

POLYCOL[®] MICRO

Solvent resistant, one-component photopolymer emulsion

POLYCOL MICRO 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, scales). Due to a relatively good water resistance it is also suitable for short runs with water based 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 POLYCOL MICRO can be coated manually or by machine. Using 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). For best resistances, please choose an exposure time which is as long as possible. This maximum exposure time must still allow reproduction of fine details. This is especially important when water based printing inks are used, as the required ink resistance in this case will be achieved by a higher exposure time.

Guide values:

5000 W metal halide lamp at the distance of 1 m:

Mesh, yellow	Coating technique wet-on-wet (KIWOMAT)	Average exposure time
120 - 34 (T)	2-3	40 - 50 sec.
100 - 40 (T)	2-3	45 - 60 sec.
77 - 55 (T)	2-3	40 - 70 sec.

**RETOUCHING/
BLOCKING OUT**

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

DECOATING

In general, stencils made using POLYCOL MICRO can easily be decoated with PREGASOL products. Use a PREGAN post-cleaner to remove any ink residue or co-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 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. 4.000 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

18 months (at 20 - 25°C). Protect against freezing.

Screens coated in advance: at least 2 months (at 20 - 25°C and in complete darkness). Dry again prior to copying.