

## AZOCOL<sup>®</sup> POLY-PLUS RS

### Solvent and water resistant Diazo-UV-polymer emulsion

AZOCOL POLY-PLUS RS is used for the production of high-quality, solvent and water resistant stencils. Especially suitable for the coating of nickel screens and rotary printing cylinders. Very high solids content, excellent copying properties and easily decoatable.

**SENSITIZING** With DIAZO NO. 6

**COATING** In general, nickel screens (Stork-Rotamesh-screens) are coated with the KIWOMAT coating machine with integrated IR-drying. Coating is done on the printing side first. After drying the stencil has to be post-coated several times. The coating machine has to suit the requirements of the Stork-Rotamesh-screens.

In general, nickel rotary cylinders are coated manually from the bottom to the top. It is recommended to proceed as follows: 1 x pre-coating, drying, 3 - 5 x post-coating (with intermediate drying).

**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 350 - 420 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 the exposure time. Even a chemical post-hardening is more efficient after having exposed the stencil well.

Guide values: 5.000 W metal halide lamp.

Stork-Rotamesh screen	Coating technique	Average exposure time
305 mesh	1-5 (IR)	30 sec
195 mesh	1-5 (IR)	40 sec
135 mesh	1-5 (IR)	50 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. For further information contact your KIWO distributor or KIWO direct.

**DECOATING**

In general, stencils made using AZOCOL POLY-PLUS RS can easily be decoated with PREGASOL products.

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 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 free-of-charge emulsion samples, as we can only guarantee a constant quality according to our own working conditions.

**COLOUR**

Unsensitized: blue  
Sensitized: green

**VISCOSITY**

Approx. 3.000 mPas (DIN 53019, D = 100 s<sup>-1</sup>)

**HEALTH HAZARDS/  
ENVIRONMENTAL  
PROTECTION**

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

AZOCOL POLY-PLUS RS is biodegradable and can be emptied into drains in usual working dilution.

**STORAGE**

Unsensitized: 1 year (at 20 - 25°C). Protect against freezing.  
Sensitized: approx. 6 weeks (at 20 - 25°C)

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

With longer storage of precoated screens, the copying material can absorb humidity from the environment. It is therefore advisable to dry again prior to copying.