



# Aquasol - HV

PRODUCT TECHNICAL DATA SHEET



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## APPLICATIONS

Pure Photopolymer emulsion for Plastisol Discharge and Water-based 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, Discharge and Water-based ink systems
- Virtually pin hole and fish eye free
- Extremely durable on press
- Suitable for use with water based inks when hardened with Murakami Hardeners
- 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. 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.



**MURAKAMI**

**MURAKAMI SCREEN USA, INC.** 745 Monterey Pass Rd. Monterey Park, CA 91754

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## 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 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. Un-sensitized 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

Suitable for use with water based and discharge inks when hardened with Murakami Hardener and/or Hardener A&B. Stencils treated with Hardener A&B will not be reclaimable.

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## MATERIAL SAFETY DATA SHEET

Date Prepared/Revised: April 5, 2006

### I. PRODUCT IDENTIFICATION

Trade Name (as labeled): AQUASOL-HV  
MANUFACTURERS NAME:  
MURAKAMI SCREEN U.S.A., INC.  
745 Monterey Pass Road  
Monterey Park, CA 91754  
PHONE NUMBER: 800-562-3534

### II. HAZARDOUS INGREDIENTS

	CAS NO.	% RANGE
Vinyl Acetate	108-05-4	0.3-0.6%

All ingredients of this product are listed under the TSCA INVENTORY

### III. HEALTH HAZARD INFORMATION

#### TOXICOLOGY

Threshold Limit Volume: Vinyl Acetate: 10 PPM (2001 ACGIH TWA)

Inhalation: Excessive exposure may cause irritation to upper respiratory tract. A single prolonged exposure is not likely to be hazardous. Signs and symptoms of excessive exposure may be to the central nervous system.

Skin Contact: Excessive exposure may cause minor irritation.

Eye Contact: May cause eye irritation. May cause moderate corneal injury.

### IV. FIRST AID PROCEDURES

Never give fluids or induce vomiting if patient is unconscious or having convulsions. Medical conditions aggravated by exposure may be pre-existing skin or other physical conditions.

Ingestion: Induce vomiting if large amounts are ingested. Contact a physician.

Eye: Flush with flowing water immediately and continuously for at least 15 minutes. Contact a physician if irritation persists.

Skin: In case of contact, immediately flush skin with plenty of water and remove contaminated clothing and shoes. Contact a physician if irritation persists. Wash clothing before reuse. Destroy contaminated shoes.

Inhalation: None

NOTE TO PHYSICIAN: No specific antidote. Supportive Care: Treatment based on judgment of the physician in response to the reactions of the patient.

## **V. SPILL, LEAK, AND DISPOSAL PROCEDURES**

**AQUASOL-HV**

Steps to be taken in case of spills or leaks:

Spillage should be contained by, and covered by large quantities of sand, earth, or similar absorbent material, then brushed in vigorously to assist absorption. The mixture can then be collected with a plastic shovel into drums or plastic bags or containers and removed for disposal. Prevent from flowing into ground or surface water.

Disposal: Follow all relevant regulations for disposal. Check with your local authority.

Storing: Store closed containers in a well ventilated area. Do not store in sunlight and ground all equipment.

NOTE: Dispose of all waste material in accordance with federal, state, and local authorities.

## **VI. PHYSICAL PROPERTIES**

Specific Gravity @ 77°F (25°C): 1.1 g/cm<sup>3</sup>                      Boiling Point: 100°C  
Viscosity @ 77°F (25°C): 7000-11000 mPa s              pH Value: 4.0-6.0  
Appearance and Odor: Blue liquid with mild odor.

## **VII. FIRE AND EXPLOSION**

Flash Point / Method: Not Flammable

Appropriate Extinguishers: Use water spray, foam, dry chemical, and CO<sub>2</sub>.

## **VIII. REACTIVITY DATA**

Stability: Stable under normal conditions.

Conditions to Avoid: Heat and exposure to sunlight.

## **IX. SPECIAL HANDLING PROCEDURES**

Ventilation and engineering controls: None required. Local exhaust ventilation may be necessary for some operations.

Respiratory Protection: None required under normal conditions. If respiratory irritation is experienced, use an approved respirator. Use an approved self contained breathing apparatus if emergency conditions occur.

Eye Protection: Use safety glasses.

Gloves: Use vinyl or other protective gloves to prevent skin contact.

Storage: Protect from freezing.

## **X. REPORTING REQUIREMENTS AND ADDITIONAL INFORMATION**

HIMS Code System Rating: Health 1; Flammability 0; Reactivity 0.

NFPA 704 Code System Rating: Health 0; Flammability 0; Reactivity 0.

Volatile Organic Compound (VOC): None.

Contains no carcinogen or petroleum hydrocarbons.

Note: Information herein is given in good faith and accurate to the best of our knowledge. No warranty is given, expressed, or implied.