

Micromax™ CB459

Electronic Inks and Pastes

Platable Silver Conductor

Micromax™ CB459 is a polymeric platable silver composition. It can be easily applied using standard screen printing techniques.

Product benefits

- Additive process
- Thermoset type of resin
- Single composition type
- Low temperature curing (200 °C, 30 min.)
- High plated adhesion
- Stable viscosity / rheology
- Good platability

Product information

Solvent or thinner

Micromax™ 9245

Rheological properties

Viscosity

16 - 22^[1] Pa.s

[1]: Brookfield RVT, #14 spindle UC&S, 10 rpm, 25 °C

Application technique

Mask mesh

200 - 280^[2]

Drying time

10 min

Drying temperature

150 °C

Leveling time

5 - 10 min

[2]: Screen Types: Stainless steel

Electrical properties

Surface resistivity

≤50^[3] mOhm per square

[3]: at 25µm thickness, prior to plating

Storage and stability

Shelf life

3^[4] months

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

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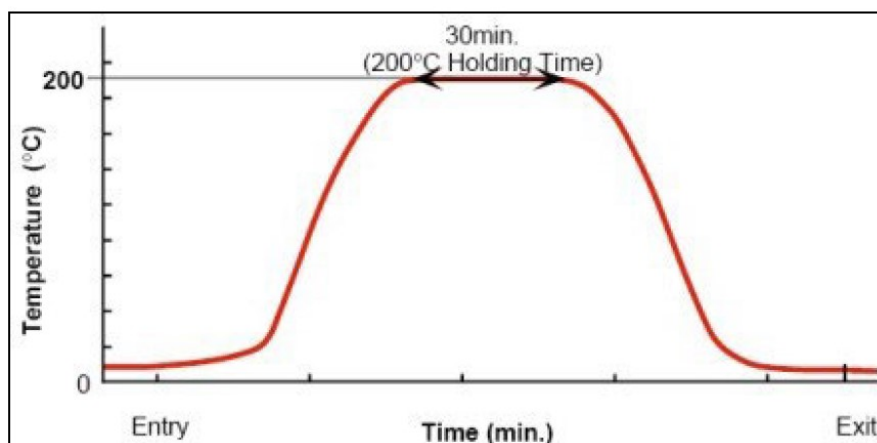
Additional information

How to use

Processing

- **Substrates**
 - Epoxy glass, 96% alumina, and others
- **Screen types**
 - Stainless steel (200-280 mesh) or equivalent polyester screen
- **Printing**
 - Reel-to-reel, semi-automatic, manual
- **Work life**
 - > 1 hour
- **Thinning**
 - Micromax™ CB459 is optimized for screen printing and thinning is not normally required. For minor adjustments, thinner Micromax™ 9245 is recommended.
- **Drying**
 - Dry in a belt or box oven.
 - A drying step prior to curing is recommended.
 - Parts should be allowed to level at room temperature for 5-10 minutes and then dried at 150 °C for 10 minutes.
- **Curing**
 - Cure in a belt or box oven.
 - Properties are based on a curing cycle with 30 minutes at peak of 200 °C. Lower curing temperatures may be possible but will require longer cure times.

Micromax™ Profile



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Properties

- Information in this datasheet shows anticipated typical physical properties for Micromax™ CB459 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).