

# Nano-Ag Conductive Ink for Inkjet Printing

Product Model: MGT-IJP-INK3050

# **Product introduction**

MGT-IJP-INK3050 is a new electronic material for digital printing and deposition of conductive circuit technology. The MGT-IJP-INK3050 can be used with the Inkjet printers to achieve digital, contactless, high-precision patterned distribution of large area circuit conductors for touch screen, solar cell, OLED display, OLED lighting and printed RF antenna applications. MGT-IJP-INK3050 presents excellent electrical conductivity and durability on the surface of PET film.

### **Product advantages**

- (1) Excellent electrical conductivity
- (2) Printing is very smoothly
- (3) High content of nano-silver
- (4) Good hardness and adhesion

# **Application conditions**

Printing substrates: PET, Teslin, PEN, ITO, PI

# Compatible nozzles:

Epson series nozzle : DX5, DX7, Fuji Starlight series, spectra series, Konica nozzle : KM512i, KM1024i Ricoh nozzle : Gen5, Gen5s, Gen6

#### Curing conditions: Oven: 150 °C or NIR infrared

Test	Properties	
Product system	Environment-friendly solvent system	
Particle size of silver powder	30~50nm	
Viscosity (cp)	5~12cP adjustable*	
Silver content	30~40wt%	
Shoot registered	*1 ~10 mΩ/□/mil	
Sheet resistance	affected by curing conditions	
Adhesion	Level 0 (100% non-peeling)	
Hardness	2H	



# **Technical Data Sheet**

- \* MGT-IJP-INK3050 has subdivided models for different nozzles, please confirm before ordering.
- \* Viscosity can be customized according to different nozzles.
- \* Sheet resistance is affected by the temperature of post-printing conditions.
- \* Sheet resistance is affected by the properties of the substrates.

#### Storage and use:

(1) Long term storage should be  $0~10^{\circ}$ C sealed storage away from light.

(2) Remove and restore to normal temperature after refrigerating, mechanical stirring is recommended for 10 minutes.

(3) The printing environment is recommended to be  $20 \sim 25 ^{\circ}C$ .

Test Items	MGT-IJP-INK3050- <mark>EN</mark>	MGT-IJP-INK3050- <mark>KA</mark>	MGT-IJP-INK3050- <mark>RH</mark>
Nozzle	Epson full series	Konica 512i, 1024i series	Ricoh GEN5, GEN5s, GEN6
Particle size of silver powder	30~50nm	30~50nm	30~50nm
Viscosity (cp)	5-6cP	~12cp	~10cp
Silver content	25~30wt%	35~40wt%	35~40wt%
Sheet resistance	*1~2mΩ/⊡/mil	*1~2mΩ/⊡/mil	*1~2mΩ/⊡/mil
	affected by curing	affected by curing	affected by curing
	conditions	conditions	conditions
Adhesion	Level 0 (100%	Level 0 (100%	Level 0 (100%
	non-peeling)	non-peeling)	non-peeling)
Hardness	2H	2H	2H

### Ink models for different nozzles:

# Inkjet printing case on different substrates:





# **Technical Data Sheet**



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