## **FOTECOAT 1070 matt**

## FOTE

## 1. DESCRIPTION

Fast, dual-cure Diazo photopolymer screen process emulsion with separate Diazo sensitizer powder, for co-solvent ink systems (inks containing a combination of solvents and water)

- Purple color
- High viscosity
- Short exposure time
- Must be processed and stored at temperatures not over 20°C

## 2. APPLICATIONS ADVANTAGES

- 42% solids content before sensitizing (38% after sensitizing)
- Can be coated wet on wet without intermediate drying to reach a flat stencil profile with a 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 (COATING TROUGH .75 MM R)

| Mesh                          | Coating | Stencil Thickness below mesh |
|-------------------------------|---------|------------------------------|
| 77-55 polyester monofilament  | 2/3     | 20 μm                        |
| 90-48 polyester monofilament  | 2/3     | 16 μm                        |
| 120-34 polyester monofilament | 2/3     | 12 μm                        |
| 150-31 polyester monofilament | 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 inter-mediary 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.

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## 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 (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

| Stencil Thickness Below Mesh | Type of Mesh  | Time (seconds) |
|------------------------------|---------------|----------------|
| 6 μm                         | 150-31 yellow | 60             |
| 12 μm                        | 120-34 yellow | 75             |
| 16 μm                        | 90-48 white   | 60             |
| 20 μm                        | 77-55 white   | 90             |

### 7. STENCIL HARDENING

Recommended is FOTECHEM 2130. 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 necessary. Stencil removal is only possible, if the screen has not been hardened chemically.

FOTECO offers several stencil removers:

- FOTECHEM 2004 liquid; FOTECHEM 2005 paste
- FOTECHEM 2042 concentrated liquid decoater (1:30) for machine decoating
- FOTECHEM 2048 is a more efficient liquid concentrate (1:30) for decoating
- 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.

- For the regeneration of the decoated mesh FOTECHEM 2080/2085 can be used to remove all ink and emulsion residues; jet wash is necessary.
- Diazo stains can be bleached out after decoating with FOTECHEM 2089.

## SAATI S.p.A.

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