# Technical Data Sheet ORGACON IJ1005 ink

## Water based inkjet ink for transparent conductive patterns

Agfa's ORGACON IJ1005 is a transparent conductive inkjet ink based on conductive PEDOT:PSS polymer. It can be applied with different piezo inkjet platforms on rigid and flexible substrates for applications like capacitive touch pads, membrane switches, smart packaging, printed sensors and hole injection layer of Organic Photovoltaics.

#### TYPICAL VALUES

Properties		Unit	Value
SER @WCT 40µm on PET Dried @130°C/3min		Ohm/sq	75
VLT @ WCT 40µm		%	>83
Dimatix DMP-2831 test	SER	Ohm/sq	800
	VLT	%	96
Weight PEDOT:PSS		%	8,0
Acidity		pН	2
Viscosity @20°C, 100 1/s		mPas	9
Surface tension		mN/m	34
Shelf life from production date when stored between 4 and 25°C in sealed container		month	6

### PROCESSING GUIDELINES

#### Printer compatibility

ORGACON IJ1005 is successfully tested with different piezo inkjet platforms including Microdrop, Dimatix DMP-2800 and Spectra Galaxy 30.

#### Printing and curing

Air bubbles in inkjet ink should absolutely be avoided, as they would counteract the jetting of the ink. Therefore, filtration of the ink for insertion into the inkjet cartridge is not recommended. If it is nevertheless decided to filter in advance, this must be done carefully. Filters that can be used are hydrophilic types like  $0.2\mu m$  syringe or  $0.4\mu m$  glass fibre.

It is essential to degas the ink before use.

Print head settings and drying conditions will vary based on the users' application requirements and printing and drying equipment. Contact us at info.orgacon@agfa.com for platform-specific recommendations.

## **HEALTH AND SAFETY**

Please check the Safety Data Sheet at msds.agfa.com.

## **CONTACT**

For more information, please contact us via e-mail at <a href="mailto:conductivematerials@agfa.com">conductivematerials@agfa.com</a> or via <a href="mailto:www.agfa.com/conductivematerials">www.agfa.com/conductivematerials</a>.

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