



Norikop 10 HQ

Solvent and Water Resistant Diazo-sensitized
UV Polymer Emulsion for Best Printing Results

Area of Application

Norikop 10 HQ is suitable for the production of solvent and water resistant stencils for high quality requirements.

Norikop 10 HQ can as well be used for processing UV curing screen printing inks.

Norikop 10 HQ is a high-quality diazo-sensitized UV polymer emulsion with 37 % solids.

Norikop 10 HQ is used in the following screen printing markets:

- **industrial screen printing**
- **graphical screen printing/promotion**
- **electronics**

Color / Pigmentation

Violet

Sensitized: Brown

Handle Norikop 10 HQ under yellow fluorescent tubes or low wattage tungsten light.

Characteristics

- tack-free surface
- excellent mesh bridging
- excellent resolution and definition
- optimal printing results for fine lines and halftone prints
- decoatable

Sensitization

A 100 ml (black) sensitizer bottle is attached to each 0.9 liter can. The bottle contains Diazo-powder. The sensitizer bottle has to be filled with $\frac{3}{4}$ (75 ml) clean or distilled water. Shake the bottle for dissolving the Diazo-powder and then pour it into the emulsion. Then rinse the bottle again with $\frac{1}{4}$ (25 ml) water, pour it into the emulsion. Stir thoroughly. This results in 1 liter sensitized emulsion.

A 250 ml (black) sensitizer bottle is attached to each 4.5 liter can. Fill the bottle two times with water, dissolve the Diazo-powder completely and pour it into the emulsion. Stir thoroughly. This results in 5 liters sensitized emulsion.

Wait for at least 1 hour to allow any air bubbles to escape. The sensitized emulsion has a pot life of approx. 6 weeks at room temperature (20 ° C); 3 months when stored in a refrigerator.

Fabric / Pre-treatment of the Fabric

Norikop 10 HQ is recommended for fabrics from 40 to 190 threads/cm.

Clean, grease-free fabrics are required for a high-quality stencil. We recommend pre-treating the fabric with NoriScreen EF/PR.

Coating

The number of coating operations required to obtain optimal mesh structure compensation depends on

- fabric fineness
- condition of the coating trough
- angle of incidence of coating trough
- contact pressure and speed of the coating trough during the coating process

Norikop 10 HQ

The correct coating thickness can be determined best via stepwise coating.

The coated screen should be dried at a maximum of 40 °C in horizontal position, with print side down.

The mesh structure compensation can be further improved if coating is repeated one to three times on the print side with intermediate drying.

Exposure

Exposure is carried out using a metal halide lamp with a maximum light intensity in the range from 350 to 450 nanometers. No exact times can be specified here, as the appropriate exposure time is influenced by many factors, such as fabric fineness, fabric dye, output of the lamp, distance of the lamp from the stencil, coating thickness. The appropriate exposure times for the locally prevailing conditions can be established quickly and easily with step-by-step exposure or exposure calculator.

Dyed fabrics (yellow) avoid under-cuttings, and offer a wide range of exposure times without any impairment to the quality of fine lines or half-tones.

Please notice:

In order to achieve an **optimum water resistance** of the stencil for printing with water-based screen printing inks:

- **The stencil must be absolutely dry before exposure!**
- **The selected exposure time should be at the upper limit of the exposure time range! Exposure times which are too short will impair the water resistance of the stencil!**
- **Repeated exposure after development of the stencil (from the squeegee side) further increases water resistance (useful when printing large jobs).**

After exposure, Norikop 10 HQ is developed with luke-warm water. Extremely fine details should be developed with a high-pressure washer.

Decoating

After cleaning the stencils Decoater Z 35/1 (diluted with water at a ratio of 1 : 10) is applied from both sides. After a short period of time, the stencil residue is rinsed off with water, most effectively with a shower spray. Afterwards, a high-pressure washer is recommended.

Shelf Life

Allow the product to adjust to room temperature in the closed container before use.

The shelf life stated on the label assures the product's quality and refers to unopened original cans stored in a dry place at temperatures between 5 °C and 25 °C.

Sensitized emulsions:

approx. 6 weeks, when stored dark

approx. 3 months if stored in a refrigerator.

Coated stencils in stock:

Approx. 4 weeks in absolute darkness, room temperature of approx. 20 °C and air humidity under 50 % r. F.

Prior to exposure the coated screens have to be dried in a drying cabinet for a short time, to remove moisture!

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