

Micromax™ 5036

Electronic Inks & Pastes

PRODUCT DESCRIPTION

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 120-125°C.

Product benefits

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

READ ENTIRE TECHNICAL DATA SHEET BEFORE USING THIS PRODUCT

PRODUCT INFORMATION

General Properties	Value Unit
Application	Membrane switch dielectric
Color	Cream
Solvent or thinner	Micromax™ 3610
Density	1.08 g/cm ³
Solid content ¹	28.9 to 30.6 %
Maximum Service Temperature	90 °C

TECHNICAL DATA

Rheological Properties	Value Unit
Viscosity ²	20 to 35 Pa.s

Application Technique	Value	Unit
Mask mesh ³	200 to 325	
Drying time ⁴	5 to 20	min
Drying temperature	120 to 130	°C
Recommended film thickness	12.7 to 25.4	µm
Mechanical Properties	Value	Unit
Adhesion ⁵	5B	class
Electrical Properties	Value	Unit
Dielectric Constant ⁶	≤5	
Insulation Resistance ⁷	≥1E10	Ohm
Breakdown Voltage ⁸	500	V
Storage and Stability	Value	Unit
Shelf life ⁹	6	months

¹150°C

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

³Screen Types: Stainless steel

⁴for belt dryer. For box oven increase drying time to 20 minutes

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

⁶ASTM D150, at 1 KHz

⁷sq at 25.4µm

⁸ATSM D150, V/25.4µm DC

⁹in unopened containers, from date of shipment, stable environment at room temperature between 5°C - 30°C

PROCESSING GUIDELINES

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

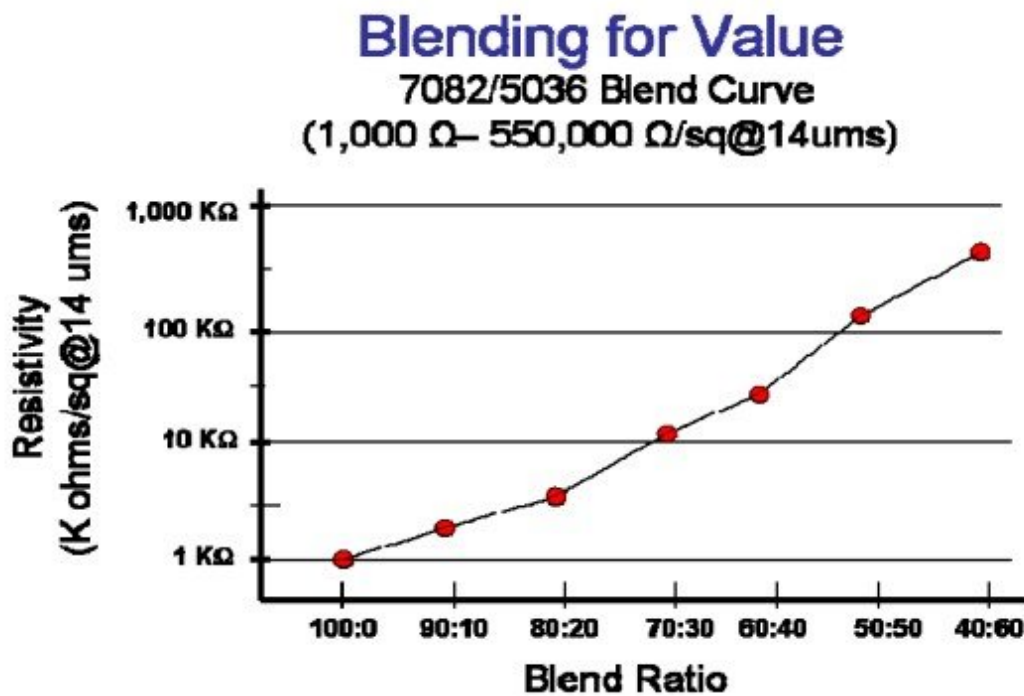
Clean-up solvent

Methyl propyl acetate

Drying

120 - 130°C/5 minute

Dry and cure in a well-ventilated oven or conveyor dryer where the exhaust meets environmental regulations.



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 between 5°C - 30°C. Shelf life of material in unopened containers is 6 months from date of shipment. Some settling of solids may occur and compositions should be thoroughly mixed prior to use.

Storage conditions on the product data sheets are intended to represent long-term material storage recommendations and not a shipping or temperature-at-receipt requirement.

Transportation: Under normal shipping conditions, without temperature control, Micromax™ products are not expected to exhibit a change in quality or fitness for use. Should extraordinary events result in extended transportation periods, Micromax™ recommends customers confirm products remain suitable for the intended application.

SAFETY & WARNING

It is recommended that the company/operator read and review the Safety Data Sheets for the appropriate health and safety warnings before use.

Safety Data Sheets are available.

WASTE TREATMENT

Prior to using any recommendations or suggestions for waste treatment, the user is required to know the appropriate local/state/federal regulations for on-site or off-site treatment which may require permits. If there is any conflict regarding our recommendations, local/state/federal regulations take precedence.

CONTACT INFORMATION

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Also read carefully warning and safety information on the Safety Data Sheet. This data sheet contains technical information required for safe and economical operation of this product. READ IT THOROUGHLY PRIOR TO PRODUCT USE. Emergency safety directory assistance: US 1 202 464 2554, Europe + 44 1235 239 670, Asia + 65 3158 1074, Brazil 0800 707 7022 and 0800 172 020, Mexico 01800 002 1400 and (55) 5559 1588

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