



Conductive Inkjet Ink 9201

Product Description

An aqueous based, silver nano-particle ink designed for piezo inkjet printing systems. Adhesion and conductivity will occur at room temperature when printed on compatible substrates with a micro porous coating. Secondary processing such as photo sintering or thermal cure is required to gain adhesion and conductivity on non-porous substrates.

Features

- Applied via piezo printheads
- Cures at ambient temperature immediately after printing on coated media
- Cures with thermal and/or photo sintering on non-porous substrates
- RoHS compliant
- Custom formulations available

Typical Ink Properties

- Viscosity 6 cps Brookfield LVDVE with UL adaptor @23 C, 30 rpm
- Density 1.25 grams/ml
- Surface Tension 27 dynes/cm SITA Bubble Pressure Tensiometer

Typical Printed Properties

- Print Thickness 1 Micron
- Line Width 75 micron lines and spaces (depending on drop size)
- Electrical Resistance 25 milliohms per square as printed (depending on drop size)
- Color Metallic Silver
- Flex Resistance Excellent
- Adhesion Excellent
- Rub Resistance Excellent



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Photonic Sintering - Conductive Inkjet Ink

Putting you in Charge

XENON's high energy S-2100 Pulsed Light system has been proven to rapidly sinter **Method Electronics** silver nano-particle ink for piezo inkjet printing systems.

Key Specifications – Model S-2100

- Max radiant pulse energy 11 J/cm² at wavelengths of 190 nm to 1100 nm
- Delivers high average pulse power up to 3.7 kW/cm²
- Ease of programming pulse energy, duration and sequencing using operator controller mounted in electronics rack.
- Programmable pulse duration from 100 to 3000 μ s
- Programmable pulse energy from 100 to 3,000 Joules
- Detached robust, air cooled lamp housings containing lamp, reflector and air filters.
- Storage and recall of all pulse settings and timing enables quick return to pulse recipe developed by operator.

Enabling your success in printed electronics

The S-2100 is designed to support both research and low volume manufacturing for sintering of silver nanoparticle inks on low temperature substrates such as PET. This system is offered with a range of options which allow you to tailor the system to your specific sintering application.



XENON's S-2100 Pulsed Light sintering system provides the researcher the flexibility to easily program energy delivered to a target. Selecting from available lamp housings, such as the linear lamp model LH-840, (top photo below) or the spiral lamp model LH-910, (bottom photo below) provide unique exposure areas and energy profiles.

