

# Micromax™ CB230

## Electronic Inks and Pastes

### Copper Conductor

Micromax™ CB230 copper conductor is solderable composition formulated with silver-coated copper powder for enhanced solderability and leach resistance. It can be used to create additive circuitry, electrodes, and termination sites on a wide variety of substrates, including rigid and flexible polymer laminates, glass and ceramic.

### Product benefits

- Excellent solderability and leach resistance
- Strong adhesion to a wide variety of substrates
- Excellent printing properties
- Excellent adhesion to aluminum

### Product information

Solvent or thinner

Micromax™ 9245

### Rheological properties

Viscosity

65 - 75<sup>[1]</sup> Pa.s

[1]: Brookfield RVT, UC&SP, 10 rpm, 25 °C

### Application technique

Mask mesh

200<sup>[2]</sup>

Drying time

30<sup>[3]</sup> min

Drying temperature

170<sup>[3]</sup> °C

Theoretical coverage

100 - 120 cm<sup>2</sup>/g

Recommended film thickness, dried

25 - 30<sup>[4]</sup> μm

[2]: Screen Types: Stainless steel

[3]: box oven

[4]: 200-mesh stainless steel

### Typical mechanical properties

Adhesion, pull tape

no material class  
transfer<sup>[5]</sup>

[5]: 3M Scotch Tape #600

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### Electrical properties

Surface resistivity 65 - 75<sup>[6]</sup> mOhm per square

[6]: at 25µm thickness

### Storage and stability

Shelf life 3<sup>[7]</sup> months

[7]: in unopened containers, from date of shipment, at temperature between 0-5 °C

### Additional information

How to use

### Processing

- **Substrates**
  - Epoxy glass, phenolic paper, Micromax™ Kapton®, glass, ceramic
- **Screen types**
  - Stainless steel or polyester
- **Printing**
  - Semi-automatic, manual
- **Typical circuit line thickness**
  - Printed with 200-mesh stainless steel screen
  - 25 - 30 µm
- **Work life**
  - > 2 hours
- **Clean-up solvent**
  - Thinner Micromax™ 9245, Arcosolv PNP, Ethylene diacetate
- **Drying**
  - Box oven : 170 °C (338 °F) for 30 min

### Properties

#### Typical Physical Properties

Test	Properties
Abrasion Resistance, Pencil Hardness (ASTM D3363-74) [H]	> 5
Solderability*1 (%)	100
Change in Physical Properties after Environmental Tests	Insignificant
Change in Electrical Properties after	

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Environmental Test (%)	
Thermal Aging (85 °C, 2000hr)	$\Delta R < 30$
Heat/Humidity (60 °C/95% RH/3000hr)	$\Delta R < 30$
Thermal Cycling (-55 to 125 °C, 500 cycles)	$\Delta R < 20$
Solder Dip (260 °C, 10 sec, 3 cycles)	$\Delta R < 10$

\*1 With eutectic or most other solders and mildly activated flux.

Information in this datasheet shows anticipated typical physical properties for Micromax™ CB230 based on specific controlled experiments in our labs and are not intended to represent the product specifications, details of which are available upon request.

### Storage and shelf life

Containers should be stored, tightly sealed, in a clean, stable environment at 0 °C – 5 °C. Shelf life of material in unopened containers is three months from date of shipment. Some setting of solids may occur and compositions should be thoroughly mixed prior to use.

### Safety and handling

For safety and handling information pertaining to this product, read Safety Data Sheet (SDS).