# MSP-2 PRODUCT TECHNICAL DATA SHEET

## **APPLICATIONS**

Premium Pure Photopolymer emulsion for stainless steel wire mesh. For commercial and industrial graphic printing, close tolerance imaging and electronic circuits.

## PHYSICAL PROPERTIES

- Turquoise colored PVA-SBQ Pure Photopolymer Direct Emulsion
- · Pre-sensitized for immediate use
- Fast exposures, 3-5x faster than diazo based emulsions
- Excellent for use with UV, solvent based and textile ink systems
- · Virtually pin hole and fish eye free
- · Extremely durable on press
- Outstanding resolution and definition of fine lines and halftones
- 42% solids content

### **HANDLING**

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

#### **SENSITIZING**

This PVA-SBQ emulsion is ready to use. There is no need to add sensitizer.

#### **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 or two coats 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.

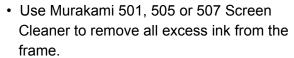
| Mesh/Inch | Color | Seconds   |
|-----------|-------|-----------|
| 125       | Wire  | 5 - 6 min |
| 200       | Wire  | 60-90     |
| 300       | Wire  | 40-70     |

**Note:** All exposure times listed above are suggested times using a 5KW 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.





- 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 Murakami PVA-SBQ emulsion within one year 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



