

POLYCOL SRX

1. DESCRIPTION:

POLYCOL SRX is a pre-sensitized SBQ-photopolymer emulsion for printing with plastisol, solvent, and UV-curable ink systems. High resolution and very good mesh bridging combined with its great exposure latitude make it suitable for fine detail and 4-color process printing. **POLYCOL SRX** is very easy to develop and reclaim. Its medium viscosity offers good coatability on all common mesh counts used for graphic printing. The fast exposure time is especially helpful for processing large numbers of screens.

2. SENSITIZING:

Pre-sensitized -- ready to use.

3. MESH PREPARATION

To achieve a good stencil, the mesh must be degreased with a commercial degreaser such as KIWO DEGREASER 1:20 or KIWO ULTRA PREP and must be free of dirt, dust, ink residues and ghost images. Rinse the screen thoroughly using low water pressure to remove any degreaser remaining on the screen. A foaming degreaser such as KIWO DEGREASER 1:20 helps to determine proper and complete rinsing. See KIWO DEGREASER 1:20 technical information sheet for details.

4. COATING PROCEDURE

POLYCOL SRX has excellent coating properties on mesh counts of 110-460 threads per inch (43-180 threads per cm). For best printing results, the following coating techniques are recommended using a round edge coating trough:

110-156 tpi (40-60 tpcm):	2-2 wet-on-wet
195-355 tpi (77-140 tpcm):	2-2 wet-on-wet
380 tpi (150 tpcm)	3-2 wet-on-wet

Always start with 2 coats on the substrate side of the screen to fill the mesh openings; then finish with wet-on-wet coats on the squeegee side to build up the emulsion coating to the desired thickness. The correct coating technique for your process *must be determined through coating tests*.

Contact KIWO for more specific coating techniques.

5. DRYING OF THE COATED SCREEN

Dry the screen in complete darkness, or under safelight conditions, with the screen in horizontal position substrate side down. Temperature, relative humidity and airflow affect the drying time. The screen must be dried thoroughly before exposing to achieve highest resistance to ink and ink cleaners. A temperature of 86°-104°F (30°-40°C) at a relative humidity of 30% -50% and moderate airflow are optimum conditions. Drying at room temperature and in uncontrolled conditions may lead to inconsistent results and varying screen resistance.

6. EXPOSURE

Expose with ultra-violet light at a wavelength 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. The following examples are offered as a guide only:

Lamp: 5000 Watt metal halide at 40" (1m) distance.

156/62 tpi (60/62 tpcm) yellow mesh, coating technique 2-2.

Exposure time: approximately 60 seconds.

305/34 tpi (120/34 tpcm) yellow mesh, coating technique 2-2.

Exposure time: approximately 30 seconds.

The correct exposure time for your equipment and mesh selection *must be determined through exposure tests* using a step exposure or an exposure calculator such as the KIWO EXPO CHECK exposure calculator films.

Under-exposed screens feel slimy on the squeegee side during developing. At correct exposure time, the screen is not slimy. Overexposure leads to loss of detail. Correctly exposed screens will withstand high water pressure during washout.

Contact KIWO if you have further questions regarding exposure time.

7. DEVELOPING / WASHOUT

Develop the screen using a medium pressure washer or full tap water and a medium spray pattern. Start by wetting both sides of the screen, then rinse thoroughly from the substrate side of the screen. Do a final rinse from the squeegee side of the screen to remove any emulsion residue before drying the screen. Vacuum off any excess water or blot it off with newsprint paper. This will avoid runs or scum from under-exposure in the open areas.

8. POST-EXPOSURE

Post-exposing the screen after developing and drying can be effective. Post exposure times should be 3-4 times the original exposure time.

9. POST-HARDENING (CHEMICALLY)

The emulsion can be chemically post-hardened using HARDENER HP or HARDENER K to improve water resistance. HARDENER HP improves the resistance without affecting the emulsions ability to be reclaimed. HARDENER K results in a permanent stencil with outstanding resistance, but the emulsion will not be reclaimable. See HARDENER HP or HARDENER K Technical Information Sheets for details.



10. BLOCKOUT / TOUCH-UP

When printing with plastisol, UV, and solvent-based inks, retouching, blocking out can be done with KIWO RED BLOCKOUT. See the KIWO RED BLOCKOUT Technical Information Sheet for details.

11. DECOATING (RECLAIMING)

POLYCOL SRX can be de-coated with emulsion removers such as KIWO STENCIL REMOVER 1:20. Before de-coating, ensure the screen is completely cleaned of ink or ink cleaning chemical residues. If water beads up on the stencil, degrease the screen prior to de-coating. See the KIWO STENCIL REMOVER 1:20 Technical Information Sheet for details. If the screen was chemically hardened with HARDENER K, reclaiming is no longer possible.

12. HAZE REMOVING

When under-exposed, the emulsion can cause emulsion haze after reclaiming. To remove haze, use KIWO HAZE REMOVER or KIWO FAST LIQUID HAZE REMOVER.

KIWO HAZE REMOVER is the safest haze remover but works slowly. KIWO HAZE REMOVER is extremely effective when applied to a dry screen, then allowed to dry onto the screen. Once dry, activate with KIWO EXCEL INK WASH and/or KIWO ULTIMATE INK WASH. These products are also very effective at removing ink haze.

KIWO FAST LIQUID HAZE REMOVER is a one component system that works effectively by applying to a dry or damp screen and allowing a five to ten minute dwell time before removing. See separate Technical Information Sheets for these additional products for more details.

13. PHYSICAL PROPERTIES

Viscosity:	approx.: 6,000 mPas
Solids Content:	approx.: 38%
Color:	Blue
Storage:	18 months at 68°F/20°C
Pot Life:	18 months at 68°F/20°C
Pre-coated screens:	8 weeks in complete darkness at 68°F/20°C
Freezing:	Protect against freezing
VOC:	None
TLV:	N/A
HMIS rating:	Health – 1 Flammability – 0 Reactivity – 0

14. PACKAGING

1 US Quart, 1 US Gallon, 5 US Gallons, 55 US Gallon Drum.

15. ADDITIONAL INFORMATION

For additional product information, please visit our web site at www.kiwo.com. All products mentioned in this technical data sheet are available through KIWO Inc. and its distributor network. For further information contact your KIWO distributor or KIWO direct.

Thank you for choosing **KIWO**.