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# FOTECOAT 1930 K

Direct ceramic printing on tiles in single, double and third fire.

## 1. Description

- Dual-cure diazo/polymer screen process 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 K emulsion (dissolving in water is not necessary).
- The emulsion can be post-exposed to reach complete thru-curing.
- Possibility to harden chemically with FOTECHEM 2100 to produce permanent stencils.
- Blue, high contrast colour to facilitate touch-ups.
- FOTECOAT 1930 K is already light sensitive; the following sensitising with the diazo powder should be done under yellow light only.
- FOTECOAT 1930 K is phthalate-free.

## 2. Application advantages

- After sensitizing approx. 46% solids content.
- Medium viscosity, suitable for meshes from 43-80 to 120-34 threads per linear cm and for manual or machine coating.
- The diazo sensitise is supplied in a separate, airtight, humidity repellent and heat-insolating sachet. It can be added directly to FOTECOAT 1930K; 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 K can be diluted with a small amount of water.

## 3. Stencil quality

It is advisable to treat the mesh prior to coating with an abrasive and degreasing paste like FOTECHEM 2023; at least the screens should be degreased thoroughly.

| Mesh | Coating | Stencil build-up |
|---|---|---|
| 43-80 | 1/1 | 25 µ |
| 77-55 | 1/2 | 16 µ |
| 120-34 | 1/1 | 6 µ |
| 120-34 | 1/2 | 10 µ |

- Intermediate drying and post-coating improve the Rz-value.
- The stencil surface is semi-mat 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.

4. **Storing**

| | |
|---|---|
| – Unsensitized at 18 - 25°C : | 1 year |
| – Sensitized at 10-15°C : | 2 months |
| – Sensitized at 20-25°C : | 1 month |
| - Pre-coated screens stored in complete darkness at 20°C: | 3 weeks |

5. **Exposure**

5 KW MH at 100 cm distance and 100 operating hours, with photopolymer bulb:

| Coating | Mesh | Time in seconds after complete drying |
|---|---|---|
| 1/1 | 43-80 white | 65 |
| 1/2 | 43-80 white | 85 |
| 1/1 | 43-80 yellow | 100 |
| 1/2 | 43-80 yellow | 130 |
| 1/1 | 77-55 white | 50 |
| 1/2 | 77-55 white | 65 |
| 1/1 | 120-34 white | 35 |
| 1/2 | 120-34 white | 45 |
| 1/1 | 120-34 yellow | 50 |
| 1/2 | 120-34 yellow | 65 |

6. **Decoating**

- Standard stencil decoating chemicals can be used.
- The decoating chemicals should never dry on the stencil.
- Make sure the screen filler is dissolved first with water before decoating starts.
- Whenever possible degrease before the decoater is being applied; this facilitates decoating and helps to prevent ghost pictures. FOTOCHEM 2033 is an ideal degreaser concentrate.
- 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 2075.
- **Important: A fully exposed stencil, with full thru curing, or a post-exposure, facilitates the stencil removal.**

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