

# Mi-AgPrInk

## Silver Conductive Ink

Mi-AgPrInk involves the development of a robust and versatile silver-based conductive ink as a metal-based conductive ink products for printed electronics, wearable technology and flexible electronics applications.



Mi-AgPrInk

### Overview

Mi-AgPrInk is a proprietary silver-based conductive ink technology developed predominantly used in the Electrical & Electronics (E&E) industry at present. Mi-AgPrInk contains water-based material with advanced nanomaterial formulation. The developed conductive ink will also enable the development of next-generation printed electronics, wearable technology and flexible electronics applications.

### Features

Mi-AgPrInk comprises the following features:

- **High Conductivity**  
A silver-based conductive liquid printable at low curing temperature for fine line resolution.
- **Inkjet Printable**  
Proven jettability on inkjet printing process (based on Dimatix DMP series of cartridge) with viscosity of below 10cP.
- **Nano-Sized**  
Comprises nano-sized conductive elements below 30nm for ease of jetting and reduction in print head clogging.
- **Customisable**  
Can be modified, tuned and tailored to required needs and specifications.

### Technology Benefits

The main impacts of Mi-AgPrInk are:

- **Low Curing Temperature**  
Low curing temperature as low as 40°C that still provides good conductivity and low resistance of printed conducting tracks. An ideal ink for thermal-sensitive substrate application such as PET or PEN.

- **Low Cost**  
Pure silver nanoparticles that are functionalised with polymer in organic medium and water-based medium. This approach ensures silver is highly conductive and eliminates metal oxidation effects. Additionally, high jettability of the ink ensures that less volume is required to develop high conductive film.
- **Enabling Technology**  
Mi-AgPrInk enables rapid product prototyping, versatility to scale up to high volume, various applications in the development of digital electronic printing of nanosensing materials, conductive fine line interconnects, flexible electronic platforms and others.

### Applications

E&E Industry, SMEs, Government



Conductive Ink Printer

