

# FOTECOAT 1569

## Diazo Emulsion

### 1. DESCRIPTION

- 100% solvent resistant screen emulsion with separate diazo powder sensitizer
- Normal exposure time; very easy to remove
- Touch ups are practically avoided; wash-out is fast and easy and does not need a high pressure device.
- Light purple in color for good transparency

### 2. APPLICATION ADVANTAGES

- 36% solid content before sensitizing
- High viscosity
- For all inks containing solvents alone and no water.
- Even aggressive inks do not harden the stencil during printing so that decoating remains easy regardless of the type of ink.
- Because of the mat surface static problems can be avoided.

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

| Mesh     | Coating           | Stencil Thickness over mesh |
|----------|-------------------|-----------------------------|
| 43/90 PW | 1/1, 2 face coats | 14 µm                       |
| 43/90 PW | 2/2               | 20 µm                       |
| 43/90 PW | 2/3               | 24 µm                       |
| 43/90 PW | 2/5               | 35 µm                       |
| 43/90 PW | 1/2               | 10 µm                       |
| 43/90 PW | 2/3               | 16 µm                       |
| 43/90 PW | 2/3, 2 face coats | 18 µm                       |

- Because of the high viscosity it is recommended to let the sensitized emulsion de-gas during a few hours before coating. This prevents air bubbles in the stencil which could cause pinholes.
- **FOTECOAT 1569** is ideal for machine coating. If a lower viscosity is wanted, additional water can be added without changing the exposure time.

### 4. STENCIL QUALITY

- The resolution is good and reaches approximately 60 microns
- The definition is good
- After the wash-out the stencil is relatively soft. Do not use high pressure wash-out device.
- The stencil is sensitive to humidity.
- Chemical hardening is not recommended.
- For stencil cleaning during printing it is necessary to use a solvent that does not contain water; otherwise the stencil becomes soft or sticky.

### 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          | 24 months    |
| Sensitized, stored at 20°C (pot life) | 4-6 weeks    |
| Pre-coated in total darkness at 20°C  | 4 weeks      |

### 6. EXPOSURE TIMES

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

| Coating           | Mesh     | Time (seconds) |
|-------------------|----------|----------------|
| 1/2               | 120/34 W | 70             |
| 1/2               | 120/34 Y | 110            |
| 2/3               | 120/34 W | 100            |
| 2/3               | 120/34 Y | 160            |
| 2/3, 2 face coats | 120/34 Y | 200            |
| 2/3               | 77/55 Y  | 240            |
| 2/2               | 43/90 W  | 260            |

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### 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**.