

# EI-1169

## SILVER CONDUCTIVE INK

### Product Description

EI-1169 ink is formulated for inkjet deposition and for applications that require good adhesion on epoxy, polyimide and copper. This unique metal-organic decomposition (MOD) ink has stable jetting performance and a long shelf life with refrigerated storage. The low-temperature curing profile makes the EI-1169 formulation suitable for substrates that can withstand 60 minutes of 180 °C thermal curing.

### Product Highlights

- Polymer-free MOD silver conductive ink
- Lead-free and halogen-free
- Moderate electrical and thermal conductivity
- Good adhesion and reliability performances on copper, polyimide and epoxy
- High stability and ink-jettability in DMP Samba heads
- UV curable

### Examples of Ink Processing

#### Storage

- Store refrigerated at 4 °C in a tightly sealed container when not in use.
- Print and cure in a well-ventilated area

#### Typical Curing

- Thermal: 180 °C for 60 minutes in a convection oven
- UV: 365 nm or 395 nm UV, 3.5 W/cm<sup>2</sup> for 3 minutes (depending on thickness)

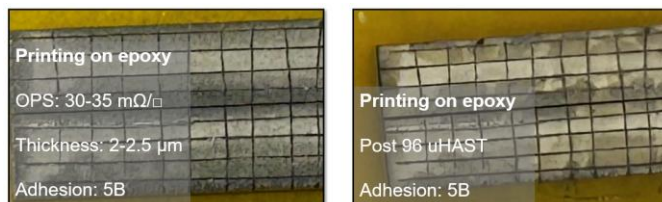


Figure 1: Printed silver on epoxy for EMI shielding: Left, printing at T0; Right, post 96-hour uHAST test

### Table 1 – Typical Ink Properties

Property	Value
Color	Light Yellow, Translucent Liquid
Viscosity	14 – 16 cP
Surface Tension	27 dyne / cm
Solid Content	13 – 14 wt%
Shelf Life	6 months refrigerated at 4 °C 4 weeks at 40 °C tested
Bulk Resistivity	13 – 18 μΩ-cm (180°C / 60 minutes)
Clean-up Solvent	Anisole and limonene

Note: Shelf life is from date of qualification in original seal. Do not return product to original container, due to possible contamination during use.

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