

PLUS 9000 Data Sheet

One Pot Photopolymer Textile Emulsion

PRODUCT DESCRIPTION

PLUS 9000 is a red, SBQ-based photopolymer direct emulsion. It has been formulated specifically for the production of photostencils used for screen printing garments. PLUS 9000 is a very high solids, fast exposing emulsion and is intended for use with garment printing inks that do not contain water.

FEATURES & BENEFITS

<i>Feature</i>	<i>Benefit</i>
One pot system	No Diazo sensitiser mixing required
Excellent coating quality	Less retouching required
Very fast exposure	Short exposure times even with a low powered UV light
Very high solids	Fewer coats required and fast drying times
Wide exposure latitude	Easy to use
Good print quality	Excellent for line, tint and halftone printing
Easy to decoat	Screen cleaning times are reduced
Ultra thick stencils can be made up to 300 microns	Ultra thick stencil can easily be produced for printing high build and 3D inks

APPLICATIONS

PLUS 9000 is designed for printing any garments that use the following inks:

- Platisols that do not contain water.
- Puff and other expanding inks that do not contain water.

NOTE: For very rigorous garment printing applications such as belt printing, water-based ink printing, or with discharge inks, we recommend the use of PLUS 6000 textile emulsion.

WORKING INSTRUCTIONS & SAFE HANDLING

Unlike conventional diazo sensitised emulsions, **PLUS 9000 does not require sensitising prior to use.**

Mesh Preparation

Unused polyester/nylon
 Used polyester/nylon

Autoprep Gel and Universal Mesh Prep
 Auto Degreaser Concentrate/Universal Mesh Prep

Coating & Drying



PLUS 9000 is a very high solids content emulsion and, as such, is intended for coarse mesh counts, preferably below 90 threads/cm (230/inch). 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 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.

For information on coating ultra thick stencils go to www.macdermidautotype.com – How To Guide to coating PLUS emulsions

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. Use the Exposure Calculator to determine the optimum exposure for each mesh count used. The following is a rough guide to exposure time:

Exposure Time (seconds)*

LAMP	DISTANCE	0	20	40	60	80	100	120	140	160	180
2kW metal halide	120 cm										
3kW metal halide	120cm										
5kW metal halide	120cm										
125W mercury vapour	50cm										
UV fluorescent tubes	10cm										
Thorn Graph X	120cm										

* Based on 2+2 coating on 43/cm (110/inch) white monofilament polyester mesh.

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. Dry at a maximum temperature of 30°C (86°F).

Stencil Removal

Remove ink from the screen with Autosolve Textile Screen Wash. Apply Autostrip to both sides of the screen. Leave standing for 5 minutes and then rinse off the chemistry with a low pressure spray. The stencil can then be removed with a strong water jet or high pressure stripper. If a stain or ghost image still remains, use Autokleen Plus.

HAZARDS

The emulsion is non-classified, and there are no hazards associated with the normal use of this product. However, the product contains a biocide, which may produce an allergic



reaction in some individuals. Splashes in the eyes may be irritating and very sensitive skin may need to be protected. Wear gloves and goggles as appropriate.

FIRE PRECAUTIONS

Non flammable.

SPILLAGE

Flush with water.

FIRST AID

Eyes: Irrigate with water for 10 minutes.
Skin: Wash thoroughly.
Ingestion: Dilute with water and get medical advice.

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.

SHELF LIFE & STORAGE

The emulsion should be stored between 3° and 20°C. Shelf life is 24 months when stored as recommended. Storage at higher temperatures will reduce shelf life.

PACKAGING

PLUS 9000 is sold in sealed plastic containers.
Trade packs of 6 x 1 Litres, 4 x 4 Litres, 1 x 200 Litres.

Revised: Jan 2014

Note – All data contained herein is based upon limited testing of pre-production material and should not be taken as representative of the eventual mass produced product.

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January 2007

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