

EZcoat SAPHIRE

APPLICATIONS

Pure Photopolymer emulsion for Plastisol textile ink systems.

PHYSICAL PROPERTIES

- Blue 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 Plastisol
- Virtually pin hole and fish eye free
- Extremely durable on press
- Outstanding resolution and definition properties
- 42% solids content

HANDLING

Handle under yellow safelights. Avoid exposure to sunlight, fluorescent 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. A haze/ghost remover will remove residual ink and/or emulsion. A 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
86	W	50-60
110	W	45-55
200	Y	45-50
300	Y	35-40
350	Y	25-30

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 ink remover to remove all excess ink from the frame.
- Remove the emulsion with emulsion remover and rinse thoroughly.
- Use a haze remover to remove haze and ghosting if required.
- Degrease with screen degreaser, rinse both sides thoroughly and let dry.

STORAGE AND HANDLING

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

Use EZcoat SAPPHIRE 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

