

CP-006

High Copper Content PCB Via Fill Paste

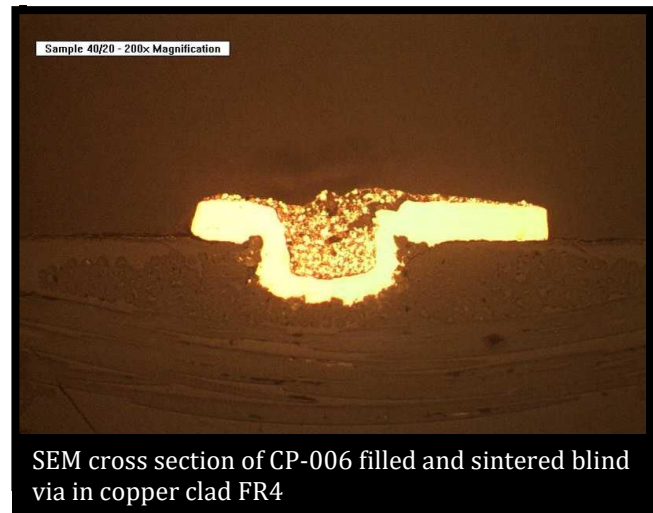
A nanocopper-based paste for printed electronics

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

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

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

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