EMD5800 Nanosilver Ink

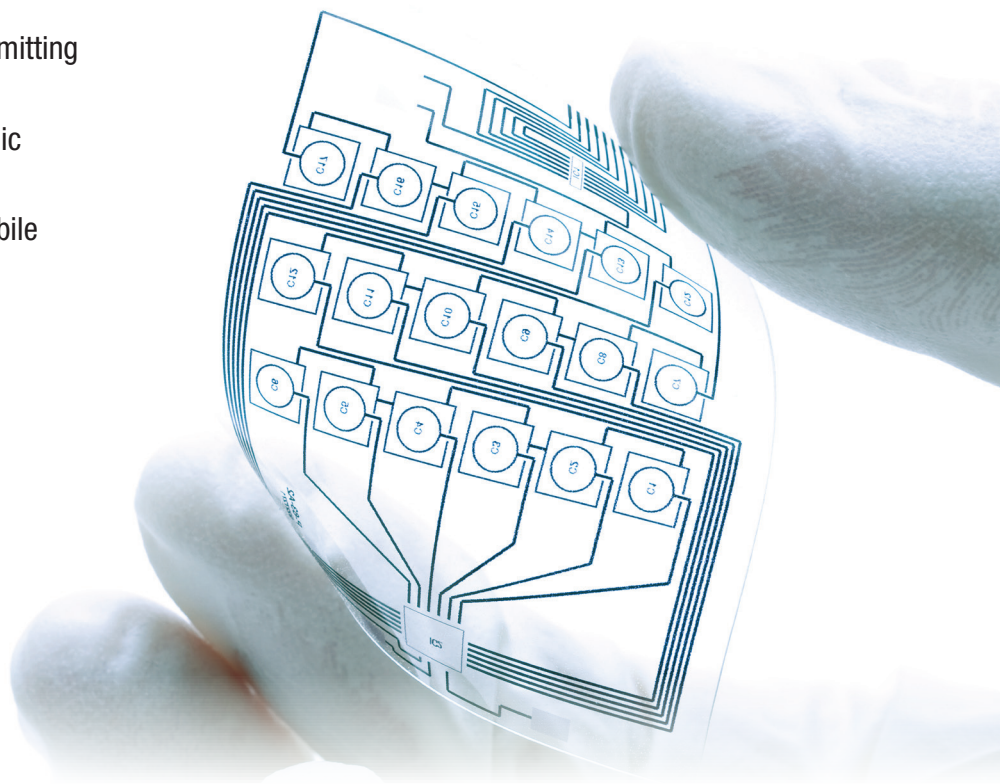
Key Attributes and Benefits:

- EMD5800 is an inkjettable nanosilver ink with superior conductivity and high print resolution for consistent printed electronics manufacturing
- Featuring outstanding jetting performance as well as monodispersion and low-temperature sintering properties, EMD5800 ensures reduced processing time
- EMD5800 exhibits adhesion to a variety of substrates, including polyimide, polyethylene terephthalate (PET), polycarbonate and polycarbonate/acrylonitrile-butadiene-styrene (PC/ABS)
- Compatible with most industrial and commercial printer heads

EMD5800 Nanosilver Ink for Printed Electonics	
Silver Content	40-50%
Binder	Oil-Based
Viscosity	6 - 8 cPs @25°C
Surface Tension	25 - 28 dynes/cm
Volume Resistivity	6 - 25 uΩ.cm
Sintering Temperature	100 - 150°C for 10 - 60 min.
Storage and Shelf Life	10-15°C, 3 months
Available Quantities	50mL or 1L Amber Jars

Major Applications:

- Highly flexible and conductive organic light-emitting diode (OLED) panels
- Thin-film photovoltaic designs, such as organic photovoltaic (OPV) materials
- Extremely conductive and flexible printed mobile antennas
- Highly conductive printed RFIDs
- Touch screen displays



Sun Chemical Electronic Materials

USA +1 513 830 8653

Europe +49 172 847 6438

Asia +86 189 1316 1558

ElectronicMaterials@sunchemical.com

SunChemical®

a member of the DIC group

HL 11/15

Photonic Sintering - Conductive Nano-Inks

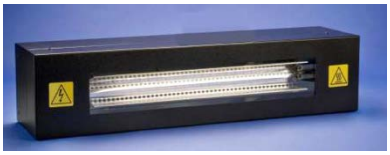
Putting you in Charge

XENON's high energy S-2200 Pulsed Light system has been proven to rapidly sinter ***Sun Chemical's*** nanoparticle conductive inks for applications in printed electronics.

Key Specifications – Model S-2200

- Max radiant pulse energy 11.8 J/cm^2 at wavelengths of 190 nm to 1100 nm
- Delivers high average pulse power up to 7 kW/cm^2 with peak power up to 2.5MW
- Achieve 6.6 Ω/☐ resistivity
- Ease of operator programming energy delivery to target using touch screen computer.
- Visual display of programmed pulse sequences.
- Storage and fast recall of over 10,000 pulse recipes developed by operator.
- Uninterruptible power supply for operator computer to insure no loss of data in the event of mains power failure.

XENON's S-2200 Pulsed Light sintering system provides the researcher with the flexibility to easily program pulse energy delivered to a target. An operator can program long duration pulses at high energy or select high pulse rates with precision control for sensitive materials. A range of optical lamp housings provide unique exposure areas. Shown below is model LH-840.



Results that count

Test Conditions	
Product	Antennae
After Sintering*	6.6 Ω/☐
Pulse Voltage	2,700 v
Pulse Duration	100 µs
Pulse Rate	3.7 Hz
12 ft./minute	

* Measured across antennae

XENON Corporation, 37 Upton Drive, Wilmington, MA, USA 01887
www.xenoncorp.com