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 use 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 120-125ºC.

Product benefits

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

Product information

Colour	Transparent[1]	
Solvent or thinner	Micromax™ 3610	
Density	1.08	g/cm^3
Solid content	28.9 - 30.6[2]	%
Maximum Service Temperature	90	°C

[1]: Colorless

[2]: 150°C

Rheological properties

Viscosity	20 - 35[3]	Pa.s

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

Application technique

Mask mesh	200 - 325[4]	
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[5]	class

[5]: The same result, Dielectric to Polyester Scotch Tape #600 and Conductor to Dielectric, ASTM D2259-78.

Micromax™ 5036

Electronic Inks and Pastes

Electrical properties

Dielectric Constant	≤5[6]	
Insulation Resistance, DC	≥1E10	Ohm
Breakdown Voltage	500[8]	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[9]	months

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

Additional information

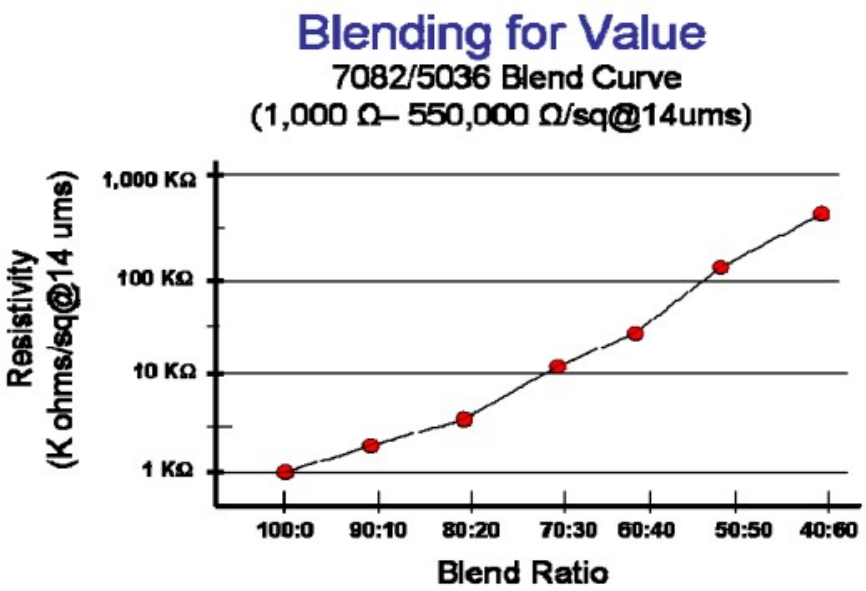
How to use

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.

Micromax™ 5036

Electronic Inks and Pastes



Properties

Typical Physicai 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).

Celanese
The chemistry inside innovation™

Micromax™ 5036

Electronic Inks and Pastes

Revised: 2023-06-26 Source: Celanese Materials Database