

Micromax™ ME902

Microcircuit and Component Materials

Electrically Conductive Adhesive

Micromax™ ME902 is a part of the Micromax™ suite of materials developed for In-Mold Electronic applications. Micromax™ ME902 is an electrically conductive adhesive system for use in stencil-printing and syringe-dispensing applications. Its unique formulation provides good adhesion between SMD components and Micromax™ silver conductive pastes after heat curing. Micromax™ ME902 maintains some flexibility after drying, which enables handling & thermoforming of IME circuits on thin substrates. It maintains its properties after over-molding.

Product benefits

- One part electrically conductive adhesive
- Good adhesion with flexibility for IME applications
- Excellent performance after thermoforming & over-molding
- Apply via stencil-printing or syringe-dispensing

Product information

Solvent or thinner	Micromax™ 8270
Solid content	75 - 77 ^[1] %
[1]: 150 °C	

Rheological properties

Viscosity	60 - 75 ^[2] Pa.s
[2]: Brookfield RVT, #14 spindle, 10 rpm, 25 °C	

Application technique

Mask emulsion	100 ^[3] μm
Drying time	20 ^[4] min
Drying temperature	120 ^[4] °C
Recommended film thickness, dried	30 - 50 ^[5] μm
[3]: stencil	
[4]: box oven	
[5]: 100 μm thick stencil	

Electrical properties

Surface resistivity	100 - 150 ^[6] mOhm per square
[6]: at 25.4 μm, serpentine pattern, 14 μm thickness	

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Storage and stability

Shelf life

6^[7] months

[7]: in unopened containers, from date of shipment, at temperature <25° C

Additional information

How to use

Design & compatibility

- **Compatibility**
 - EFD Fluid Dispensing Systems, bench-top or robotic
 - Stencil-printing
 - Screen-printing (thinning is required)

Processing

- **Substrates**
 - Micromax™ silver pastes on polycarbonate or surface-treated polyester
- **Work life (on stencil)**
 - > 1 hour
- **Clean-up solvent**
 - Ethylene glycol diacetate
- **Typical thickness (after drying)**
 - 30~50µm
 - Stencil-printed with a ~100µm thick stencil
- **Drying**
 - Box oven : 120° C for 20 minutes in a well-ventilated oven

Properties

Typical Physical Properties

Test	Properties
Component Shear Strength (grams-force) (1206-size SMD LEDs on Micromax™ silver)	1000-1200

Information in this datasheet shows anticipated typical physical properties for Micromax™ ME902 based on specific controlled experiments in our labs and are not intended to represent the product specifications, details of which are available upon request.

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Storage and shelf life

Containers should be stored, tightly sealed, in a clean, stable environment at room temperature (<25 °C). Shelf life of material in unopened containers is six months from date of shipment. Some settling 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).

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