

EI-904 Ink

SILVER CONDUCTIVE PASTE

Product Description

EI-904 ink is formulated for screen printing applications which require high conductivity and low curing temperatures. This unique silver ink has a long shelf life with refrigerated storage. The low curing temperature makes the EI-900 series suitable for substrates such as PET, PC, glass and COP, as well as fabric and textiles, with good adhesion.

Product Highlights

- Silver Conductive Ink
- High Electrical Conductivity
- Low Temperature Curing
- Fine line printing for mass production
- Adhesion to PET, ITO, glass and textiles

Ink Processing

Handling

- Refrigerate at 4°C
- No filtration needed
- Prior to use allow ink to come to room temperature and mix well using non-metallic spatula

Curing

- 80-180°C for 20 minutes in a convection box oven (depending on substrate)
- Print and cure in a well-ventilated area

Table 1-Typical Ink Physical Properties

Properties	Values
Viscosity (Brookfield CPA-52Z)	33,000 cPs @ 2 (1/s)
Thixotropic Index	1.7
Solid Content	30%
Shelf Life	>2 months refrigerated

Plot 1-Temperature vs Resistivity

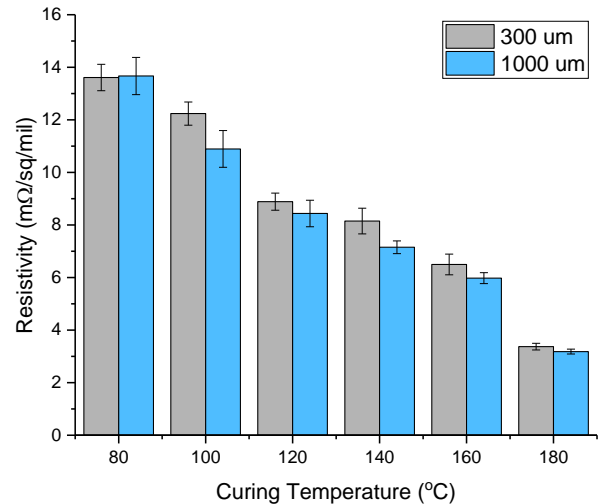


Table 2-Typical Electrical Properties (cont.)

Properties	Values
Resistivity on PET	< 8.5 mΩ/sq/mil @ 140°C
Resistivity on Glass	< 3.5 mΩ/sq/mil @ 180°C
Achievable feature size	~ 55um patterning
Adhesion on PET and glass (ASTM tape test)	5B
Clean-up Solvent	Isopropyl Alcohol

Typical Screen Print Parameters – Plot 1

- Screen: 360 mesh, EOM 14-16 μm
- Printing parameters: 40-60N, 20mm/sec squeegee speed, 1.5 mm snap off
- Approximate thickness: 1 μm
- Cured for 20 minutes in a convection oven
- PET and Glass substrates

Note: Do not transfer the left-over ink from screen to the original container after printing.