Metalon® Conductive Inks for Printed Electronics

www.novacentrix.com

Metalon® ICI-003

Nanocopper Ink – Aqueous dispersion

ICI-003 is a copper oxide ink which is transformed post-printing into true copper thin-film by processing with PulseForge® tools. ICI-003 ink is designed to produce conductive traces on low temperature substrates such as treated polymer films. **ICI-003** ink is specially formulated for stablity for piezo-ink jet printing methods.

Performance Properties

Metalon ICI-003 when printed and cured produces conductive traces that attain as low as 2.5x bulk Cu resistivity. ICI-003 MUST be processed by PulseForge® tools from NovaCentrix to reach stated conductivity values. Thermal curing is not applicable. ICI-003 is not conductive prior to processing by PulseForge® tools.

Sample Conductivity

	Units	ICI-003
Resistivity	Micro ohm–cm	4.3
Sheet Resistance	milliOhm/Square	140
Bulk conductivity	Rho Film/Bulk Ag	2.4

Sample Information

Substrate:	Novele™ IJ-220 coated PET (made for NovaCentrix by Mitsubishi Imaging)
Printer:	Epson Stylus C88+ with aftermarket driver, single pass
Post-Process Tool:	PulseForge® 3100 in 12" configuration
Environment:	Atmosphere – no special preparation

Physical Properties

General Description ..... Water-based CuO ink converted to Cu after printing
Viscosity ..... 1-5 cps
Specific Gravity 1.12
Flash Point .....Non Flammable
Particle Size ..... **Malvern Dynamic Light Scattering Method**
z-average 143 nm

CuO Content ..... 10% wt

Shipping and Packaging

Standard sample order is 50ml or multiples of 50 ml.
Bulk packaging is also available.

www.novacentrix.com
Contact us today to learn more.
Stan Farnsworth: 512 491 9500 x210
stan.farnsworth@novacentrix.com