



The strength of chemicals.

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Technical Data Sheet

Material: Ecomass® Compound 4703ZB92

Nontoxic alternative to Lead (Pb), radiation shielding applications

Description / Features: Moderate Specific Gravity, Filled Polyurethane (TPU) Base Resin

Processing Method: Injection Molding

Physical Properties

	Test Method	Value	Units
Physical Properties			
Product Form		Pellets	
Specific Gravity	ASTM D792	6.90	
Mechanical Properties			
Tensile Strength	ASTM D638	1,600	psi
Tensile Modulus	ASTM D638	97,000	psi
Tensile Elongation at Break	ASTM D638	15	%
Flexural Modulus	ASTM D790	65,000	psi
Flexural Strength	ASTM D790	3,000	psi
Izod Impact Strength, notched	ASTM D256	3.0	ft-lb/in
Thermal Properties			
Heat Deflection Temperature at 66 psi	ASTM D648	N/A	°F
Heat Deflection Temperature at 264 psi	ASTM D648	N/A	°F
Electrical Properties			
Surface Resistivity	ASTM D257	N/A	ohms/sq
Processing Information			
Melt Temperature Range		400 - 430	°F
Mold Temperature Range		50 - 80	°F
Mold Shrinkage Rate		0.003 - 0.005	in/in
Pre-Drying Conditions		2 hrs at 200°F then reduce to 160°F (do not over-dry)	

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