

FOTECOAT 1920 K

Dual-Cure Photopolymer Emulsion

1. DESCRIPTION

- Fast, dual-cure photopolymer textile printing screen process emulsion with separate diazo sensitizer powder for direct addition.
- predominantly for aqueous ink systems.
- Light blue colour with excellent see-through
- The ready-made stencil can be post-hardened by UV-light to increase the mechanical and the solvent resistance.
- Very short exposure time
- Ecologically sound

2. APPLICATION ADVANTAGES

- 44% solid content before sensitizing
- Low viscosity, appropriate for meshes between 43/90 and 120/34 (lower viscosity than **FOTECOAT 1065** and higher than **FOETCOAT 1636**)
- **FOTECOAT 1920 K** is a water resistant emulsion that can be printed with most inks containing water and little solvents.
- A longer exposure renders the stencil more resistant against abrasion and therefore allows to print longer runs.
- decoatable
- Can also be post-hardened with **FOTECHEM 2119** if a permanent stencil for all inks is desired. In such a case the stencil can no longer be decoated.

3. COATING TECHNIQUE AND STENCIL BUILD-UP (COATING TROUGH .75MM R)

Mesh	Coating	Stencil Thickness over mesh
43/90 PW	1/1	20 µm
77/55 PW	1/2	15 µm
120/34 PW	1/1	6 µm
120/34 PW	1/2	10 µm

- It is recommended to let degas the emulsion after sensitizing during a few hours.
- **FOTECOAT 1920 K** is ideal for machine coating. If a lower viscosity is wanted, additional water can be added without changing the exposure time.

4. STENCIL QUALITY

Definition is excellent. The resolution is good. The high solid content guarantees a flat stencil surface combined with excellent mesh bridging.

5. STORING

The freshness of the diazo powder 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)	2-3 weeks
Pre-coated in total darkness at 20°C	3 weeks

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6. EXPOSURE TIMES

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

Coating	Mesh	Time in seconds
1/1	43/90 W	90
1/2	43/90 W	120
1/1	43/90 Y	135
1/2	43/90 Y	180
1/1	77/55 W	70
1/2	77/55 W	90
1/1	120/34 W	45
1/2	120/34 W	60
1/1	120/34 Y	70
1/2	120/34 Y	90

Post-Exposure: Once the stencil is washed-out and dried it can be exposed again under the sun, day light, fluorescent tubes or with the exposure lamp. It is recommended to make the post-exposure without the vacuum frame so that no glass between the lamp and the stencil interferes with the light absorption.

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**.