

FOTECOAT 1025 N

Triple-Cure Emulsion for flated Textile Screen Printing

1. DESCRIPTION

- Triple-cure emulsion for printing plastisol, water-based and discharge inks.
- Can be chemical hardened with **FOTECHEM 2119** to produce a waterproof and abrasion resistant stencil.
- High resolution
- Faster in exposure compared to **1099**; it allows to reduce exposure time by 40-50%.

2. APPLICATION ADVANTAGES

- 45% solid content before sensitizing (approx. 41% after sensitizing)
- Can be coated wet on wet without intermediate drying cycle to reach a flat stencil profile with an Rz-value of approx 7-8 at 10-12 microns.
- Low odour, color blue
- Easy to reclaim (before hardening)

3. COATING TECHNIQUE AND STENCIL BUILD-UP (TROUGH WITH 0.75 MM R)

Mesh	Coating	Stencil Thickness over mesh
43/80 PW	1/1	25 µm
77/55 PW	1/1	16 µm
120/34 PW	1/1	6 µm
120/34 PW	1/2	10 µm

- 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.

4. 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.

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	12 months
Sensitized, stored at 20 °C (pot life)	4 weeks
Pre-coated screens in total darkness at 20°C	1 week

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	43/80 W	35
1/2	43/80 W	45
1/1	43/80 Y	55
1/2	43/80 Y	70
1/1	77/55 W	30
1/2	77/55 W	35
1/1	120/34 W	20
1/2	120/34 W	25

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**.