

# Technical data sheet

# SAATIGRAF CTS

## APPLICATIONS

Specially designed for use with DLE technology (Direct Light Exposure for Computer to Screen Technology)

## GENERAL CHARACTERISTICS

- Extremely high resolution pure photopolymer emulsion
- Resistant to UV-cured, water-based UV-cured and solvent-based ink for the graphic market
- Ideal for the “large format” in advertising and general graphic
- Very high solids content (35%) for high printing quality
- Exposes 20 times faster than diazo or dual-cure emulsions
- Easy to reclaim.

## DIRECTIONS FOR USE

Handle under yellow safelight or low wattage tungsten lights. Avoid exposure to daylight, quartz/halogen lamps, cool white fluorescent lamps or discharge lamps.

### Sensitizing and mixing

Emulsion is presensitized during production and does not require mixing.

### Mesh preparation and degreasing

Degrease new mesh with Direct Prep 2 in order to optimise stencil adhesion; dry and store the screen in a dust free, dry environment prior to coating.

### Coating

Saatigraf CTS can be coated by hand or with the use of an automatic coating machine

Apply one or two coats to the substrate side of the screen, followed by one or two coats on the squeegee side. For a thicker stencil, apply additional coats to the squeegee side prior to drying.

For a higher quality stencil with a minimal increase in stencil thickness, apply one or two additional coats to the substrate side of the screen after the initial coats have dried.

### Drying and storage

Thoroughly dry the coated screen at a maximum temperature of 104°F (40°C) in a dust free, dark or yellow light area, with the substrate side facing down to optimize stencil quality. Coated screens should be stored in a dust free, dry, safelight environment.

### Exposing

Saatigraf CTS has high sensitivity to UV light and is suitable for use With DLE machines.

Exposure speed depends on mesh count and its colour and the number of coats of emulsion. Perform an exposure test with a 21-step Sensitivity Guide to determine correct exposure speed. The 21-step Sensitivity Guide should be taped directly to the surface of the emulsion in an area that will be fully exposed. Saatigraf CTS stencils should hold a solid step 5 after thorough developing to guarantee proper resistance during printing, maintaining excellent resolution.

### Developing

Wet both sides of the screen with a strong, finely divided spray of water and continue washing out until all image areas are fully open. Rinse both sides of the screen and dry thoroughly before use. A properly exposed and developed screen will not leave residues on the squeegee side.

**Post exposing**

Post expose with daylight or exposure UV lamp to produce a more water-resistance stencil.

**Reclaiming**

Remove all ink residues immediately after printing with an appropriate solvent. Remove stencil with Remove ER series and a pressure washer. For stains and ghost images, use Remove HR series followed by a pressure washer.

**HEALTH AND SAFETY**

Before using, refer to appropriate material safety data sheets.

**PROBLEM SOLVING**

**Poor coating quality**

- Properly clean, degrease and rinse the screen to remove all residues and traces of chemicals.
- Properly and evenly tension the fabric.
- Clean and ensure the scoop coater does not present any defect edge.

**Poor detail or difficulty washing out image**

- Ensure emulsion and coated screens are handled in safelight conditions only.
- Optimize exposure time.
- Do not store emulsion or coated screen at high temperatures.

**Emulsion falls off, extreme pinholes or severe stencil breakdown during printing**

- Ensure that damp screens are not being exposed
- Only expose screens with an even and consistent coating thickness.
- Ensure that stencil has not been severely underexposed.
- Ensure emulsion is not too old and has not been stored at high temperature.

**Difficulty reclaiming screens**

- Non reclaimable once catalysed
- Optimize exposure time and properly rinse the squeegee side of the screen during developing to remove all residual traces, especially when using higher mesh count dyed fabric.

**STORAGE**

When sealed in the original container and stored at temperature between 20 and 25°C, SAATIGRAF CTS will maintain original properties for 18 months from the date of production.

**PACKAGING**

Available in 1, 5, 20, 120 and 200 kilogram containers. In North America, available in one, five and fifty US gallon containers.

**WARRANTY AND LIMITED REMEDY**

The directions, recommendations and specifications contained in this Technical Data Sheet are meant as a guide to the use of the product and shall not bind the company. Product specifications are subject to change without notice.

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