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TECHNICAL INFORMATION

Küsnacht, February 1999

# FOTECOAT 1019

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## 1. Description

- Fast, dual-cure diazo photopolymer screen process emulsion with separate diazo sensitizer powder in sachets, for co-solvent ink systems (inks containing a combination of solvents and water)
- Purple color
- High viscosity
- Short exposure time
- Ecologically sound
- Must be processed and stored at temperatures not over 20°C

## 2. Application advantages

- 40% solids content before sensitizing (approx. 36% after sensitizing)
- Can be coated wet on wet without intermediate drying to reach a flat stencil profile with a Rz-value of approximatively 7 - 8 at 10 - 12 microns
- Low odor
- Stencils made with FOTECOAT 1019 can be printed with most inks containing solvents and water

## 3. Coating technique and stencil build-up (coating trough .75 mm R)

<u>Mesh</u>	<u>Coating</u>	<u>Stencil thickness below mesh</u>
77-55 polyester monofilament	2/3	20 microns
90-48 polyester monofilament	2/3	16 microns
120-34 polyester monofilament	2/3	12 microns
150-31 polyester monofilament	2/2	6 microns

- To reach a flatter stencil surface and to lower the Rz-value to improve edge sharpness of the print, 1 or 2 additional coats can be applied after the intermediary drying cycle. Stencil thickness will increase by 1 - 2 microns and the Rz-value go down to 6 - 7 microns
- FOTECOAT 1019 is ideal for machine coating. If necessary the emulsion can be diluted with water

## 4. Stencil quality

Definition and resolution are excellent. Perfect mesh bridging is possible. After wash-out the stencil is very hard and has low swell characteristics.

## 5. Storing

- |   |              |   |
|---|--------------|---|
| - Unsensitized  | up to 1 year | } <i>age, transportation- and storing conditions influence the quality of the emulsion drastically.</i> |
| - Sensitized and stored at 20°C (pot life):               | 2 weeks      |   |
| - Pre-coated screens stored in complete darkness at 20°C: | 2 months     |   |

**Store and process FOTECOAT 1019 at temperatures not over 20°C.**

*In addition the freshness of the diazo controls the pot life.*

## 6. Exposure times

5 KW metal halide lamp at 100 cm distance; photopolymer bulb at 100 hours operating time.

<u>Stencil thickness below mesh</u>	<u>Type of mesh</u>	<u>Time in seconds</u>
6 microns	150-31 yellow	60
12 microns	120-34 yellow	75
16 microns	90-48 white	60
20 microns	77-55 white	90

For fine details a post exposure is recommended.

## 7. 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 for machine decoating and FOTECHEM 2044 powder.
- The longer the exposure, the better the through-curing of the stencil. If necessary make a post exposure. Both render the decoating easier.

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