

OPT-W Photo Emulsion (water resistance)

1. DESCRIPTION

OPT-W is a high quality Pre-sensitized Photo-polymer emulsion for textile printing with water-based ink or abrasive print media. Its fast exposure time enables quick screen making. OPT-W making it suitable for excellent fine detail and 3,0000 times long printing without hardener.

2. SENSITIZING

Pre-sensitized ---- ready to use.

3. MESH PREPARATION

To achieve a good stencil, the mesh must be degreased with a degreaser and must be free of dirt, dust, ink residues and ghost images. Rinse the screen thoroughly using low water pressure to remove any degreaser remaining on the screen. A foaming degreaser helps to determine proper and complete rinsing. See DEGREASER Technical Information for details.

4. COATING PROCEDURE

OPT-W has excellent coating properties on mesh counts of 40-470 threads per inch (16-185 threads per cm). Always start with 1 or 2 coats on the substrate side of the screen to fill the mesh openings; then finish with wet-on-wet coats on the squeegee side to build up the emulsion coating to the desired thickness. The correct coating technique for your process must be determined through coating tests.

5. DRYING OF THE COATED SCREEN

Dry the screen in complete darkness, or under safelight conditions, with the screen in horizontal position with the substrate side down. Temperature, relative humidity and airflow affect the drying time. The screen must be dried thoroughly before exposing to achieve highest resistance to ink and ink cleaners. A temperature of 86°-104°F (30°-40°C) at a relative humidity of 30% -50% and moderate airflow are optimum conditions. Drying at room temperature and in uncontrolled conditions may lead to inconsistent results and varying screen resistance.

6. EXPOSURE

Expose with ultra-violet light at a wavelength of 320 – 380 nm. A metal halide lamp provides the best results. Due to the many variables that determine the actual exposure time, accurate exposure times cannot be given. The following examples are offered as a guide only:

Lamp: 3000 Watt metal halogen at 80cm distance.
NBC 150T white mesh, coating thickness: 10 - 12 um.
Expose Energy: approximately blue: 20 - 30mj
Exposure time: approximately blue: 35 seconds

The correct exposure time for your equipment and mesh selection must be determined through exposure tests using a step exposure or an exposure calculator films.

7. DEVELOPING / WASHOUT

Develop the screen using full tap water and a medium spray pattern. Adjust the water temperature to lukewarm or slightly colder. Rinse thoroughly from both sides of the screen. Vacuum off any excess water or blot it off with newsprint paper. This will avoid runs or scum from under-exposure in the open areas.

8. POST-EXPOSURE

Post-exposing the screen after developing and drying can be very effective. The post-exposure time should be 1 - 2 times the original exposure time.

9. POST-HARDENING (CHEMICALLY)

The emulsion can be chemically post-hardened using HARDENER to improve water resistance. HARDENER improves the resistance, but the emulsion remains reclaimable.

10. BLOCKOUT / TOUCH-UP

When printing with solvent based inks, retouching, blocking out can be done with blue filler and filler NO.1. For water resistant stencils, block out and retouch with retouching lacquer for screens..

11. DECOATING

OPT-W can be decoated with emulsion removers liquid. Before decoating, ensure the screen is completely cleaned of ink or ink cleaning chemical residues. If water beads up on the stencil, degrease the screen prior to decoating. If the screen was chemically hardened with HARDENER , reclaiming is no longer possible.

12. HEALTH AND SAFETY

Before using, refer to appropriate material safety data sheets.

13. PHYSICAL PROPERTIES

Viscosity : approx.: 10,000 ± 2,000 mPas

Solids Content: approx.: 35 ± 2 %

Color: blue

Storage: 1 year at 68°F/20°C

Potlife: 1 year at 68°F/20°C

Precoated screens: 8 weeks in complete darkness at 68°F/20°C

Freezing: protect against freezing

14. PACKAGING

1 KG, 5 KGS , 10KGS

15. ADDITIONAL INFORMATION

For additional product information, please contact with us.

Thank you for choosing **CSK**.

This data sheet is for your information, a legally binding guarantee of the product's suitability for a peculiar application cannot be derived. No responsibilities can be undertaken for occurring damages. Our products are subject to a continuous production and quality control and leave our factory in perfect condition.
Replaces technical information dated 06/01/04 Update: 10/01/05