Specifications for Shielding Techniques

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| **Shielding Material** | **Specific gravity** | **Wet Density** | **Resistivity ohm per sq. for 0.001”** | **Continous use temperature, oF** | **Shelf life, months** | **Drying time, hours** | **Shielding, db @ 10MHz** | **Shielding db @ 100 MHz** | **Shielding db @****1 GHz** |
| Metal Paints |  |  |  |  |  |  |  |  |  |
| Pure Silver acrylic 1-part system | 3.9 | 1.9 | 0.004 | -65 to 200  | 12 | 1 | 67 | 93 | 97 |
| Pure Silver Epoxy, 2-part system | 2.8 | 1.0 | 0.1 | -25 to 180 | 24 | 3 | 59 | 81 | 87 |
| Pure Silver Solvent | 3.6 | 1.5 | 0.05 | -65 to 200 | 12 | ½ | 57 | 82 | 89 |
| Nickel | 3.95 | 1.9 | 3.0 | -60 to 180 | 6 | 24 | 35 | 47 | 57 |
| Carbon | 0.8 | 0.4 | 10 | -65 to 255 | 12 | 24 | 27 | 35 | 41 |
| Thermal Spray |  |  |  |  |  |  |  |  |  |
| Arc Sprayed Zinc | 7 | 7 | 0.002 | -65 to 675 | ∞ | 0 | 106 | 92 | 98 |

**Tensile Bond Strengthsa of Twin Wire Arc Sprayed Zinc on various substrates**

|  |  |
| --- | --- |
| **Substate** | **Value, psi** |
| Modified PPOb | 350 |
| Polycarbonate | 380 |
| Polystyrenec | 300 |
| Structural foam | 425 |
| ABS | 240 |
| Phenolic | 450 |
| Glass-filled Nylon | 1050 |

a Coating pulled at right angles to plastic substrate. Surface lightly blasted with 80 mesh Aluminum Oxide to give 250 RMS finish prior to spraying

b Noryl made be GE

c Styron 6087 SF made by DOW Chemical