PRODUCT INFORMATION SHEET

C2070424P2
Carbon Mediator Paste

PRODUCT DESCRIPTION
This carbon-graphite mediator paste is designed to be used for screen printing working electrodes. These electrodes when used in conjunction with specific oxidase type enzymes, enable the detection of many analytes.

Product Benefits
This carbon-graphite mediated paste has been optimised to give superior electrochemical performance. The paste contains Prussian Blue, a mediator that makes the electrodes specific to hydrogen peroxide \((\text{H}_2\text{O}_2)\) detection at potentials near 0V vs. Ag/AgCl reference electrode. Electrodes printed using this paste should be used in a Dynamic stirred solution or in a Flow Injection Mode.

PROCESSING
Screen Printing Equipment
Semi-Automatic, manual

Ink Screen Life
>3 hours

Screen Types
Stainless steel, polyester, mesh 156-230 tpi

Typical Drying Conditions
Dry at 60°C for 30 minutes or 80°C for 10-15 minutes in a box oven.

Clean Up Solvent
Ethoxy Propanol

Substrate
Polyester, PVC, Polycarbonate or ceramic.

Storage
The product should be kept sealed, in its container, and stored at room temperature (20°C)

Shelf Life
In a sealed container, stored correctly, the shelf life is minimum 6 months from despatch.

PHYSICAL PROPERTIES

<table>
<thead>
<tr>
<th>Solids Content at 130°C</th>
<th>42 – 43 %</th>
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</thead>
<tbody>
<tr>
<td>Viscosity</td>
<td>Haake RS1 C20/2º TiL at 230 sec(^{-1}) at 25°C.</td>
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<tr>
<td>Coverage</td>
<td>Using a 230 mesh stainless steel screen</td>
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<tr>
<td>Sheet Resistivity</td>
<td>Printed through 230 stainless steel mesh with 13micron emulsion</td>
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<tr>
<td>Cured Thickness</td>
<td>Printed through a 230 stainless steel mesh with 13micron emulsion</td>
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SAFETY AND HANDLING
These pastes are intended for industrial use by trained personnel. It is important for workers to avoid overexposure to chemicals contained in these products.

Read the Material Safety Data Sheet (MSDS) and product labels before using the products.

Keep product container closed when not in use to prevent solvent evaporation and spilling hazard.

Issued by Gwent Group Nov 2018
Issue 9