

## POLYCOL® Z 540 CTS Violet

### Solvent and water resistant, one-component emulsion

POLYCOL Z 540 CTS Violet is used for the production of high quality, solvent and water resistant stencils made by conventional exposure or with CTS units. Excellent resolution and mesh bridging make it suitable for large-scale screen-printing applications (e.g. flat glass printing).

### SENSITIZING

Not applicable as ready-to-use.

In order to achieve highest printing resistance when using aqueous, very aggressive or very abrasive printing inks, in some cases POLYCOL Z 540 CTS Violet can be sensitized with DIAZO Nr. 14. The Diazo-sensitized emulsion can be stored for at least 2 months (at 20-25°C). In order to avoid a decrease in viscosity, use only half the amount of water to dissolve the Diazo.

### 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 Z 540 CTS Violet can be coated manually or by machine. The use of a coating machine with integrated IR-dryer is especially recommended because it permits the equalization of the mesh structure with a comparatively thin coating.

### 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. In case of large sized screens which do not fit into the drying chamber, at least increase the room temperature (e.g. with an electric heater) and ventilate the humidity

### 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 320-420 nm.

The exposure time for direct projection may depend on the distance of the stencil and type of projection unit. Please choose an exposure time which is as long as possible (step exposure). This maximum exposure time must still allow reproduction of fine details. This is especially important when water based printing inks are used.

#### Guide values:

Light source: 2500 W metal halide lamp at the distance of approx. 1 meter;  
Automatic coating with KIWOMAT MODULAR (MA), coating trough R 125:

| Mesh    | Coating sequence* | Stencil build-up thickness | Average exposure time |
|---------|-------------------|----------------------------|-----------------------|
| 77-48 Y | 1D-1R (MA)        | 12 µm                      | 20 - 30 s             |

\*D: Coating from the printing side, R: Coating from the squeegee side  
-: one coating process, /: following coating process

**RETOUCHING/  
BLOCKING-OUT**

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

**DECOATING**

In general, stencils made using POLYCOL Z 540 CTS Violet can easily be decoated with PREGASOL products.

Using the Diazo No. 14 additionally complicates decoating, however, under optimum processing conditions decoating is still possible.

Use a PREGAN post-cleaner to remove possibly remaining ink residue or so-called ghost images. 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 for a constant quality according to our own working conditions.

**COLOUR**

Violet

**VISCOSITY**

Approx. 5200 mPas (Rheomat RM 180, MS33, D = 100 s<sup>-1</sup>, 23°C)

**HEALTH HAZARDS/  
ENVIRONMENTAL  
PROTECTION**

Please follow further information given in the MSDS.

**STORAGE**

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

Screens coated in advance: at least 4 months (at 20°C and in complete darkness). Dry again prior to copying.