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MICRO-LINE E-20 DUAL CURE EMULSION

Alpha E-20 emulsion at 500 x Magnification. Microphotography supplied by Chromaline Labs™ Chromaline's latest Alpha E-20 emulsion coated 1 x 4 on 400 stainless steel mesh.

## **ALPHA™ E-20 KEY FEATURES**

- 20-Micron lines and spaces
- Micro particle size enables clean, sharp edges
- Sharpest stencil edges and smoothest stencil walls allow for a cleaner release of inks
- Superior mesh bridging eliminates scalloping/sawtoothing
- Largest window of exposure latitude
- We do not recommend polyester mesh.

#### **SPECIFICATIONS**

Appearance: Blue Solids: 33.56% (Sensitized) Viscosity: 7,000 cps (Sensitized) Standard Sizes: Quart, Gallon

#### SAFETY AND HANDLING

Avoid contact with skin and eyes. Refer to SDS for further information.

#### **APPLICATIONS**

Screenprinting ultra-fine patterns of solvent-based and UV-curable silver and carbon conductive inks.

#### STORAGE

**Sensitized Alpha E-20** emulsion has a shelf life of 4 weeks at room temperature (60 to 80°F) or longer when refrigerated. To maximize sensitized shelf life use only distilled water to dissolve diazo sensitizer. **Protect from freezing.** Alpha E-20 is not freeze/thaw stable. Freezing during shipping may result in clear gel spots which may resemble pinholes.

**Coated, unexposed screens** can be stored as long as one month in a clean, cool, dry and completely dark area.

**Expiration date.** Always check the expiration date on sensitizer bottle to assure freshness.



#### **Chromaline Screen Print Products**

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#### **USER'S GUIDE**

# **ALPHA<sup>™</sup> E-20**

### INSTRUCTIONS

#### DEGREASE

Using Degreaser 260 mesh degreaser, work up a lather on both sides of mesh. Flood screen and frame thoroughly with water, then dry. (Note: We highly recommend the use of mesh Degreaser 260 for all mesh types, especially stainless steel.)

#### ΜΙΧ

Mix emulsion and sensitizer according to instructions on bottle. FOR OPTIMUM RESULTS: Mix sensitizer into emulsion using a high-speed dispersers blade. Mix 3-5 minutes at 1,500 - 2,000 rpm. Let mixed emulsion stand until excess bubbles have dissipated. Recommend



high-speed dispersers blade

filtering diazo solution to maintain cleanliness.

#### COAT

Fill scoop coater with room temperature emulsion. Slowly apply first coat to print side. Then coat squeegee side with one to three coats depending upon thickness required. If thicker stencil is required, additional coats may be applied to print side after initial drying of stencil. Be sure to dry thoroughly between coats.

#### DRY

Thoroughly dry screen in horizontal position, print side down, using a dark, clean drying cabinet. Temperature should not exceed 110°F (43°C).

#### EXPOSE

Place emulsion side of photopositive in contact with print side of screen.

#### DEVELOP

Gently spray both sides of screen with tepid water, wait 30 seconds then gently wash print side of the screen until image is fully open. Rinse both sides thoroughly. Dry screen completely and you are ready to print. We recommend a air-assisted water mist for micro-line development.

#### RECLAIM

Apply Chroma/Strip<sup>™</sup> screen reclaimer to both sides of screen. Scrub area to be reclaimed with a stiff nylon brush to ensure entire surface is wet and let it work a few moments until stencil begins to dissolve. Remove stencil residue with pressure washer, then rinse with water, thoroughly flooding screen and frame.

#### **EXPOSURE GUIDELINES**

Refer to the Chromaline Exposure Calculator to determine optimal exposure times. Individual exposure times may vary depending upon equipment used, bulb age, and other shop conditions.

AVOID FAILURE: Dual cure emulsions have a very wide exposure latitude. Underexposed stencils often appear acceptable, but premature breakdown can occur on the press. When determining exposure speed, always overexpose your test stencil. Then, using the Chromaline exposure calculator, reduce exposure time until acceptable image quality is achieved. This will help assure good durability.

# FOR TECHNICAL SERVICE

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