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TECHNICAL INFORMATION

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## FOTECOAT 1669

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### 1. Description

- Water resistant screen emulsion with separate diazo powder sensitizer.
- Can be decoated with a high pressure water device.
- Purple with good contrast.

### 2. Application advantages

- 36% solids content before sensitizing.
- Rather high viscosity (relatively thick).
- Suitable for all inks containing water only and no solvents.
- Simple to use with good resolution and high definition.

### 3. Coating technique and stencil thicknesses below the mesh

- Because of the high viscosity of the emulsion it is recommended to let the sensitized emulsion degass during a few hours. This prevents air bubbles which could cause pinholes.
- The emulsion can be used for coating on an automatic coating machine.
- If the emulsion is too thick, additional water can be added without changing the exposure time.

<u>Mesh</u>	<u>Coating</u>	<u>Stencil thickness below the mesh</u>
43T monofilament	1/1; + 2	14 microns
43 T monofilament	2/2	20 microns
77 T monofilament	2/3	24 microns
77 T monofilament	2/5	35 microns
120 T monofilament	1/2	10 microns
120 T monofilament	2/3	16 microns
120 T monofilament	2/3; + 2	18 microns

- Coating again after an intermediate drying cycle improves the flatness of a stencil and does not increase substantially the stencil thickness. However the printing shoulders will keep contact with the substrate during the printing process; an improved printing result is achieved. For negative image printing the stencil thickness should be increased by 3 - 4 micr. compared with positive printing.

### 4. Stencil quality

- The resolution is excellent and reaches approximatively 60 microns.
- The definition is very good.
- After the wash-out the stencil is hard. It is possible to use a high pressure device for the wash-out.

- A chemical hardening by FOTECHEM 2110 is possible. The water resistance and the wearing characteristics will improve. In such a case the stencil can no longer be decoated.
- If better transparency is desired, FOTECOAT 1664 can be used. This emulsion is undyed, white, and can be used as such or be mixed with FOTECOAT 1669 to reach the needed transparency.

#### 5. **Stocking**

- Unsensitized: approximately 1 year
- Sensitized at 20°C: 2 - 3 weeks
- Pre-coated screens stored in complete darkness at 20°C: 1 week

#### 6. **Exposure times**

5 KW metal halide lamp at 100 cm distance; iron charged high pressure burner at 100 hours burning time.

<u>Coating technique</u>	<u>Type of mesh</u>	<u>Time in seconds</u>
1/2	120 T white	70
1/2	120 T dyed	140
2/3	120 T white	100
2/3	120 T dyed	160
2/3; + 2	120 T dyed	200
2/3	77 T dyed	240
2/2	43 T white	260

#### 7. **Decoating**

- Remove ink first with adequate solvent as soon as possible after printing, then decoat.
- Add 5 litres of water to 100 grams of FOTECHEM 2044 Remover Powder  
or  
use FOTECHEM 2005 Paste with brush.
- FOTECHEM 2004 Liquid is appropriate.
- Because of the hardness of the stencil the decoating medium should stand for 10 - 15 min. on the stencil before it is washed-out. Under difficult conditions the removal operation has to be repeated.
- If decoating equipment is used a higher concentrated solution is necessary.

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