

POLYCOL® SUPRA PLUS

Solvent resistant, one-component photopolymer emulsion

POLYCOL SUPRA PLUS is used for the production of high-quality, solvent resistant stencils. High resolution and excellent mesh bridging make it suitable for printing finest half-tones, lettering and designs (circuit boards, ceramic decals, bar-codes).

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 Coating can be done manually or by machine. The use of a coating machine is especially recommended because it achieves a reproducible coating result. If coating is done manually ensure that the mesh openings are filled from the printing side (generally 2-3). Only then begin with the emulsion build-up from the squeegee side – depending on the print job.

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 (i.e. step exposure). For the best ink resistance, please choose an exposure time which is as long as possible. This maximum exposure time must still allow reproduction of fine details.

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/2R (H)]:

Mesh	Coating technique, manual	Stencil build-up thickness	Average exposure time
120-34 Y	2D/2R (H)	7-8 µm	40-50 s
150-31 Y	2D/2R (H)	5-6 µm	30-40 s

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

/: following coating process

**RETOUCHING/
BLOCKING-OUT**

For retouching / blocking-out use products of the KIWOFILLER range. Ask your KIWO distributor or KIWO for advice.

DECOATING

In general, stencils made with POLYCOL SUPRA PLUS can easily be decoated with PREGASOL products. Ask KIWO for advice. If screens are coated in advance or if printed screens are not immediately decoated, it is recommended to store them protected against UV-light or daylight to prevent post-hardening and hence additional difficulties in decoating.

NOTICE

Please note that the printing resistance of a screen printing stencil is influenced by a lot of 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

Blue

VISCOSITY

Approx. 4400 mPas (Rhemoat 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: at least 2 months (at 20 - 25°C and in complete darkness).

When storing precoated screens for a longer period of time, the copying material can absorb humidity from the environment. Therefore, dry again prior to copying.