

## **Technical Data Sheet**

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Material: Ecomass<sup>®</sup> Compound 1050CO93

Nontoxic alternative to Lead (Pb), weighting and balancing applications

Description / Features: High Specific Gravity, Copper Powder Filled Polyamide (PA) Alloy, Rigid

Processing Method: Injection Molding

| Physical Properties                    |             |               |          |               |         |
|--|-------------|---------------|----------|---------------|---------|
|  |             | English       |          | SI            |         |
|  | Test Method | Value         | Units    | Value         | Units   |
| Physical Properties                    |             |               |          |               |         |
| Product Form                           |             | Pellets       |          | Pellets       |         |
| Density                                | ASTM D792   | 5.70          | g/cc     | 5.70          | g/cc    |
| Mechanical Properties                  |             |               |          |               |         |
| Tensile Strength                       | ASTM D638   | 6,500         | psi      | 45            | MPa     |
| Tensile Modulus                        | ASTM D638   | 1,400,000     | psi      | 9,655         | MPa     |
| Tensile Elongation at Break            | ASTM D638   | 1.5           | %        | 1.5           | %       |
| Flexural Modulus                       | ASTM D790   | 1,250,000     | psi      | 8,621         | MPa     |
| Flexural Strength                      | ASTM D790   | 9,500         | psi      | 66            | MPa     |
| Izod Impact Strength, notched          | ASTM D256   | 1.35          | ft-lb/in | 72            | J/m     |
| Thermal Properties                     |             |               |          |               |         |
| Heat Deflection Temperature at 66 psi  | ASTM D648   | 318           | °F       | 159           | °C      |
| Heat Deflection Temperature at 264 psi | ASTM D648   | 311           | °F       | 155           | °C      |
| Electrical Properties                  |             |               |          |               |         |
| Surface Resistivity                    | ASTM D257   | 0.21          | ohms/sq  | 0.21          | ohms/sq |
| Processing Information                 |             |               |          |               |         |
| Melt Temperature Range                 |             | 400 - 490     | °F       | 200 - 255     | °C      |
| Mold Temperature Range                 |             | 135 - 180     | °F       | 55 - 85       | °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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