# Z

# PRODUCT TECHNICAL DATA SHEET

# **APPLICATIONS**

Premium all purpose Capillary Film for graphics, textile, electronics, and compact disc printing.

# **PHYSICAL PROPERTIES**

- Light blue colored Capillary Film System
- Available in thicknesses from 15 to 100 microns
- Excellent for use with UV, solvent-based, and textile ink systems
- Outstanding resolution and definition of fine lines and halftones
- Extremely durable on press
- Pin Hole and Fish Eye free.
- Adhere with water or One Pot Sol-C Emulsion as the adhering liquid

# HANDLING

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

## **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**

- Place the film on a build up board with the emulsion side up. The build up board should be slightly smaller than the inside of the frame.
- Place the screen, squeegee side up, on top of the film.
- At this stage you can either use a spray bottle with water or direct emulsion to adhere the film.

#### WATER

- Spray water from the bottle liberally onto the screen.
- Remove excess water with a 60-70 durometer squeegee.

#### EMULSION

- Place a piece of masking tape just above and below the film on the squeegee side of the frame.
- Pour a bead of One Pot Sol-C Emulsion on the top piece of tape
- Use a 60 to 70 durometer squeegee to draw the emulsion across the film from tape to tape two times.

# 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.

MS-Film	Mesh/Color	Time/Sec
MS-15	350 & Finer Y	15
MS-20	250-390 Y	25
MS-30	225-350 Y	35
MS-40	135-200 Y	40
MS-50	110-160 W	45
MS-80	60-86 W	90
MS-100	40-86 W	120

**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.

# RECLAIMING

- Use Murakami 501, 505 or 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 film in a cool dry area. MS-Film has a shelf life of approximately three years. One Pot Sol-C emulsion has a shelf life of at least one year.

Coated screens may be stored for up to two weeks when kept under the following conditions:

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

#### **CUSTOM CUT SHEETS**

200 Sheet minimum for less than 144 sq.in.100 Sheet minimum for 144 sq.in. and up.Please contact your local Murakami Dealerfor price and availability on any size cut sheets.



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