SP-3000

PRODUCT TECHNICAL DATA SHEET

APPLICATIONS

Diazo emulsion for Industrial printing of UV or Solvent based ink systems.

PHYSICAL PROPERTIES

- · Light green colored Diazo Emulsion
- For use with UV and hot solvent based ink systems.
- · Virtually pin hole and fish eye free.
- · Extremely durable on press.
- Good solvent resistancy for:
 Toluene, Acetone, Ethyl Acetate,
 Butylcellosolve, Butylacetate, Cyclohexane, Methyl Cellosolve, Isophoron,
 Ethylene Glycol Dimethyl Ether, Methyl Ethlyl Ketone (MEK), Butyl Carbitol Butyl Carbitol Acetate.
- Outstanding resolution and definition properties, reclaims easily.
- · 24.5% solids content

HANDLING

Handle under yellow safe lights. Avoid exposure to sunlight, flourescent and incandescent lights.

SENSITIZING

Mix the sensitizer according to the instructions on the bottle. Pour the entire solution into the emulsion and mix thoroughly. To reduce air bubbles let the emulsion stand for two hours (preferably overnight) before using.

MESH PREPARATION

It is important to remove any contamination, residual inks, cleaning chemistry, or general dirt and dust. Murakami 701 Haze/Ghost Remover (a non-caustic water soluble liquid) will remove residual ink and/or emulsion. Murakami 801 Screen Degreaser will help eliminate any further contaminants. Completely dry the screen before coating.

COATING PROCEDURE

- Use a clean dry coating trough that has a nick free surface for smooth coating.
- Apply one coat of emulsion to the print side. Rotate the frame 180 degrees and apply one or two coats of emulsion to the squeegee side.
- Additional coats may be added to the print side if thicker stencils are required.

DRYING

Dry the coated screen horizontally with the print side down in a clean light safe area. The following will help to ensure complete drying:

- 86° to 104° degrees F (30° to 40° C)
- 30% to 50% relative humidity
- · Good air circulation

The use of a screen drying cabinet with heated airflow can help in maintaining these conditions.







EXPOSURE

Clean the film positives and vacuum frame glass prior to exposure to minimize pinholes. Exposure is affected by mesh color, emulsion type, coating thickness, lamp type and the age of the bulb itself. For best results use an exposure calculator to determine the correct exposure time. It is important that a lamp designed for exposing screen printing emulsions is utilized.

Note: The use of film positives that are either frosted or have weak black density can reduce resolution and definition qualities of the coated screen.

Mesh/Inch	Color	Seconds
150	W	150-180
250	Υ	180-210
300	Υ	120-150

Note: All exposure times listed above are suggested times using a 3KW Metal Halide lamp at a distance of 40".

WASHOUT

Gently spray both sides of the screen with lukewarm water, wait a few seconds to allow emulsion to soften then wash print side of screen until image is fully open. Rinse both sides thoroughly and dry. The use of a drying cabinet or fans is recommended to dry the screen.

RECLAIMING

- Use Murakami 507 Screen Cleaner to remove all excess ink from the frame.
- Remove the emulsion with Murakami 601, 605, or a solution of Strip Super-P. Rinse thoroughly.
- Use Murakami 701 to remove haze and ghost if required.
- Degrease with Murakami 801, rinse both sides thoroughly and let dry.

STORAGE AND HANDLING

Store the emulsion in a cool dry area. Unsensitized emulsion has a shelf life of at least one year when stored at room temperature.

Use the sensitized emulsion within 2-3 weeks for best results.

Coated screens may be stored for up to one month when kept under the following conditions.

- 59° to 77° degrees F (15° to 25° C)
- 30% to 50% relative humidity









