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TECHNICAL INFORMATION

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FOTECOAT 1915 WR

Sensitizing by the DIR-AD System

1. Description

- Fast, duo-cure polymer type textile printing screen process emulsion with separate diazo sensitizer powder, for aqueous ink systems.
- Light purple color with excellent see-through.
- The ready-made stencil can be post-hardened by light to increase the mechanical and the solvent resistance.
- Very short exposure time.
- Ecologically sound.

2. Application advantages

- 41% solids content.
- Medium viscosity, appropriate for meshes between 45 T and 120 T (lower viscosity than FOTECOAT 1065 and a higher viscosity than FOTECOAT
- FOTECOAT 1915 WR 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.
- FOTECOAT 1915 WR can be decoated.
- If a permanent stencil for all inks is desired a longer post-hardening by light or a chemical treatment with FOTECHEM 2110 or 2100 Hardener can be used. In such a case the stencil can no longer be decoated.

3. Coating technique and stencil build-up

Because of the relatively high viscosity of FOTECOAT 1915 WR it is recommended to degas the emulsion after sensitizing during a few hours.

| <u>Mesh</u> | <u>Coating</u> | Stencil thickness below mesh |
|--------------------|----------------|------------------------------|
| 43 T multifilament | 1/2 | 20 microns |
| 43 T monofilament | 1/1 | 20 microns |
| 77 T monofilament | 1/2 | 15 microns |
| 120 T monofilament | 1/1 | 4 microns |
| 120 T monofilament | 2/3 | 14 microns |

FOTECOAT 1915 WR is ideal for machine coating. If necessary the emulsion can be diluted with water to reach a lower viscosity.

4. Stencil quality

- The definition is excellent. The high solids content allows to reach a flat stencil surface combined with excellent mesh bridging.
- The resolution is good.

5. Stocking

Unsensitized: up to 1 year
Sensitized, at 20°C: 1 - 2 weeks

- Pre-coated screens stored

in complete darkness at 20°C:: 3 weeks

6. Exposure times

5 KW metal halide lamp at 100 cm distance; iron charged high pressure burner at 100 hours burning time.

| <u>Mesh</u> | Time in seconds |
|--------------------------|---|
| 43 T multifilament white | 100 |
| 43 T monofilament white | 70 |
| 43 T monofilament dyed | 105 |
| 77 T monofilament white | 90 |
| 77 T monofilament dyed | 135 |
| 120 T monofilament white | 50 |
| 120 T monofilament dyed | 75 |
| 120 T monofilament white | 60 |
| 120 T monofilament dyed | 90 |
| 120 T monofilament white | 70 |
| 120 T monofilament dyed | 105 |
| | 43 T multifilament white 43 T monofilament white 43 T monofilament dyed 77 T monofilament white 77 T monofilament dyed 120 T monofilament white 120 T monofilament dyed 120 T monofilament white 120 T monofilament white 120 T monofilament dyed 120 T monofilament dyed |

7. Decoating

- Only possible with high pressure gun.
- A higher concentrated remover than usual has to be used. Ideal are FOTECHEM 2004 liquid or FOTECHEM 2005 paste.
- For machine decoating the concentration of the remover liquid has to be increased and the speed of the machine be reduced to a minimum.
- A post-exposure makes the stencil removal easier.

8. Post-exposure

Once the stencil is washed-out and dryed it can be exposed again under the sun, day light fluorescent tubes or with the standard 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 light absorption.

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