


Technical Data Sheet

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Preliminary

Material:  **Ecomass® Compound 4700ZB92**
Nontoxic alternative to Lead (Pb), radiation shielding applications

Description / Features: Moderate Specific Gravity, Filled Polyurethane (TPU), Flexible
Processing Method: Extrusion

Physical Properties

| | Test Method | Value | Units |
|----------------------------|-------------|---------|-------|
| Physical Properties | | | |
| Product Form | | Pellets | |
| Specific Gravity | ASTM D792 | 6.90 | |

| | | | |
|-------------------------------|-----------|--------|----------|
| Mechanical Properties | | | |
| Tensile Strength | ASTM D638 | 380 | psi |
| Tensile Modulus | ASTM D638 | 40,000 | psi |
| Tensile Elongation at Break | ASTM D638 | 185 | % |
| Flexural Modulus | ASTM D790 | 25,000 | psi |
| Flexural Strength | ASTM D790 | 950 | psi |
| Izod Impact Strength, notched | ASTM D256 | 3.0 | ft-lb/in |

| | | | |
|--|-----------|--|----|
| Thermal Properties | | | |
| Heat Deflection Temperature at 66 psi | ASTM D648 | | °F |
| Heat Deflection Temperature at 264 psi | ASTM D648 | | °F |

| | | | |
|------------------------------|-----------|--|---------|
| Electrical Properties | | | |
| Surface Resistivity | ASTM D257 | | ohms/sq |

| | | | |
|-------------------------------|--|-------------------------------------|-------|
| Processing Information | | | |
| Melt Temperature Range | | 360-400 | °F |
| Mold Temperature Range | | N/A | °F |
| Mold Shrinkage Rate | | N/A | in/in |
| Pre-Drying Conditions | | 2 hrs at 200°F then reduce to 160°F | |

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