

FOTECOAT 1930 M

Dual-Cure Photopolymer Emulsion for printing on tiles in single, double or third fire

1. DESCRIPTION

- Dual-cure diazo polymer emulsion for printing on ceramic substrates and for ceramic decalcomanias.
- Suitable for most ceramic inks
- The sensitizer can be mixed directly into the **FOTECOAT 1930 M** emulsion (dissolving in water is not necessary).
- The emulsion can be post-exposed to reach complete thru-curing.
- Possibility to harden chemically with **FOTECHEM 2119** to produce permanent stencils.
- Blue, high contrast colour to facilitate touch-ups.
- **FOTECOAT 1930 M** is already light sensitive; the following sensitising with the diazo powder should be done under yellow light only.
- **FOTECOAT 1930 M** is phthalate-free

2. APPLICATION ADVANTAGES

- After sensitizing approx. 46% solid content
- Medium viscosity, suitable for meshes from 43/90 to 120/34 threads per linear cm and for manual or machine coating.
- The diazo powder can be added directly to **FOTECOAT 1930 M**; it dissolves quickly and under light stirring. Before coating let the emulsion degas.
- High resolution with excellent mesh bridging
- Can be decoated with the usual chemicals as long as a catalyser has not hardened the stencil.
- If necessary, **FOTECOAT 1930 M** can be diluted with a small amount of water.

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

Mesh	Coating	Stencil Thickness over mesh
43/90 PW	1/1	25 µm
77/55 PW	1/2	16 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.

4. STENCIL QUALITY

- Intermediate drying and post-coating improve the Rz-value.
- The stencil surface is semi-matt and has no tendency to get sticky.
- The stencil should be completely dry before exposing; for drying never use heat over 40°C.
- Control stencil humidity with the **FOTECO AQUATEST** device.

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)	1 months
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	65
1/2	43/90 W	85
1/1	43/90 Y	100
1/2	43/90 Y	130
1/1	77/55 W	50
1/2	77/55 W	65
1/1	120/34 W	35
1/2	120/34 W	45
1/1	120/34 Y	50
1/2	120/34 Y	65

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**.