Metalon® Conductive Inks for Printed Electronics

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Metalon® HPSC-U590

90% Copper
High Conductivity Silver-Coated Copper Screen Ink

GENERAL INFORMATION

Particle: 5-micron silver-coated copper particles (90% Cu)

Substrates: Paper, plastics, glass, metals

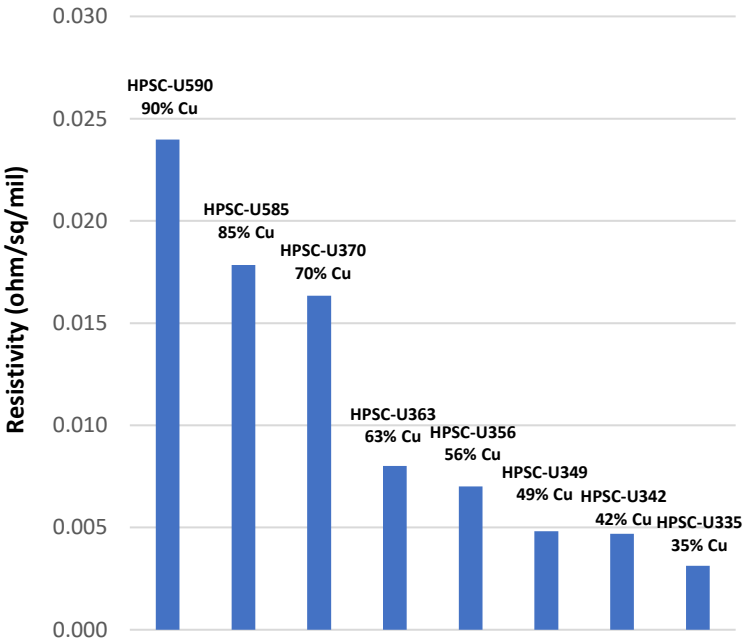
Features:
- Economical pricing
- High metal loading (87% w/w metal)
- High conductivity for low temperature curing
- Excellent water and alcohol resistance
- Flexible and good adhesion
- Printing equipment cleans with isopropanol
- Conductivity can be adjusted with Ag amount
- Solderable

THERMAL CURE DATA

Cure Temperature[1] (°C)	Cure Time (minutes)	Volume Resistivity[2] (Ω-cm)	Sheet Resistivity[2] (Ω/sq/mil)
80	120	8.3E-05	0.033
100	30	7.9E-05	0.031
120	30	7.8E-05	0.031
140	30	6.1E-05	0.024

[1]Pre-cure drying at 140C for 10 minutes for cure ≥ 175C
[2]Typical value (#10 drawdown and 25% porosity - typical dried coating 0.013g/cm^2)

HPSC-U Silver-coated copper inks (cured at 140°C)



Physical Properties	**General description**.....	Ag-coated Cu particle ink
	Viscosity (typical values)...	86,000 cP at 10 sec^{-1} 58,000 cP at 100 sec^{-1}
	Specific gravity.....	4.5
	Particle size.....	D50 - 5 microns
	Metal content.....	87% w/w
Storage and Printing	**Storage**.....	Refrigerated at 4-7 °C
	Shelf life.....	> 6 months
	Cleaning solvent.....	Isopropanol
	Screen mesh material.....	Stainless steel or polyester
	Screen mesh count.....	325 to 80 wires per inch
Shipping and Packaging	MOQ - 100 grams	

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Contact us today to learn more.
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