

## Product Description

Dycotec DM-CUI-5002 copper ink is designed for inkjet printing for versatile use in electronic applications. The ink is designed to be rapidly cured using Xenon flash and laser systems.

## Product Benefits

- Excellent Conductivity
- Good Adhesion
- Compatibility with a broad range of light based sintering techniques

## Ink Preparation

Sedimentation may occur naturally over the lifetime of the product. Stir (not shake) the ink thoroughly before use to ensure the product is well mixed whilst care should be taken to avoid introducing air bubbles. Do not replace used ink in the container. This ink is designed for drop-on-demand print-heads.

## Properties of the Uncured Ink

Test	Properties
Solids	40-45%
Density (g/mL)	~1.6-1.7
Viscosity	<23 cPs at 25°C
Surface tension (mN/m)	32-35
Substrate compatibility	Polyimide, ITO-glass, paper

## Ink Curing Conditions

Test	Typical Properties
Sintering technique compatibility	Xenon flash lamp, laser

## Properties of the Cured Ink

Test	Properties
Adhesion	5B
Optimum volume resistivity (Flash lamp)	3.5 mΩ/□/mil (polyimide)

## Storage and Shelf-life

Containers should be stored as specified with lids tightly sealed. We cannot assume responsibility for an ink that has not been stored in appropriate conditions or where the ink has been contaminated following use. Extended shelf-life (>6 months) can be achieved by storing inks in a fridge at ~4°C. Allow ink to warm up to >15°C before opening.

## Cleaning

Inkjet heads can be cleaned using solvents such as iso-propanol or ethylene glycol.

## Safety and Handling

For safe use of this product, please review relevant material safety and datasheet (MSDS).

For more information, please contact:

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All information reported in the datasheet is for experimental work undertaken in our laboratories and illustrates typical values only. Processing conditions may vary depending on customers' experience and their application requirements and manufacturing process equipment set-up.

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