



# ALPHA

MICRO-LINE E-30 DUAL CURE EMULSION

30-micron line resolved using **Alpha E-30™** direct emulsion on 400 SS. 350x Magnification.  
Microphotography supplied by Chromaline Labs™

## ALPHA E-30™ KEY FEATURES

- 30-micron lines and spaces
- Micro particle size < 2-microns
- Ideal for laminating Alpha MicroCap™ A capillary film for prolonged durability
- Ultra-high resolution on stainless mesh
- High durability with easy reclaimability
- Crisp printing of fine lines & halftones down to 30-microns

### SPECIFICATIONS

Appearance: Blue  
Solids: 28% (Sensitized)  
Viscosity: 6,000 cps (Sensitized)  
Standard Sizes: Quart, Gallon

### SAFETY AND HANDLING

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

### APPLICATIONS

Compatible with solvent and UV-based inks for manufacturing conductive traces, membrane switches, overlays, PCB ledgers, and nameplates/industrial applications.

### STORAGE

**Sensitized Alpha E-30** 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-30 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



**WARNING:** This product can expose you to chemicals including 1,4-dioxane, which is known in the State of California to cause cancer, and toluene, which is known in the State of California to cause birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

# ALPHA E-30™

## 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.)*

### MIX

Mix emulsion and sensitizer according to instructions on bottle. Let emulsion stand at least two hours before using, or until excess bubbles have dissipated. Contents may settle over long periods of time. Always stir emulsion gently before use to ensure that it is properly mixed. Filtering diazo sensitizer solution is recommended 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 face 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). Use of a dehumidifier is recommended.

### 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 an air-assisted water mist for micro-line development.

### RECLAIM

Apply Chroma/Strip™ 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.

**MESH RECOMMENDATION** Alpha E-30™ can be used with all thread counts and mesh types. When used for high-resolution micro-line imaging, we recommend stainless steel mesh.

### RECOMMENDED EXPOSURE TIMES

Bulb Type	400 SS, coated 1 x 2 8-micron EOM	380 PET, coated 1 x 2 3-micron EOM
5kw	-	8-15 units (90-146 mj/cm <sup>2</sup> )
8kw	13-15 units (640-700 mj/cm <sup>2</sup> )	5-10 units (367-538 mj/cm <sup>2</sup> )

## FOR TECHNICAL SERVICE

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