

SAATItex Rotary CTS

Photopolymer Emulsion for Rotary Textile Printing - Computer-to-Screen Imaging/Exposure

Applications

Rotary textile printing.

Characteristics

- Low viscosity one part photopolymer emulsion, compatible with industrial discharges
- Remarkable wet adhesion during the developing process
- Very high mechanical & chemical resistance

Features/Benefits

- Developed for Direct Light & Direct Laser imaging & exposure
- Excellent resolution for fine lines & half-tone printing
- Outstanding adhesion to nickel screens

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 & Mixing

Emulsion is presensitized during production, no mixing required.

Mesh Preparation & Degreasing

Degrease and abrade new mesh with SAATI Direct Prep 1 in order to optimize stencil adhesion; dry and store the screen in a dust free, dry environment prior to coating. For more applications, thoroughly degrease the mesh prior to use with SAATI Direct Prep 2.

Coating

For bottom to top method by hand or machine, apply one coat and dry at 104°F (40°C). If higher thickness is requested, after drying apply one or two coats more and dry again.

Using double squeegee, top to bottom, we suggest a coating speed of 1-2 mt/min. Only one coat is sufficient to guarantee perfect resistance..

Drying & 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

SAATITEX ROTARY CTS has high sensitivity to UV light and is suitable for use with DLE machines.

Exposure speed depends on mesh count of rotary screen 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 but does not enter the image area. SAATITEX ROTARY CTS stencils should hold a solid step 5 after thorough developing to guarantee proper resistance during printing, in addition to maintaining excellent resolution.

Developing

Soak the engraved screen in a tank of water for 5 to 10 minutes or use an automatic washing machine. In either case, ensure a thorough final rinse.

Post Exposing

Post expose the developed stencil with daylight or an exposure lamp to produce a more water and/or solvent resistant stencil. This is particularly effective process to improve water resistance of SBQ based emulsions for use with water-based inks, or discharge inks for textile printing applications. SAATI Pro-Lite 300 or 450 LED Exposure Lamps are recommended for fast and consistent results with any combination of mesh & emulsion.

Reclaiming - Prior to Polymerization

Manual Process – Remove all ink residues immediately after printing with SAATI Remove IR26. Remove stencil with SAATI Remove ER6 (concentrate) diluted in dip tank, or for spray & brush use Remove ER2 (diluted), or Remove ER5. For stains use a second application of SAATI Remove IR26, and for stubborn ghost images, use SAATI Remove HR9 followed by a pressure washer.

Automatic Machine Process – Remove all ink residues immediately after printing with SAATI Remove IR29. Remove stencil with SAATI Remove ER10, ER13, or ER25 (concentrates). For stains use a second application of Remove IR29, and for stubborn ghost images, use SAATI Remove HR9 followed by a pressure washer.

Polymerization

Place the screen into oven at 190°–200°C (374°–392°F) for one hour, starting once the required temperature has been reached.

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Problem Solving

Poor Coating Quality

- Properly clean, degrease and rinse the rotary screen to remove all residues and traces of chemicals
- Ensure that the emulsion has completely degassed before coating

Penetration on the Inside Surface of the Screen

- Do not dilute emulsion with more water as suggested in mixing

Poor Detail or Difficulty Washing Out Image

- Ensure emulsion and coated screens are handled in safelight conditions only
- Optimize exposure time and use only high quality film positives
- Do not store sensitized emulsion or coated screen at high temperature
- Ensure that damp screens are not being exposed

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 mixed emulsion is not too old, has been correctly sensitized and has not been stored at high temperature

Difficulty Reclaiming Screens

- Not reclaimable once polymerized
- 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

Health & Safety

Before using, refer to appropriate Safety Data Sheets. Contact SAATI at info.IT@saati.com to request SDS.

Storage

When sealed in the original container and stored in cool conditions, SAATI products will maintain their original properties for one year from the date of production.

Packaging

Available in 4.5 and 200 kilogram containers.

Warranty And Limited Warranty

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

The following is made in lieu of all other express or implied warranties, including any implied warranty of merchantability or fitness for a particular purpose; All SAATI manufactured liquid products are warranted to be free of defects in materials and manufacture and to meet the specifications in SAATI Product Bulletin.

SAATI will replace or refund the price of any SAATI manufactured liquid product that does not meet this warranty within the applicable warranty period.

The remedies are exclusive. In no case shall SAATI be liable for any other direct or indirect damage or loss, including without limitation any incidental, special or consequential damages, or any material costs or labor charges incident to the removal or replacement of any mesh, screen, ink, substrate, finished graphic or other item.