

FOTECOAT 1070 MATT

Dual-Cure Photopolymer Emulsion

1. DESCRIPTION

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

2. APPLICATION ADVANTAGES

- 42% solid content before sensitizing (approx. 38% 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 1070 matt** can be printed with most inks containing solvents and water.

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

Mesh	Coating	Stencil Thickness over mesh
77/55 PW	2/3	20 µm
90/48 PW	2/3	16 µm
120/34 PW	2/3	12 µm
150/31 PW	2/2	6 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 1070 matt** 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

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	8 weeks

6. EXPOSURE TIMES

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

EOM	Mesh	Time in seconds
6 µm	150/31 Y	70
12 µm	120/34 Y	50
16 µm	90/48 W	50
20 µm	77/55 W	90

7. STENCIL HARDENING

Recommended is **FOTECHEM 2119**. The hardener can be applied by the usual method. The penetrating and drying times recommended by the manufacturer should be kept to reach the best possible result.

8. 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**.