

Metalon[®] Conductive Inks for Printed Electronics

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Metalon[®] CP-007

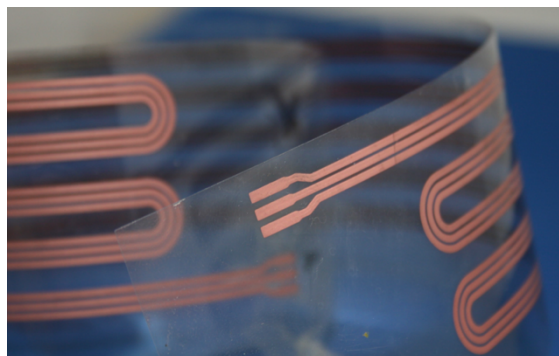
General Purpose High Performance Copper Paste

Product Overview

CP-007 is a screen printable copper paste suitable for fine line, high resolution printing. CP-007 is formulated to provide excellent conductivity, flexibility and adhesion at processing temperatures around 200° C. CP-007 can be used on a variety of substrates including ceramic, FR4, fabrics and TCO-coated glass.

Applications

CP-007 paste formulation is designed to be compatible with FR-4. The paste can also be used with a variety of other substrates common in industries such as automotive, aerospace and consumer products. Applications include: LED lighting, microelectronics, membrane switches, and sensors & antennas.



CP-007 printed on PET after a reducing formic acid/argon atmosphere processed @150°C / 1 hour

General Use, Storage and Shelf Life

The product should be kept sealed in its container and stored at room temperature (<25°C). The shelf life of unopened containers is six months from date of shipment. Prior to use, please ensure that the paste is mixed thoroughly for a few minutes taking care to avoid introducing air to the paste.

Safety and Handling

For safety and handling information, please refer to the Material Safety Data Sheet (MSDS).

Typical Compositional Properties	Solids Content (Weight %) ~ 77% Viscosity [Pa.S] (Anton Paar MCR-301 at 50s ⁻¹ @ 25°C) 20 – 35 Density [g/ml] ~ 2.6
Typical Electrical & Physical Properties (Sintered)	Sheet Resistance [mΩ/sq/25µm] ~ 7 Adhesion (ASTM D3359)..... 5B Sintered Thickness [µm] >5 – <50



Contact us today to learn more.

For detailed application information or additional assistance: inktechnicalsupport@novacentrix.com
 Ink can be ordered at store.novacentrix.com

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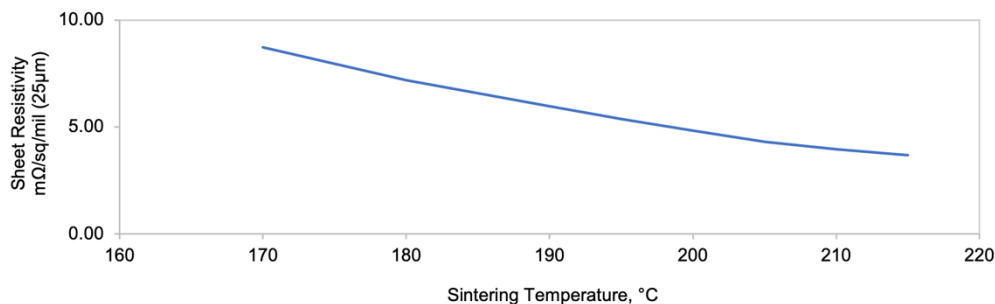
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Processing	Printing Equipment	Flatbed Screen Printing <i>(both sheet and reel-to-reel)</i>
	Screen Type	Stainless steel mesh and polyester mesh
	Line Thickness/Height <i>(sintered)</i>	5 μm – 50 μm <i>(depending on screen)</i>
	Line Width	75 μm minimum
	Ink on Screen (Printing Life)	> 5 hours <i>(depending on printing process)</i>
	Substrates	Ceramic, FR4, TCO-coated glass and fabrics
	Clean up solvent	Acetone, isopropanol
	Diluent/Thinner	Terpineol
	Typical Drying Conditions	Can be dried in standard convection ovens and Vacuum ovens @ 60°C, 30 – 60 minutes, or Under IR Dryer @ 80°C, 30 minutes, or Forced air convection @ 80°C, 4 – 15 minutes
	Typical Sintering Conditions	Reducing atmosphere of argon or nitrogen, with 3% formic acid vapor @ 170°C – 210°C for 1 hour (convection oven), or As above @ 190°C for 30 mins (Heller belt oven)
Shipping and Packaging	Standard sample order is 100g or multiples of 100g. Bulk packaging is also available.	

Typical CP-007 Sheet Resistivity as a Function of Temperature Sintered in a Formic Acid Reduction Environment



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