

EX-718 Ink – R&D

SILVER CONDUCTIVE INK

Product Description

EX-718 ink is formulated for inkjet deposition and for applications that require good adhesion on glass, Si and low curing temperatures. This unique MOD ink has stable jetting performance and a long shelf life with refrigerated storage. The low curing temperature makes EX-718 suitable for plastic substrates such as PET, Kapton, and dielectric materials.

Product Highlights

- Polymer-free MOD silver conductive ink
- Lead-free and halogen-free
- Moderate electrical and thermal conductivity
- Low temperature curing
- High stability and ink-jettability in DMP Samba heads
- UV curable
- Adhesion to glass, Si, PET and dielectric materials

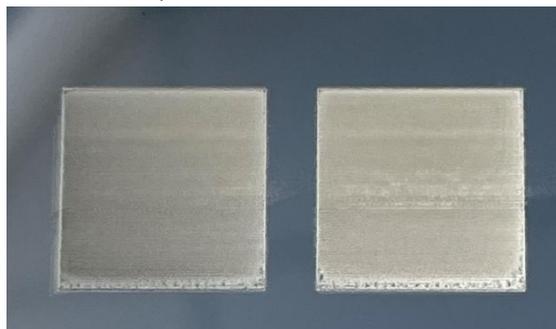
Examples of Ink Processing

Storage

- Store refrigerated at 4 °C in a tightly sealed container when not in use.
- Print and cure in a well-ventilated area
- Do not return product to original container, due to possible contamination during use.

Typical Curing

- Thermal: 130 °C for 20 minutes in a convection oven. Better conductivity can be achieved at higher curing temperature.
- UV: 3.5 W/cm² for 15 seconds (depending on thickness)



Printed silver pads on Si cured at 130 °C for 20 minutes

Typical Ink Properties

Property	Value
Color	Light Yellow, Translucent Liquid
Viscosity	6 – 10 cP
Surface Tension	25 dyne/cm
pH	11
Solid Content	9 – 11 wt%
Shelf Life	6 months refrigerated at 4 °C 1 month at 30 °C 1 week at 40 °C
Bulk Resistivity	13-18 μΩ-cm (130 °C / 20 minutes)
Clean-up Solvent	Isopropyl Alcohol and water

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