

## PRODUCT DESCRIPTION

Mateprincs ITCO-030 is an ITO based transparent conductive ink for inkjet printing.

This ink has been developed for printed electronics applications that require high transparency. It is suitable for printing on glass and polyimide substrates.

## PRODUCT BENEFITS

- High conductivity
- High transparency
- Excellent adhesion on glass
- Compatible with Xaar and Dimatix printheads
- Stable over time
- Ink produced using patented process technology

## PROCESSING

- Clean the substrate surface with alcohol to ensure the surface is clean of any debris or grease
- Put the ink for 5 minutes in an ultrasonic bath in order to get rid of any aggregates
- Filtrate with a 1,2  $\mu\text{m}$  fiber glass filter syringe to avoid any nozzles clogging
- Print at room temperature

### Curing conditions

Static Box oven	650°C, 30 min (glass substrate)
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Static Box oven	400°C, 60 min (polyimide substrate)
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### Clean-up

To clean printheads and equipment use alcohols such as Ethanol.

## INK PROPERTIES

### Typical properties of uncured ink

Viscosity, cP	10-15
Solids Content, %	24-26
Density, g/cm <sup>3</sup>	1.16
Surface tension at 23°C, mN/m	29-32
Particle size, nm	20-70
Ink aspect	Yellow colour

### Typical properties of cured ink

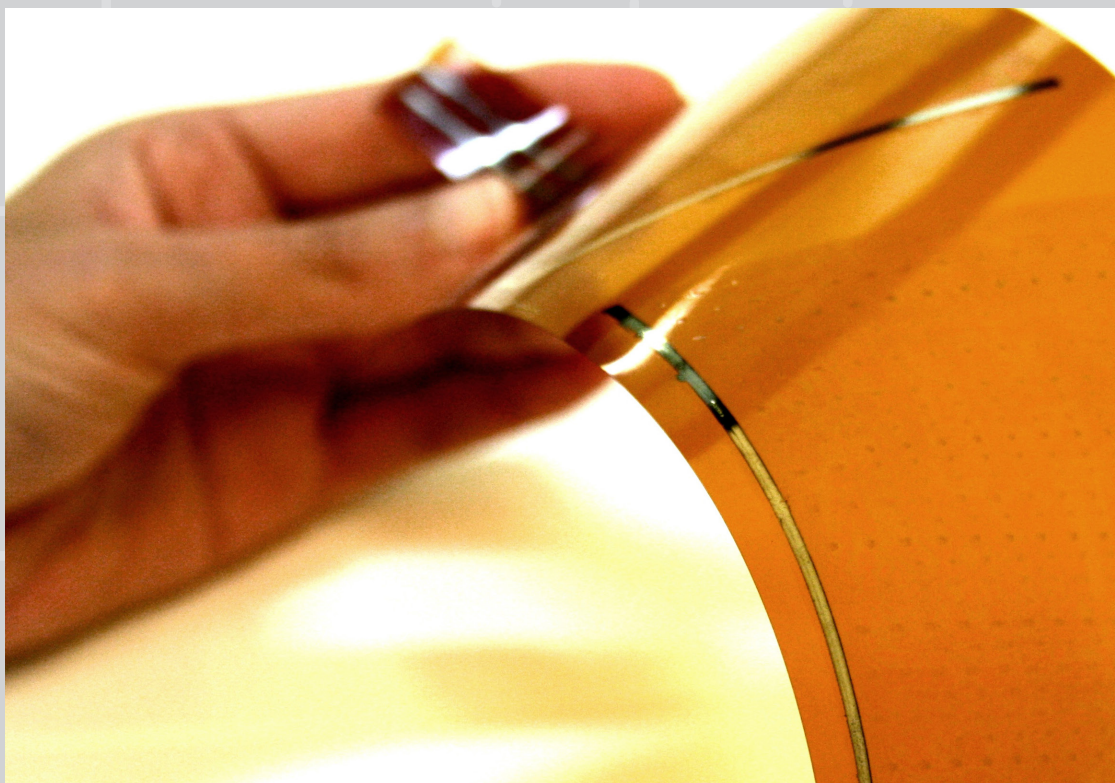
Adhesion, UNE EN ISO 2409	0-1
Resistivity, m $\Omega$ ·cm	53-55
Transparency, %	>90

## STORAGE AND SHELF LIFE

Store the product in an unopened container in a dry location at room temperature (<25°C) Avoid high temperatures and freezing. The ink shelf-life for an unopened container is 3 months from the date of shipment. Some settling may occur and the ink should be mixed thoroughly prior to use.

## SAFETY AND HANDLING

For safe handling information on this product, consult the Material Safety Data Sheet, (MSDS)



## DISCLAIMER

All the information provided in the technical data sheet including the eventual recommendations for use and the applicability of the product are based on our test results carried out by our technical team and we believe them to be accurate and reliable. We cannot make any warranty or representation express or implied, now or hereafter, as to the marketability, merchantability or fitness for use or for a particular purpose of any of the products. Furthermore we cannot assume any responsibility from any third party use, studies or applications as we have no control over their methods. In any case, and in the event that we would have to legally assume any responsibility related to our products, such responsibility will be limited to the amount paid by the client for the products.