

# CP-006

## High Copper Content PCB Via Fill Paste

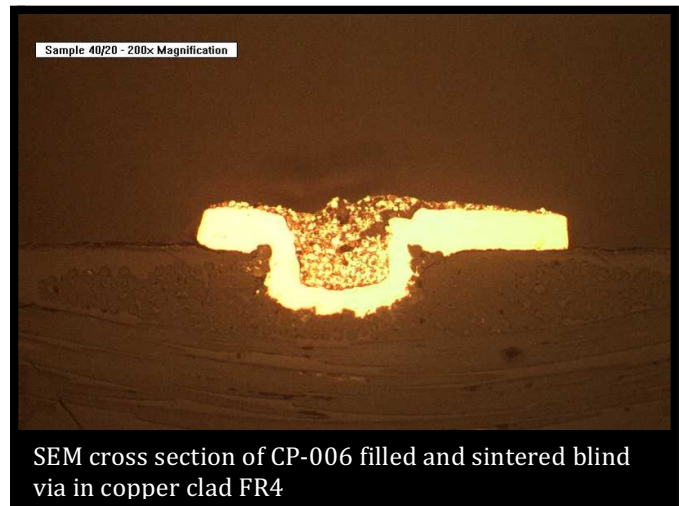
*A nanocopper-based paste for printed electronics*

### Product Overview

CP-006 Is a copper paste suitable for screen printing and via filling.

CP-006 is formulated to provide good conductivity, adhesion and durability with wet post-processing employed in PCB industry.

Can be used on a variety of substrates including FR4, ceramic glass and polyimide.



### Processing

<b>Printing Equipment</b>	Screen Printing Flatbed (Both sheet and reel to reel)
<b>Screen Type</b>	Stainless steel mesh and polyester mesh
<b>Typical via fill dimensions</b>	100 – 200 µm diameter via and up to 300 µm depth
<b>Line Thickness/Height (resolution)</b>	15 µm – 30 µm (Depending on screen type)
<b>Line Width</b>	100 µm minimum
<b>Ink on screen (printing life)</b>	>5 hours
<b>Substrates</b>	FR4, ceramic, glass, polyimide
<b>Clean up solvent</b>	Isopropanol, acetone
<b>Diluent/Thinner</b>	DT-001
<b>Typical Drying Conditions</b>	Can be dried in standard convection ovens and Vacuum ovens @ 60°C, 30–60 minutes, <b>or</b> IR dryer @ 80°C, 30 minutes, <b>or</b> Forced air convection @ 80°C 15–30 minutes
<b>Typical Sintering Conditions</b>	Reducing atmosphere of argon or nitrogen, with 3%-7% formic acid vapor @ 225°C – 260°C for 1 hour

## Applications

CP-006 paste formulation is designed to be durable when exposed to typical PCB post-processing. Applications include:

- Printed circuit boards via filing with planarization
- Interposers

## 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 relating to the use of this product, please refer to the Safety Data Sheet (SDS).

## Technical Support

Intrinsiq works closely with its customers to ensure this product is optimized for their process. For more product information or technical support, please contact your local representative.

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## Typical Compositional Properties

<b>Solids content</b> (Weight %)	~86%
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<b>Viscosity [Pa.s]</b> (Bohlin CVO 100 at 50 s <sup>-1</sup> @ 25°C)	10-30
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<b>Density [g/ml]</b>	3.8
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## Typical Electrical & Physical Properties (Sintered)

<b>Sheet Resistance</b> [mΩ/sq/25μm]	~13
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<b>Adhesion</b> (ASTM D3359)	5B
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<b>Sintered Thickness [μm]</b>	>15 - <30
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