Aquasol-HS

PRODUCT TECHNICAL DATA SHEET

Aquasol HS
Aquasol HS
AquasolHS
Aquasol HS

APPLICATIONS

Pure Photopolymer emulsion for creating thick stencils for high density or gel inks.

PHYSICAL PROPERTIES

- Light red colored PVA-SBQ Pure Photopolymer Direct Emulsion.
- Pre-sensitized for immediate use
- Fast exposures, 3-5x faster than diazo based emulsions
- Excellent for building up thick stencils even when coated wet onto wet.
- Virtually pin hole and fish eye free
- Extremely durable on press
- Suitable for use with high density, gel, puff, and plastisol inks where thick ink deposit is required.
- Outstanding resolution and definition properties
- 42% solids content

HANDLING

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

SENSITIZING

SBQ photopolymer 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 dent free surface for smooth coating.
- Apply one coat of emulsion to the print side, then apply 1 or more coats to squee-gee side wet onto wet, no drying between coats is needed. Use dull side of coater.
- Coat slowly by hand, or the following chart gives stencil thicknesses using an auto coater.

Coating Pattern	Print Trough Pressure	Squeegee Trough Pressure	Carriage Speed	Dwell Time	Dry Screen Thickness
1+1	2.4 Bars	2.1 Bars	50	4	95 Microns
1+2	2.4 Bars	2.1 Bars	50	4	135 Microns
1+3	2.4 Bars	2.1 Bars	50	4	218 Microns
1+4	2.4 Bars	2.1 Bars	50	4	273 Microns
1+5	2.4 Bars	2.1 Bars	50	4	335 Microns

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
- Strong air circulation

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

MU-COM MURAKAMI

MURAKAMI SCREEN USA, INC. 745 Monterey Pass Rd. Monterey Park, CA 91754
TEL: 323.980.0662, FAX: 323.980.0659 www.murakamiscreen.com

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 devloped screen.

Expose HS Emulsion as follows:

1 Minute per 100 mIcrons of stencil thickness. See previous page for approximate thickness values using an auto coater, hand coating thickness may vary depending on speed coater angle and pressure used.

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 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

SPECIAL APPLICATIONS

Aquasol HS is designed to create thick stencils. It can be coated wet onto wet up to 5 times and achieve a 335 micron thick stencil. Additional coats can be added after drying to increase thickness, make sure to dry between coats.

MU-COM MURAKAMI

MURAKAMI SCREEN USA, INC. 745 Monterey Pass Rd. Monterey Park, CA 91754
TEL: 323.980.0662, FAX: 323.980.0659 www.murakamiscreen.com