PLUS 2000
High Quality, Pigmented Aqueous Emulsion

DESCRIPTION
PLUS 2000 is a high quality, 34% solids, pigmented aqueous emulsion of water dispersible polymers and monomers, supplied with diazo powder sensitiser.

APPLICATIONS
• PLUS 2000 is resistant to solvent and radiation curing inks.
• PLUS 2000 is particularly recommended for applications where rapid stencil production and wide processing latitude is required, along with good print durability, print quality, and easy removal after printing.

SENSITISING OF EMULSION
Handle the direct emulsions under yellow fluorescent tubes or low wattage Tungsten light. This emulsion is supplied as a two pack kit comprising the emulsion and powder sensitiser in a sachet. Prior to sensitising read the Safety Data Sheet.
Mix the two components as follows:
1. Cut the powder diazo sachet open using a pair of scissors (DO NOT OPEN WITH TEETH).
2. Add the powder diazo sensitiser DIRECTLY to the emulsion (DO NOT DISSOLVE THE SENSITISER IN WATER OR ADD ADDITIONAL WATER TO THE EMULSION).
3. Stir thoroughly for approximately 2-3 minutes to ensure emulsion is sensitised throughout. Allow the emulsion to degas for approximately 12 hours for 4 litres (1 gallon).

MESH PREPARATION
<table>
<thead>
<tr>
<th>Material</th>
<th>Cleaner/Solvent</th>
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<tbody>
<tr>
<td>Unused Polyester</td>
<td>Alkemi Autoprep Gel and Alkemi Universal Mesh Prep or Alkemi Degreaser Concentrate</td>
</tr>
<tr>
<td>Used Polyester</td>
<td>Alkemi Universal Mesh Prep or Alkemi Degreaser Concentrate</td>
</tr>
<tr>
<td>Stainless Steel</td>
<td>Alkemi Universal Mesh Prep or Alkemi Degreaser Concentrate</td>
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COATING & DRYING
Stand the screen on edge, angled away from the operator and, using a good quality coating trough, proceed as follows:
1. Apply 2 coats to the print of the screen
2. Apply 2 coats to squeegee side
3. The screen should be dried horizontally, squeegee side up and stored under dark or yellow light conditions. Dry the screen at a maximum temperature of 30°C (86°F).
4. Additional coatings may be applied to the underside of the screen with intermediate drying.

WARNINGS
Emulsion: May produce an allergic reaction
Sensitiser: Harmful if swallowed
EXPOSURE

CORRECT EXPOSURE IS ESSENTIAL FOR OPTIMUM STENCIL PERFORMANCE. UNDEREXPOSURE WILL GIVE A WEAK STENCIL AND REDUCE RESISTANCE.

Remove dust from the surface of the stencil and tape positive in position using Alkemi Anti-Dust Cloths. Place entire screen in a suitable vacuum frame and expose. We recommend use of the Alkemi Exposure Calculator for test exposures to ascertain correct timing.

EXPOSURE TIME (MINUTES)

<table>
<thead>
<tr>
<th>LAMP</th>
<th>DISTANCE</th>
<th>MINUTES</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>2kW metal halide</td>
<td>120 cm</td>
<td></td>
</tr>
<tr>
<td>3kW metal halide</td>
<td>120 cm</td>
<td></td>
</tr>
<tr>
<td>5kW metal halide</td>
<td>120 cm</td>
<td></td>
</tr>
<tr>
<td>125W mercury vapour</td>
<td>50 cm</td>
<td></td>
</tr>
<tr>
<td>UV fluorescent tubes</td>
<td>10 cm</td>
<td></td>
</tr>
</tbody>
</table>

WASHOUT & DRYING

Washout the screen from both sides with a strong spray of water. Continue the washout until all parts of the image appear clean and sharp. Blot off surplus moisture with newsprint or a leather and dry at a maximum temperature of 30°C (86°F).

Spot out blemishes with sensitised emulsion (for water-based inks) or Alkemi Blue Block, Green Block or Ruby Block (UV or solvent based inks).

STENCIL REMOVER

Remove ink from the screen, with Alkemi Screen Cleaner. Apply the Stencil Remover Concentrate with the Alkemi Brush to both sides of the screen. Leave it on for 2-4 minutes. The stencil can then be removed with a strong water jet or high pressure washer. If a stain or ghost image remains, use Alkemi Haze Remover HV or Alkemi Autohaze.

FIRE PRECAUTIONS

The sensitiser powder will burn liberating toxic oxides of nitrogen. If burning extensively, breathing apparatus should be worn. Fires may be extinguished with water or foam.
**SPILLAGE**

Diazo sensitiser should be collected for authorised chemical disposal. The emulsion may be flushed to waste with extensive dilution. Large spillage should be absorbed in sand or sawdust and transferred to a safe area for disposal.

**FIRST AID**

**Eyes:** Irrigate with water for 15 minutes. Get medical advice.  
**Skin:** Wash thoroughly with soap and water.  
**Ingestion:** Wash out mouth. Administer emetic. Get medical attention.

**SHELF LIFE & STORAGE**

The unsensitised emulsion and sensitiser should be stored between 3° and 20°C for optimum shelf life. Shelf life is 24 months.

**ENVIRONMENTAL**

This product is a mixture of water dispersible pigmented polymers. The polymers are polyvinylalcohols and/or plasticised polyvinylacetate with an insoluble pigment and surfactants. This product does not contain any materials regarded as ecotoxic or contained on the EC Black/Grey lists. Tests have shown no inhibition of activated sludge at typical effluent concentrations and the product may be regarded as drain safe and biodegradable.

**DISPOSAL**

Small quantities can be washed to foul waste. Larger quantities should be disposed of by an authorised industrial waste chemical contractor. Emulsion EWC Code: 08 04 08. Sensitiser EWC Code: 07 07 99.

**PACKAGING**

PLUS 2000 is sold in sealed plastic containers. Trade packs of 6 x 1 Litres, 4 x 4 Litres, 1 x 200 Litres.
SAFETY & WARNING

MacDermidConnect recommends 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 from MacDermidConnect

WASTE TREATMENT

Prior to using any recommendations or suggestions by MacDermidConnect 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 precedent.

CONTACT INFORMATION

To confirm this is the most recent issue, please contact MacDermidConnect

<table>
<thead>
<tr>
<th>North America</th>
<th>Europe</th>
<th>Asia</th>
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<tr>
<td>777 108th Ave NE Suite 1750&lt;br&gt;Bellevue WA 98004&lt;br&gt;+1 888-910-1008&lt;br&gt;<a href="mailto:orders@macdermidconnect.com">orders@macdermidconnect.com</a></td>
<td>Weg der Verenigde Naties 1&lt;br&gt;3527 KT, Utrecht NL&lt;br&gt;+31 (0) 304 100 530&lt;br&gt;<a href="mailto:orderseu@macdermidconnect.com">orderseu@macdermidconnect.com</a></td>
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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.

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