

Conductive Paint
ELE-EARTH EAM Type
(Baking Finish)

Composition

ELE-EARTH EAM Type is a thermoset paint that consists of specially modified epoxy resin, pigments, conductive fillers, and special additives.

Functionality

- (1) Excellent, long-lasting antistatic performance.
- (2) High hardness and superior physical properties.
- (3) Excellent adhesion to zinc-coated steel and other light alloy metals.
- (4) High whiteness properties for long-lasting, brilliant color results.
- (5) No toxic pigments (i.e. lead, chromium, etc.) used.

Use and Application

Read the following instructions to ensure the best film performance:

- (1) Stir and shake well before use to mix any sediment (conductive fillers).
- (2) Thin up to 15-20% by weight with *Thinner 2300*.
- (3) Thinners allow paint to settle quickly; stir the paint well and spray coat at a thickness of 30-40 μ m for drying.
- (4) Dry the paint under the same conditions to ensure consistent coating performance.
(10-15 minutes for normal setting)
(30 minutes at 150°C for baking finish)

Intended Use

Antistatic treatment for interior finishings of semiconductor facility and other clean rooms, semiconductor facility, precision machinery, communications equipment, etc.

Precautions

- (1) Apply the paint as soon as possible after mixing.
- (2) Clean all painting equipment thoroughly.
- (3) Keep the paint in an airtight container and store in a cool, dark space.
- (4) Primer is available by order.
- (5) Some variations in color and gloss are available by order.
- (6) Use the color paint within three months.
- (7) See the SDS for more information.

Film Performance

| Test Item | Test Condition | Result |
|---------------------|---|----------------|
| Pencil Hardness | Film hardness tester using Mitsubishi UNI pencils | 2H |
| Adhesion | SPCC-SD steel plate | 100/100 |
| | Aluminum plate 1050P | 100/100 |
| | Zinc-coated, Bonderized steel plate | 100/100 |
| Bend Test | 4mm, 180°/1sec, Bend | Pass |
| Chip Resistance | Dupont impact tester: 500g, 1/2 inch, 40cm | Pass |
| Water Resistance | Immersed in tap water at 40°C for 24 hours | OK |
| Oil Resistance | Immersed in spindle oil at 60°C for 6 hours | OK |
| Solvent Resistance | Fixed-force (500g) rubbings (50 times) with methanol | Pass |
| Salt Spray Test | Spray 5% NaCl solution at 35°C, 98% humidity, for 72 hours. | 4mm |
| Abrasion Resistance | Taber abrasion tester: CS-17, 1Kg, 500 cycles | < 150mg |
| Conductivity Test | (JIS L 6911) surface resistivity (Ω -cm) | < $10^8\Omega$ |

*Tests were conducted in accordance with JIS.K-5600 except for electrical properties.

*SPCC-SD steel plates were used in all but adhesion test.

Volume

ELE-EARTH EAM 16kg (Light-colored possible)

Thinner 2300 S(Summer Type) W(Winner Type) 16L