Metalon® Conductive Inks for Printed Electronics

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Metalon® JS-A101A

Nanosilver Ink – Aqueous dispersions for Inkjet Printing

JS-A101A is an electrically conductive ink designed to produce circuits on porous and non-porous substrates such as coated papers and polymeric films including polycarbonate and PET. This ink can be thermally cured at temperatures as low as 100°C or PulseForge® processed for enhanced conductivity. The ink is formulated for printing from the Dimatix Samba printhead and various thermal inkjet printheads such as those manufactured by HP. Please inquire about suitability for other print heads.

Performance Properties

	PulseForge 1200	Thermal[3]	
	JS-A101A	JS-A101A	Units
Sheet resistance[1]	25	< 100	milli-ohm/square
Volume resistivity[2]	7.80E-06	< 3.1E-05	ohm-cm
Pencil hardness	>4H	>4H	--

Printed on Melinex ST505 with Dimatix DMP-2831 at 20 micron drop spacing.

The inks also display excellent crosshatch adhesion and water resistance after full curing.

[1]Typical values.

[2] Value calculated based on estimate of 50% porosity in cured print.

[3]Thermal cure: 140C 10 minutes

Physical Properties

General Description …… Water-based Ag ink
Flash Point ……Non-flammable

	JS-A101	Units
Ag content	40	wt%
Viscosity	5-7	cP
Surface tension	19-30	dyne/cm
z-avg particle size[4]	30-50	nm
Specific gravity	1.6	–

[4]Malvern dynamic light scattering

Shipping and Packaging

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

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Contact us today to learn more.
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