Diazo emulsion

Description

Diazo emulsion for solvent-based inks; direct system. Good resolution. Excellent mechanical resistance. Easily reclaimed.

RECOMMENDED APPLICATIONS	
Conventional printing on paper or	
cardboard.	Excellent
Printed circuits	Acceptable
Ceramics & glass printing	Good
Printing on PVC and adhesives.	Excellent
Plastic printing	Excellent
Textil printing (Plastisol)	Acceptable
CHARACTERISTICS	
Kind of sensitizer	Diazo
Colour	Violet
Relative sensibility	Mid
Resolution	Excellent
Viscosity	High
Solids content	26%
Post Hardening	No
Thick emulsion build-up	Yes
RESISTANCE	
Solvent inks resistance	Excellent
Mixed inks resistance	Not recommendable
Water-based inks resistance	Not recommendable
Mechanical resistance	Good
HANDLING PROPIETIES	
Pot life of packing at 5 -35°C	1 year
Pot life of sensitised packing at 24°C	4/6 weeks
Pot life of coated screen at 24°C	15 days
Reclamation of screen	Excellent
PACKAGING	
12 Kg. Box	12 units x 1 Kg. with the sensitizer.
20 Kg. Box	4 units x 5 Kg. with the sensitizer.

INSTRUCTIONS OF USE

Emulsion sensitising

The emulsion must be sensitised with the supplied sensitizer (add destilated water in the flask and shake well until diazo becomes completelly dissolved). Allow the emulsion to settle for a minimum of 20 minutes so that air bubbles can escape. Keep the emulsion in a cool (20° C / 68° F) and dark place during the process.

Screen preparation

The mesh must be free of dirt, dust, ink residues, emulsion and ghost image. In order to achieve a good screen, previously degrease the mesh on both sides with **PREPAMASK** or **KAUSTIMASK S**, and then rinse thoroughly with water in order to remove any degreaser rests remaining on the screen.

Coating procedure

Depending on the kind of mesh, always start with 1 or 2 coats in both sides of the screen so as to fill all the mesh openings. Leave the emulsion dry completely in a temperature up to 35°C.

Repeat the process of drying and coating as times as necessary so as to achieve the thickness wanted.



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Drying of the coated screen

Dry the screen in horizontal position with the surface side down, under absolute darkness or safelight conditions, with a temperature of $30^{\circ} - 40^{\circ}$ C (86° - 104°F), a relative humidity of 30% - 50% and a moderate airflow. Avoid white light sources for a long time.

Temperature, relative humidity and airflow affect the drying time. The screen must be <u>completely dry before</u> <u>exposure</u>, that way we will achieve a higher resistance to ink and ink cleaners. Drying the screen at higher temperatures than recommended, or under different conditions than mentioned may lead to inconsistent results and varying resistance.

Exposure

Expose the screen with ultra-violet light at a wavelength of 350 - 420 nm. Use a halogen lamp to get the best results.. Due to the many factors that determine the exposure time, we cannot give accurate times without a previous test.

The correct exposure time is the maximum time that achieves the optimum resolution; it must be determined by successive tests, with a step exposure or with a exposure calculator such as KOPIMASK CONTROL STRIP KS1.

Under-exposure provides a inconsistent fasten and porosity of the emulsion. Over-exposure leads to a loss of detail. Correctly exposed screens withstand high tap water pressure during washout.

Developing and washout

Adjust the water temperature to lukewarm between 20°C and 26°C. Gently rinse the screen on both sides with water. After 1 or 2 minutes rinse thoroughly on both sides of the screen, with a higher tap water pressure, until the developing has finished successfully.

Post-exposure

In order to improve resistance, post-exposure time ought to be 2 - 4 times the original exposure time, always after developing and drying. It only makes sense for short runs and if a posterior screen reclamation is wanted (without chemical hardening).

Touch-up

For solvent-based inks resistant screens, touch-up with **BLOCOFIX**.

Emulsion reclamation

Use emulsion removers such as **SCREEN STRIP** or **SERI CERO GEL** in order to remove the emulsion from the screen. Before removing the emulsion, make sure that the screen is completely free of ink using **DISOLIX ECO** or a ink residue cleaner.

Ghost image removal

When ink residues and hardened emulsions cause a ghost image, use **KAUSTIMASK S**, **STARGEL 200** o **ZERO GHOST** to remove it. Mixing **KAUSTIMASK S** with **DISOLIX GEL** is also a very effective way of removing ink haze.

ADITIONAL INFORMATION

Safety data sheet is available through Kopimask or your nearer supplier. KOPIMASK, S.A. Tlph. 00 34 93 863 93 50 Fax 00 34 93 864 70 37 e-mail kopimask@kopimask.es

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