

# FOTECOAT 1010

## Dual-Cure Emulsion for Industrial and Graphic Application

### 1. DESCRIPTION

Fast, Diazo dual-cure emulsion for solvent based and co-solvent ink systems (ink containing a combination of solvents and water) including water based graphic arts inks and aqueous UV inks.

- Light purple color
- Medium viscosity
- Short exposure time
- Must be processed and stored at temperatures not over 20° C

### 2. DIRECTIONS

- 40% solids content before sensitizing (approx. 36% after sensitizing)
- Can be coated wet on wet without intermediate drying cycle to reach a flat stencil profile with an Rz-value of approximately 7-8 at 10-12 microns.
- Stencils made with **FOTECOAT 1010** can be printed with all ink systems containing both solvent/water or only solvents.

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

Mesh (Polyester monofilament)	Coating	Stencil Thickness below mesh
77-55	2/3	16 µm
90-48	2/3	12 µm
120-34	2/2	9 µm
150-31	1/2	6 µm

- To reach a flatter stencil surface and to lower the Rz-value to improve the 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 decrease to 6-7 microns.

- **FOTECOAT 1010** 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.
- Printing with most ink types is possible.
- For long runs with aqueous textile inks and pure water media, **FOTECOAT 1915 WR**, **FOTECOAT 1065** or **1636** are recommended.

### 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	18 months
Sensitized, stored at 20°C	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.

Stencil Thickness below mesh	Type of mesh	Time (seconds)
6 µm	150-31 yellow	45
9 µm	120-34- yellow	55
12 µm	90-48 white	40
16 µm	77-55 white	70

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### 7. STENCIL REMOVAL

All commercial decoaters can be used. A high pressure gun is recommended. The longer the exposure, the better the through-curing of the stencil. If necessary make a post exposure. Both render the decoating easier.

FOTECO offers several stencil removers:

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

### 8. HEALTH AND SAFETY

Before using, refer to appropriate Safety Data Sheet.