

Micromax™ 1908

Electronic Inks & Pastes

PRODUCT DESCRIPTION

Carbon Conductive Composition

Micromax™ 1908 is a carbon conductor designed as a working electrode for high sensitivity biosensors.

Product benefits

- High Sensitivity
- Low Resistivity
- Long Screen Life

READ ENTIRE TECHNICAL DATA SHEET BEFORE USING THIS PRODUCT

PRODUCT INFORMATION

Application	Carbon paste
Solvent or thinner	Micromax™ 8240
Solid content	35 to 40

TECHNICAL DATA

Rheological Properties	Value	Unit
Viscosity ¹	25 to 60	Pa.s

Application Technique	Value	Unit
Mask mesh	200	
Drying time ²	5 to 10	min
Drying temperature ³	130	°C
Theoretical coverage ⁴	200	cm ² /g

Application Technique	Value	Unit
Recommended film thickness	8 to 12	µm
Mechanical Properties	Value	Unit
Adhesion ⁵	no material transfer	class
Electrical Properties	Value	Unit
Resistivity ⁶	30 to 60	Ohm per square
Storage and Stability	Value	Unit
Shelf life ⁷	6	months

¹Brookfield RVT, 10 rpm #14 spindle & UC, 25°C

²box oven

³box oven

⁴@12.7µm (0.5mil)

⁵PET untited, on 127µm polyester film.

⁶@25.4µm, on 127µm polyester film

⁷in unopened containers, from date of shipment, stable environment at room temperature between 5°C - 30°C

PROCESSING GUIDELINES

Screen types

Stainless steel, polyester

Printing

Reel-to-reel, semiautomatic, manual

Typical circuit line thickness

Printed with 200-mesh stainless steel screen

8-12µm

Work life

>2 hours

Drying

Box oven: 130°C for 5 -10 min

Reel-to-reel: 140°C for 1 min

Clean-up solvent

Ethylene diacetate or Methyl propasol acetate

Typical Properties on 127µm polyester film

Test	Properties
Abrasion Resistance, Pencil Hardness (ASTM D3363-74) [H]	3
Soldering	Not Recommended

Information in this datasheet shows anticipated typical physical properties for Micromax™ 1908 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 and handling

For Safety and Handling information pertaining to this product, read the Safety Data Sheet (SDS).

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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