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TECHNICAL INFORMATION

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## THICKFILM STENCILS

# FOTECOAT 1837 SOLO

FOTECOAT 1837 SOLO is very thick and somewhat easier to coat than FOTECOAT 1835 SOLO. The application technology is described in the Technical Information FOTECOAT 1835 SOLO.

FOTECOAT 1837 SOLO is ready-to-use, presensitized and can be used for the production of thick stencils by the wet in wet coating method.

FOTECOAT 1837 SOLO is pink with 52% solids and a very good water resistance. Stencils made with FOTECOAT 1837 SOLO can be used for printing all types of aqueous inks and for plastisols as long as the stencil is not cleaned with aggressive solvents.

FOTECOAT 1837 SOLO can be used on polyester and steel mesh by the manual or by the machine coating. The thickness of the stencil over the mesh (EOM) depends on the number of coats applied from the squeegee side.

The following hints might be useful for the application:

### 1. Manual coating

- 2x print side, 2x squeegee side, wet in wet.
- Scrape both sides.
- Apply the number of needed coats from the squeegee side, wet in wet.

### 2. By machine

- 2x print side.
- Coat from the squeegee side only the necessary number of layers, wet in wet.

### 3. Drying

Coated screens should be dried during the first 15 minutes with print side downwards, then turn over and finish drying at 30°C maximum.

### 4. Exposure time

The following rule helps to find the correct exposure time with a 5 KW metal halide lamp at 100 operating hours and with a distance of 100 cm between vacuum frame and lamp:

- White mesh:  $1/3$  of the total stencil thickness = time in seconds
- Yellow mesh:  $1/2$  of the total stencil thickness = time in seconds
- Steel mesh: total stencil thickness = time in seconds

Total stencil thickness means mesh thickness + EOM.

It is recommended to start with a step wedge to find out the correct exposure time.

**5. Developing** (wash-out)

- Immerse the exposed stencil in warm water at 25 – 30°C.
- Afterwards only use a soft spray to wash-out the stencil openings.

**6. Decoating** (stencil removal)

- All commercial decoaters can be used. A high pressure gun is recommended.
- FOTECO offers several stencil removers:
  - FOTECHEM 2004 liquid; FOTECHEM 2005 paste;
  - FOTECHEM 2042 concentrated liquid decoater (1:30) for machine coating;
  - FOTECHEM 2048 is a more efficient liquid concentrate (1:30) for decoating;
  - FOTECHEM 2044 powder.
- Apply the decoating solution onto the squeegee side and peel off the stencil after a few minutes. Any residues can be removed by an additional application of the decoater, followed by high pressure spray.
- The longer the exposure, the better the through-curing of the stencil. If necessary make a post exposure. Both render the decoating easier.

**7. Storing**

FOTECOAT 1837 SOLO can be stored for at least 1 year. Protect the emulsion from freezing.

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