**DESCRIPTION**

PLUS 7000 is a high quality Multi-purpose Dual-cure photo-emulsion, 34% solids, pigmented aqueous emulsion of water dispersible polymers and monomers, supplied with Diazo powder sensitiser.

Applications Resistance to a wide range of water-based, solvent, UV curable and co-solvent ink systems, makes PLUS 7000 a suitable direct photo-emulsion for most screen-printing applications.

PLUS 7000 is particularly recommended for applications where good print durability, print quality and easy removal after printing is required.

READ ENTIRE TECHNICAL DATA SHEET BEFORE USING THIS PRODUCT.

**FEATURES & BENEFITS**

- Very high print quality, 34% solids.
- Deep blue/green colour provides excellent colour contrast without compromising see-through.
- The Diazo dual-cure photochemistry used provides exceptional resistance to solvent-based, water-based and UV curable inks.
- The good water resistance also means that PLUS 7000 can be used in areas of high humidity with no softening.
- Although universally resistant PLUS 7000 can also be decoated using Alkemi Autostrip and Stencil Remover Concentrates.
- Excellent print definition and resolution, very tough.
- An excellent choice for high quality graphics such as nameplates, overlays, membrane switches, POP, Decals, 4 colour process, gradations and more.

**WORKING INSTRUCTIONS**

**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 de-gas for approximately 12 hours for 4 liters (1 gallon).

By MacDermid Graphics Solutions
WORKING INSTRUCTIONS - CONTINUED

Mesh Prep
New polyester/nylon
Used polyester/nylon & Stainless Steel
Stainless Steel
Alkemi Autoprep Gel and Alkemi Universal Mesh Prep
Alkemi Universal Mesh Prep or Alkemi Degreaser Concentrate
Alkemi Universal Mesh Prep or Alkemi Degreaser Concentrate

Coating & Drying
Using a good quality coating through, proceed as follows:

1. Apply 2 coats to the print side 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.

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. 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 times below should be used as a guide:

Exposure Time

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<th>LAMP</th>
<th>DISTANCE</th>
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<tr>
<td>2kW metal halide</td>
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<td>125W mercury vapour</td>
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<td>UV fluorescent tubes</td>
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WORKING INSTRUCTIONS - CONTINUED

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 Removal

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.

SHELF LIFE & STORAGE

The unsensitised emulsion and sensitiser should be stored between 5 to 20°C (41 to 68°F) for optimum shelf life.

The shelf life is 24 months for unsensitised emulsion and 4 to 6 weeks once sensitised.

PLUS 7000 is supplied in trade packs of 6 x 1 Litres, 4 x 4 Litres, 1 x 20 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

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<thead>
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<th>Region</th>
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</tr>
</tbody>
</table>

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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