

# Micromax™ 5036

## Electronic Inks and Pastes

### Encapsulant/Blend Member/Heat Seal

Polymeric composition Micromax™ 5036 is solvent-based, screen-printable ink used for heat-sealing circuitry and encapsulant application. It offers the advantages of rapid-curing while maintaining adhesion to both polyester and/or conductors. Micromax™ 5036 may be used as a blend member for Micromax™ 7102 and Micromax™ 7082 carbon conductors. Heat sealing conditions will vary depending on equipment used. A general recommendation would be to cure as directed below, followed by heat-sealing at 120-125°C.

### Product benefits

- Solvent based protection layer, can be used as barrier for graphic ink overprint

### Product information

Colour	Transparent <sup>[1]</sup>
Solvent or thinner	Micromax™ 3610
Density	1.08 g/cm³
Solid content	28.9 - 30.6 <sup>[2]</sup> %
Maximum Service Temperature	90 °C

[1]: Colorless

[2]: 150°C

### Rheological properties

Viscosity	20 - 35 <sup>[3]</sup> Pa.s
[3]: Brookfield RVT, 10 rpm, #14 spindle, 25°C	

### Application technique

Mask mesh	200 - 325 <sup>[4]</sup>
Drying time	5 min
Drying temperature	120 - 130 °C
Recommended film thickness, dried	12.7 - 25.4 µm
[4]: Screen Types: Stainless steel	

### Typical mechanical properties

Adhesion, cross hatch	5B <sup>[5]</sup> class
[5]: The same result, Dielectric to Polyester Scotch Tape #600 and Conductor to Dielectric, ASTM D2259-78.	

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### Electrical properties

Dielectric Constant	$\leq 5^{[6]}$
Insulation Resistance, DC	$\geq 1E10$ Ohm
Breakdown Voltage	500 <sup>[8]</sup> V

[6]: ASTM D150, at 1 KHz

[7]: sq at 25.4µm

[8]: ATSM D150, V/25.4µm DC

### Storage and stability

Shelf life 6<sup>[9]</sup> months

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

### Additional information

#### How to use

#### Processing

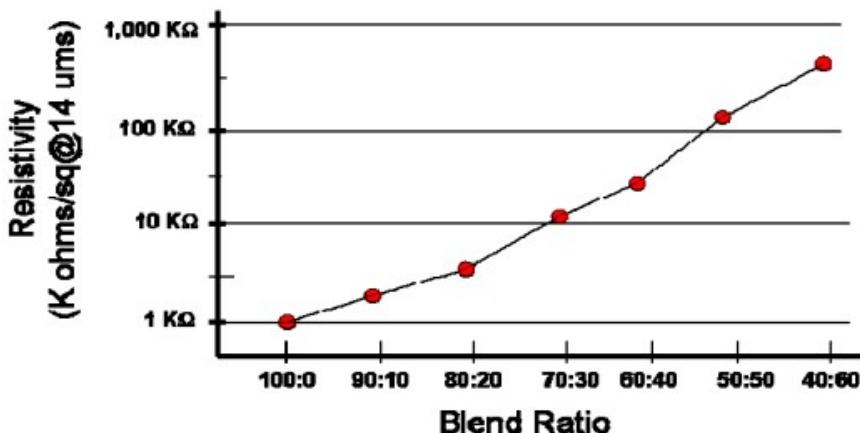
- **Substrates**
  - Polyester, polyimide, epoxy glass
- **Screen types**
  - Stainless steel, polyester
- **Printing**
  - Semiautomatic and manual
- **Typical thickness (after cure)**
  - Printed with 200 - 325 mesh stainless steel screen
  - 0.5 - 1.0 mil
- **Work life**
  - > 2 hours
- **Clean-up solvent**
  - Methyl proposol acetate
- **Drying**
  - 120 - 130°C/5 minute
  - Dry and cure in a well ventilated oven or conveyor dryer where the exhaust meets environmental regulations.

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### Blending for Value

7082/5036 Blend Curve  
 (1,000 Ω– 550,000 Ω/sq@14ums)



### Properties

Typical Physical Properties on Polyester Film

Test	Properties
Abrasion Resistance, Pencil Hardness (ASTM D3363-74) [H]	≥ 1
Flexibility (180° crease over Micromax™ 5007)	No opens

Information in this datasheet shows anticipated typical physical properties for Micromax™ 5036 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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