

Micromax™ 7102

Electronic Inks and Pastes

Carbon Conductive Composition

Micromax™ 7102 carbon is used as conductor in designs that tolerate high resistivity. Major benefits include low cost and excellent screen life and high-temp stability. It can be used with semi- automatic and manual printers. Micromax™ 7102 may be blended with these Micromax™ compositions to meet specific resistance requirements: Micromax™ 7082 Carbon, DoPont 5028 Ag and Micromax™ 3571 Dielectric.

Product benefits

- Low resistivity carbon
- High stability
- Superior activity in biomedical applications
- Excellent adhesion to polycarbonate substrates
- Lead, Cadmium, Nickel and Phthalate free*

* Lead, Cadmium, Nickel and Phthalate 'free' as used herein means that lead, cadmium, nickel and phthalate are not intentional ingredients in and are not intentionally added to the referenced product. Trace amount however may be present.

Product information

Solvent or thinner	Micromax™ 3610
Solid content	34.5 - 37.5 ^[1] %
[1]: 150 °C	

Rheological properties

Viscosity	60 - 125 ^[2] Pa.s
[2]: Brookfield RVT, 10 rpm, #14 spindle & UC, 25 °C	

Application technique

Mask mesh	200
Drying time	5 - 6 ^[3] min
Drying temperature	120 ^[3] °C
Theoretical coverage	103 cm ² /g
Recommended film thickness, dried	9 - 15 µm
[3]: Box Oven	

Storage and stability

Shelf life	6 ^[4] months
[4]: in unopened containers, from date of shipment, at temperature <25 °C	

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Additional information

How to use

Processing

- **Screen types**
 - Stainless steel, Polyester
- **Printing**
 - Semiautomatic, manual
- **Typical circuit line thickness**
 - 9 - 15 μm
 - Printed with 200-mesh stainless steel screen
- **Worklife**
 - > 2 hours
- **Clean-up solvent**
 - Ethylene diacetate or methyl propasol acetate

Properties

Typical Physical Properties on 5-mil Polyester Film

Test	Properties
Abrasion Resistance, Pencil Hardness (ASTM D3363-74) [H]	2
Resistivity after Flex (Ω/sq) at 25.4 μm 15 sec after test Crease (180°, 1 cycle)	50

Information in this datasheet shows anticipated typical physical properties for Micromax™ 7102 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 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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