Micromax™ 7105

Electronic Inks and Pastes

Carbon Conductive Composition

Micromax™ 7105 is used as conductor in designs that tolerate high resistivity. Its major benefits include low cost and excellent screen life as well as excellent high-temp stability. It can be used with semi-automatic and manual printers. Micromax™ 7105 may be blended with Micromax™ 5000 silver conductor to meet specific resistance requirements.

Product benefits

- High abrasion resistance
- High stability
- Lowest resistivity carbon
- High activity biomedical applications

Product information

Solvent or thinner	Micromax™ 8260	
Solid content	32.5 - 36.5[1]	%

[1]: 150 °C

Rheological properties

Viscosity	15 - 70[2]	Pa.s

[2]: Brookfield RVT, #14 spindle, 10 rpm, 25 °C

Application technique

Mask mesh	200[3]	
Drying time	5[4]	min
Drying temperature	120[4]	°C
Theoretical coverage	103[5]	cm^2/g
Recommended film thickness, dried	9 - 15[6]	µm

[3]: Screen Types: Stainless steel

[4]: box oven

[5]: at 25.4µm

[6]: printed with 200 mesh stainless steel screen

Electrical properties

Surface resistivity	≤30000[5]	mOhm per square

[5]: at 25.4µm

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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

Processing

- Screen types
  - Polyester, stainless steel
- Printing
  - Semi-automatic or manual
- Typical circuit line thickness
  - 9 - 15 µm
  - Printed with 200-mesh stainless steel screen
- Work life
  - > 2 hours
- Clean-up solvent
  - Ethylene diacetate or Methyl propasol acetate
- Drying
  - Box oven : 120-130 °C for 5 minutes
  - IR oven : 130 °C/ 2-3 minutes

Properties

Typical Physical Properties on 5-mil Polyester Film

Test	Properties
Resistivity after Flax (Ω/sq/mil) 15sec after test Crease (180 °C, 1cycle)	50
Abrasion Resistance, Pencil Hardness (ASTM D3363-74) [H]	3
Soldering	Not Recommended

Information in this datasheet shows anticipated typical physical properties for Micromax™ 7105 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

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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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