

## TEXSOL® 560 D

### Water resistant, decoatable Diazo photoemulsion

TEXSOL 560 D is used for the production of textile flat printing screens which are resistant to aqueous printing pastes. It is mainly used for printing textile and ceramic printing pastes as well as dispersion based adhesives (e.g. KIWOPRINT- and MECOFLOCK D-series). The printing resistance can be improved considerably by post-hardening with KIWOSET E-WR or alternatively KIWOSET A-WR. After hardening, the screens are no longer decoatable.

**SENSITIZING** With DIAZO NR. 1

**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, as a rule, screens are coated 1-1, i.e. once from the printing side and once from the squeegee side. When printing asiatic mesh, we recommend to coat once from the squeegee side and, after intermediate drying, once from the printing side.

**DRYING** In order to achieve highest resistances of the textile printing screens, it is essential to dry the coated screens carefully, preferably in a dust-free drying cabinet with air exchanger at a temperature of 35-40 °C.

**EXPOSURE** Expose the coated and well-dried textile printing screens to blue actinic light in the wave length range of 350-420 nm. Best results have been achieved with metal halide lamps.

Owing to the high number of parameters that can have an influence on exposure time, no absolute values can be given. Optimum copying results have been achieved by trials (step exposure). For achieving highest resistances, select the maximum exposure time which still leads to a good resolution of details. This is especially important when printing with water based printing pastes where resistance is only achieved via exposure time. Chemical post-hardening is also more efficient when the screen was exposed well before.

Guide values:

Light source: 5000 W metal halide lamp at a distance of 1 m, coating with V2A coating trough, once from the printing side and once from the squeegee side (1-1):

Mesh	Average Exposure Time
77-55 (T) white	approx. 30 sec.
51-70 (T) white	approx. 35 sec.



48-55 (T) white	approx. 40 sec.
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#### **POST-HARDENING**

For improving the printing resistance of screens coated with TEXSOL 560 D, KIWOSET E-WR or KIWOSET A-WR can be used. As a standard KIWOSET E-WR is used. KIWOSET A-WR is slightly odour-intensive but further increases printing resistance. Apply the hardener onto both sides of the flat screen after exposure, washing out and drying. Allow approx. 15 min. for the hardener to react and then harden for at least 1 hour at 40°C. Hardened screens are no longer decoatable.

#### **RETOUCHING/ BLOCKING OUT**

Products for retouching and blocking out have to be selected depending on whether the screens shall be decoated after printing or not. For screens that shall be decoated, use the water based lacquer KIWOFILLER WR 01, for permanent screens use e.g. the two-component lacquer ESTELAN NDW (see separate Technical Information). Repair work on the printing machine is done by using the extremely fast drying lacquer ESTELAN 440. For detailed information, please contact your agent or the ARC-Department for Applied Technology.

#### **DECOATING**

Before hardening, screens which were cleaned thoroughly with water or solvent based cleaners from ink residue, (e.g. PREGAN or KIWOCLEAN products) can be decoated with PREGASOL products (e.g. PREGASOL F, -EP 3). Due to the high resistance of the photoemulsion, it will be necessary to work with a high pressure unit.

#### **REMARK**

The printing resistance of a textile stencil depends on many different parameters, e.g. type of the screen, coating technique, drying, exposure time. 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, which are free-of-charge, 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.

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#### **COLOUR**

Unsensitized: blue                      Sensitized: green

#### **VISCOSITY**

Approx. 4.400 mPas (Rheomat RM 180, MS 33, D = 100 s<sup>-1</sup>, 23°C)

#### **SAFETY ADVICE / ENVIRONMENTAL PROTECTION**

Please see information given in the Material Safety Data Sheet.

#### **STORAGE (20-25 °C)**

Unsensitized: 1 year (in original container).  
Sensitized: approx. 2 weeks.  
Approx. 4 weeks when chemically post-hardened



Screens coated in advance: approx. 4 weeks at 20 °C and absolute darkness.

If screens which have been coated in advance are stored for a longer time, the photoemulsion might have absorbed humidity from the air. Therefore, it is advisable to dry the screen again before copying.

Store protected against frost.