

## PRODUCT DESCRIPTION

Mateprincs SRCE-001 is a carbon based resistive ink for screen printing. It is suitable for printing on plastic substrates.

It is specifically formulated to be used as a working electrode in electrochemical sensors applications.

## PRODUCT BENEFITS

- Excellent adhesion to plastic substrates
- Good compatibility with other conductive inks
- Stable over time
- Good definition

## PROCESSING

### Screen Printing equipment

- Manual
- Semi-automatic

### Screen type

- Monofilament polyester screen or stainless steel screen

### Recommended Screen type

- Monofilament polyester screen, threads/cm 61-130

### Recommended squeegee

Polyurethane, shore: 60-75

### Curing conditions

Static Box oven: 130°C, 20-30min

Belt furnace: 130°C, 2-3 min

### Clean-up

To clean screen and equipment use alcohols such as Ethanol or a general product for screen cleaning

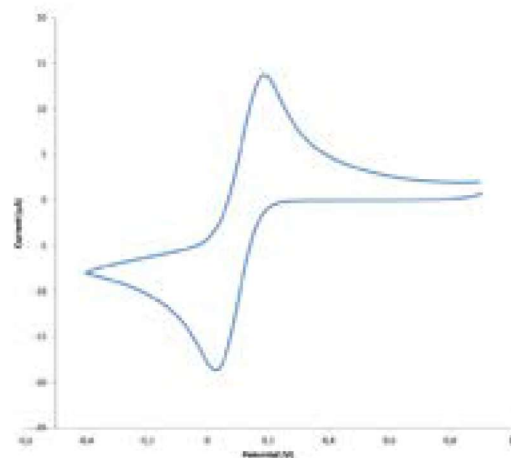
## INK PROPERTIES

### Typical properties of uncured ink

|  |              |
|--|--------------|
| Solids Content, %                                    | 29.5-31.2    |
| Density, g/cm <sup>3</sup>                           | 1.63         |
| Viscosity, cP, (rheometer, 23°C), 100s <sup>-1</sup> | 9,500-13,000 |

### Typical properties of cured ink

|  |           |
|--|-----------|
| Adhesion, UNE EN ISO 2409  | 0-1       |
| Resistivity, mΩ·cm   | 200       |
| Abrasion resistance, UNE EN ISO 15184 (Pencil Hardness, Scratch) | 7 H       |
| Excellent as an electrochemical sensor                           | See chart |

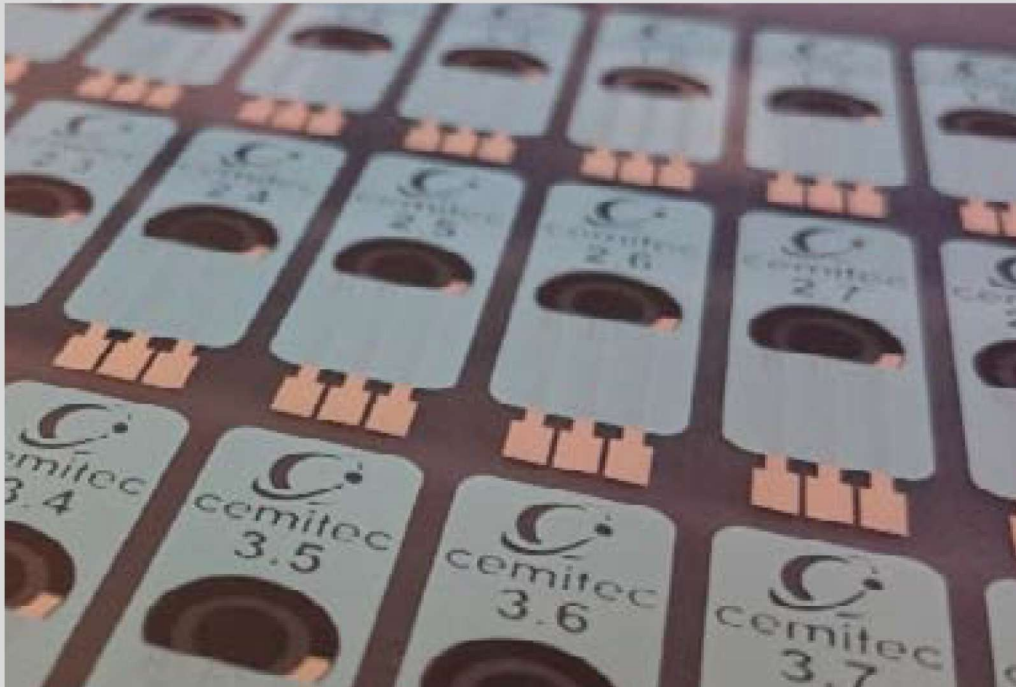


## STORAGE AND SHELF LIFE

Store the product in an unopened container in a dry location at room temperature (25°C). Avoid high temperatures and freezing. The ink shelf-life for an unopened container is 6 months from the date of shipment. Some settling may occur and the ink should be mixed thoroughly prior to use.

## SAFETY AND HANDLING

For safe handling information on this product, consult the Material Safety Data Sheet, (MSDS)



## DISCLAIMER

All the information provided in the technical data sheet including the eventual recommendations for use and the applicability of the product are based on our test results carried out by our technical team and we believe them to be accurate and reliable. We cannot make any warranty or representation express or implied, now or hereafter, as to the marketability, merchantability or fitness for use or for a particular purpose of any of the products. Furthermore we cannot assume any responsibility from any third party use, studies or applications as we have no control over their methods. In any case, and in the event that we would have to legally assume any responsibility related to our products, such responsibility will be limited to the amount paid by the client for the products.