TEXSOL® 680 CTS

Chemically curable, water resistant, very reactive Diazo-emulsion

TEXSOL 680 CTS is used for the production of stencils resistant to aqueous printing media. The main field of application is textile printing, e.g. T-shirt and flag printing. TEXSOL 680 CTS is highly sensitive to light and thus suitable for DMD systems. A wax jet system can also be used. To resist to long printing runs, TEXSOL 680 CTS can be chemically hardened. The standard hardener is KIWOSET K-T. Before hardening, TEXSOL 680 CTS can be easily decoated with PREGASOL products. Hardened screens are no longer decoatable.

SENSITIZING

DIAZO Nr. 14 and half the amount of water (fill the Diazo bottle for the 4,5 kg unit of emulsion only once = 250 ml).

Make sure that TEXSOL 680 CTS is processed under yellow light as the sensitized as well as unsensitized emulsion is very sensitive to light.

DEGREASING

Before coating it is recommended to clean and degrease the screen mesh to achieve reproducible coating results. Ensure proper tension of the screen mesh. Use manual degreasers of the PREGAN range or KIWOCLEAN degreasing concentrates for automatic units (see separate Technical Information). After thorough rinsing with water and drying, the screens are ready for coating.

COATING

In textile printing, the mesh is coated 1-1, i.e. the coating is first done from the printing side. Only then begin with the coating from the squeegee side. The use of the a coating machine is particularly advantageous, since it permits an absolute even and reproducible coating result.

DRYING

In order to achieve highest resistances as well as optimum exposure and developing results of the stencil, the coated screens must be well dried before exposure. Drying is preferably effected in a dust-free drying cabinet with fresh air circulation at 35-40 °C. If very big screen sizes make drying in the drying cabinet impossible the temperature should be increased compared to the room temperature (e.g. with a fan heater) and the humid air should be lead off.

EXPOSURE

The stencil is created by UV-light hardening of the non-printing stencil parts. Expose in blue actinic light in a wave length of 330-400 nm. Owing to the great number of parameters that can have an influence on exposure time, no absolute values can be given. Optimum copying results can only be achieved by trials (step exposure). This especially applies to DLE systems.

HARDENING

TEXSOL 680 CTS stencils are also very resistant to many print runs when printing with aqueous media without post-treatment. However, when exposed to extreme stress, chemical hardening may be necessary. For that purpose, apply a considerable amount of hardener onto both sides of the coated screen with a brush after coating, exposure, development and drying. The screen should be placed in horizontal position. Usually KIWOSET K-T is

being used. After a reaction time of 15 min. the screen is being heat-cured for a minimum of 1 hour at approx. 60°C in the drying cabinet. Or leave the screen for 24 hours at room temperature (min. 20°C).

RETOUCHING / BLOCKING OUT

For retouching / blocking-out, lacquers of the ESTELAN or products of the KIWOFILLER range can be used. Please contact your agent or the ARC-Department for Applied Technology.

DECOATING (unhardened screen)

The stencil, which is thoroughly cleaned from any remaining inks with water or solvent-based cleaning agents (e.g. PREGAN or KIWOCLEAN product range) can be decoated with PREGASOL-products (e.g. PREGASOL F, -EP 3). Due to the high durability, a high pressure unit is in general necessary. The possibly remaining resin hazes can be removed with suitable post-cleaning products. Please contact your agent or the ARC-Department for Applied Technology.

NOTICE

The printing resistance of a textile stencil depends on many different parameters, e.g. type of the screen, coating technique, drying, exposure time etc. Furthermore, in practical work, a large variety of printing media and printing machines are in use, all of which cannot be included in our preliminary tests. Therefore, we ask you to order samples of this photoemulsion, so that you can conduct your own trials under local working conditions. This is the best way to establish that our products meet your requirements. We accept responsibility for consistent screen quality only under our working conditions.

Kindly observe the Material Safety Data Sheet.

COLOUR

Unsensitized: Blue
Sensitized: Green

VISCOSITY

Approx. 3700 mPas (Rheomat RM 180, MS 33, D = 100 s^{-1}, 23 °C)

STORAGE

Unsensitized: 1 year (in original contained). Store protected against frost.
Sensitized: approx. 4-6 weeks (at 20-25°C).

Screens coated in advance: at least 4 weeks at 20°C and in total darkness. Dry the screens again before copying.