

Technical Data Sheet

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Material: Ecomass® Compound 1050ZB92 Nat
Nontoxic alternative to Lead (Pb), radiation shielding applications

Description / Features: Moderate Specific Gravity, Filled Polyamide12 (PA12) Alloy, Good Toughness
Processing Method: Injection Molding

Physical Properties					
	Test Method	English		SI	
		Value	Units	Value	Units
Physical Properties					
Product Form		Pellets		Pellets	
Density	ASTM D792	6.90	g/cc	6.90	g/cc
Mechanical Properties					
Tensile Strength	ASTM D638	6,500	psi	45	MPa
Tensile Modulus	ASTM D638	900,000	psi	6,207	MPa
Tensile Elongation at Break	ASTM D638	1.75	%	1.75	%
Flexural Modulus	ASTM D790	720,000	psi	4,966	MPa
Flexural Strength	ASTM D790	7,000	psi	48	MPa
Izod Impact Strength, notched	ASTM D256	2.1	ft-lb/in	112	J/m
Thermal Properties					
Heat Deflection Temperature at 66 psi	ASTM D648	250	°F	121	°C
Heat Deflection Temperature at 264 psi	ASTM D648	225	°F	107	°C
Processing Information					
Melt Temperature Range		450-500	°F	230 - 260	°C
Mold Temperature Range		150-180	°F	65 - 80	°C
Mold Shrinkage Rate	ASTM D955	0.005-0.006	in/in	0.5 - 0.6	%
Pre-Drying Conditions		4 hrs @165°F		4 hrs @ 75°C	

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