

# FOTECOAT 1018

## Dual-Cure Emulsion for Industrial and Graphic Application

### 1. DESCRIPTION

- Unique resistance against very strong solvents and excellent printing quality
- Dual-cure photopolymer screen process emulsion with separate diazo sensitizer powder, for co-solvent ink systems
- Extraordinary print definition and resolution on any mesh
- Very good adhesion for long printing runs
- Blue colour, high viscosity
- Short exposure time
- Must be processed and stored at temperatures not over 20°C

### 2. APPLICATION ADVANTAGES

- 40% solid content before sensitizing (approx. 36% after sensitizing)
- Can be coated wet on wet without intermediate drying to reach a flat stencil profile with an Rz-value of approx 7-8 at 10-12 microns
- Stencils made with **FOTECOAT 1018** can be printed with most inks containing solvents and water
- Easy to reclaim

### 3. COATING TECHNIQUE AND STENCIL BUILD-UP (TROUGH WITH 0.75 MM R)

Mesh	Coating	Stencil Thickness over mesh
43/90 PW	1/2	20 µm
43/90 PW	1/1	20 µm
77/55 PW	1/2	15 µm
120/34 PW	1/1	4 µm

- 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 goes down to 6-7 microns.
- **FOTECOAT 1018** is ideal for machine coating. If necessary the emulsion can be diluted with water.

### 4. STENCIL QUALITY

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

### 5. STORING

The freshness of the diazo controls the pot life. Age, transportation and storing conditions influence the quality of the emulsion drastically.

Condition	Service Life
Unsensitized, 18-25°C storage	24 months
Sensitized, stored at 20 °C (pot life)	4 weeks
Pre-coated screens in total darkness at 20°C	2 months

### 6. EXPOSURE TIMES

5 kW metal halide lamp at 100 cm distance; photopolymer bulb at 100 hours operating time. For fine details a post exposure is recommended.

EOM	Type of Mesh	Time in seconds
6 µm	150/31 Y	60
12 µm	120/34 Y	75
16 µm	90/48 W	60
20 µm	77/55 W	90

### 7. STENCIL REMOVAL

All commercial decoaters can be used. A high pressure gun is recommended. Stencil removal is only possible, if the screen has not been hardened chemically.

**FOTECO** offers several stencil removers:

- **FOTECHEM 2005** Paste
- **FOTECHEM 2042 S** decoater concentrate 1:30

Ghost images can be removed with **FOTECHEM 2089**.