melt Temperature Range		400 - 430	°F	205 - 220	°C
Mold Temperature Range		50 -80	°F	10 - 25	°C
Mold Shrinkage Rate	ASTM D955	0.006 - 0.008	in/in	0.6 - 0.8	%
Pre-Drying Conditions	(do not over-dry)	2 hrs @ 180 °F		2 hrs @ 85 °C	

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