

## EMC 25 Conductive Coating Product Datasheet

Excellent Reworkability  
Excellent Shielding Effectiveness  
Room Temperature Cure and Storage

### Description

EMC 25 is a silver-filled, one part epoxy conductive coating, which has exceptional electrical conductivity and excellent EMI shielding, anti-static protection, corona shielding in a wide range of applications. EMC 25 can be applied to glass, plastic, YINCAE conformal coating surface or epoxy substrate using conventional methods. EMC 25 can be cured at room temperature, although optimum results can be achieved at elevated temperature. After cure, EMC 25 not only provides excellent protection to all surfaces against moisture, dust, chemicals and other harsh environments, but also offers excellent EMI.

### Typical Physical Properties

|                                                                |                            |
|----------------------------------------------------------------|----------------------------|
| Product Name                                                   | EMC 25 conductive coatings |
| PROPERTIES OF UNCURED MATERIAL                                 |                            |
| Appearance                                                     | Black/Gray liquid          |
| Specific Gravity (ASTM D 1475-60)                              | 1.6 g/cc                   |
| Viscosity (Zahn Cup)                                           | 18 – 26 s                  |
| PROPERTIES OF CURED MATERIAL                                   |                            |
| Glass Transition Temperature (T <sub>g</sub> ) (ASTM D3418-82) | 68 °C                      |
| C.T. E (ASTM E 831), PPM /°C (ASTM E 831)                      | $\alpha_1 = 75$            |

|                                                      |                     |
|------------------------------------------------------|---------------------|
| Durometer Hardness (ASTM D-224)                      | A75                 |
| Humidity Resistance (85C/95RH, 120 days)(IPC-CC-830) | Pass                |
| Flexibility (MIL-L-46058C)                           | Excellent           |
| Adhesion (ASTM D2197)                                | Excellent           |
| Extractable ions (MIL-STD-883E)                      |                     |
| Na+                                                  | <5ppm               |
| K+                                                   | <5ppm               |
| F-                                                   | <5ppm               |
| Cl-                                                  | <10ppm              |
| Thermal Performance                                  |                     |
| Thermal Shock (-65/+125 °C)(IPC-CC-830)              | 100 cycles, Class 3 |
| Temperature range for use                            | -65 to 125°C        |
| Electrical Performance                               |                     |
| Max. Surface Resistance (ASTM D-257)                 | 0.05 ohm/sq.        |

## **Recommended Curing Conditions**

EMC 25 can complete the curing at room temperature for 24 – 48h or 1 – 2h at 60°C.

## **Storage & Shelf Life**

6 months provided materials are kept in a sealed original container at room temperature. Storage beyond this period can produce higher viscosity. Protect from UV light, moisture, evaporation and foreign materials. Process ability of these products can be adversely affected by evaporation and contamination.



YINCAE Advanced Materials, LLC  
93 Broadway  
Menands, NY 12204  
T (518) 452-2880  
F (518) 452-2779

### **Safety**

EMC 25 is a friendly, non-toxic material. However, general hygiene practice is recommended when handling this material. For detailed information, please consult the product SDS.

### **Package**

EMC 25 conformal coating is available in 55cc and 12oz. Other packages are available depending upon customer's request. Contact YINCAE for order information.