Replaces the Technical Information dated 08.03.17

Update: 19.05.18

POLYTEX®W 690

One-component photopolymer emulsion for textile printing

POLYTEX W 690 is used for the production of stencils which are resistant to aqueous printing media and plastisol inks.

SENSITIZING

Not applicable, as ready-to-use.

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

The coating of the screen generally begins from the printing side in order to fill the mesh openings. Only then begin with the emulsion build-up from the squeegee side, e.g. 2-1, 2-2, 2-3,... The use of the a coating machine is especially recommended because it achieves an even and reproducible coating result.

DRYING

The screen must be dried thoroughly before exposing to achieve the highest ink resistance. This should preferably be done in a dust-free drying-chamber with fresh-air inlet at temperatures of between 35-40°C.

EXPOSURE

The stencil is created by UV-light hardening of the non-printing stencil parts. Expose with blue actinic light at a wave length 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. Optimum copying results can only be achieved by trials (step exposure).

Guide values:
Light source: 5.000 W metal halide lamp at a distance of 1 m. Manual coating (H), e.g. twice from the printing side, then twice from the squeegee side [2D/1R (H)]

Mesh	Coating technique	Average exposure time
77-55 (Y)	2D/1R (H)	Approx. 30 sec
51-80 (W)	2D/2R (H)	Approx. 40 sec

D: Coating from the printing side, R: coating from the squeegee side

/: following coating stroke

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POST-HARDENING

Stencils made using POLYTEX W 690 also permit long runs when printing with aqueous inks without post-treatment. Under extreme circumstances, the screen can additionally be post-hardened. Depending on the printing resistance and decoatability various hardeners of the ARC range are suitable. For further information contact your ARC distributor or ARC.

RETOUCHING/ BLOCKING-OUT

For retouching / blocking-out, use products of the KIWOFILLER range. When printing with aqueous inks, preferably use water based products with dry water resistant. These can be removed with PREGASOL decoating agents and a high pressure water washer. Ask you ARC distributor or ARC direct for advice.

DECOATING

The screen which has thoroughly been cleaned from ink residue with either water or solvent based cleaners (PREGAN or KIWOCLEAN LM products) can be decoated with PREGASOL products. Due to the high resistance of the photoemulsion a high pressure water washer is necessary.

Use a PREGAN post-cleaner to remove any ink residue or so-called ghost images which may remain on the screen after decoating. Trials are essential as the type of residue may vary. Please make tests and ask for samples.

NOTICE

Please note that the printing resistance of a screen printing stencil is influenced by many parameters e.g. mesh, coating technique, drying, exposure time etc. Furthermore, a lot of printing media and printing machines are being used in practice which have not all been tested by us. Therefore, please accept our offer and test the suitability of our products by asking for emulsion samples, as we can only guarantee a constant quality according to our own working conditions.

COLOUR

Red

VISCOSITY

Approx. 2600 mPas (Rheomat RM 180, MS 33, D = 100 s^{-1}, 23°C)

HEALTH HAZARDS/ ENVIRONMENTAL PROTECTION

Please follow further information given in the material safety data sheet.

STORAGE

1 year (at 20-25°C). Protect against freezing.

Screens coated in advance: approx. 4 weeks (at 20-25°C and in complete darkness). Dry again prior to copying.