



P.O. Box 4 29
D-91773 Weissenburg i. Bay.
Germany
Phone: +49 9141 906-0
Fax: +49 9141 906-49
E-mail: info@proell.de
Internet: www.proell.de

Aqua-Jet[®] KSF

Water-based Screen Printing Ink

Area of Application and General Characteristics

Water-based screen printing ink for hard printing substrates such as polycarbonate, acrylic, rigid PVC, polystyrene (see auxiliaries, Crosslinker L 20749), ABS, pre-treated polyester and pre-treated polyolefines after testing.

Important

Printing results, to a large extent, depend on the substrate as well as the printing and application conditions. We recommend checking your printing materials under your conditions of use before performing any production runs. Materials that are supposed to be identical may vary from manufacturer to manufacturer and even from batch to batch. Some substrates may have been treated with or contain sliding agents, antistatics or other additives which may impair the adhesion of the inks.

In general please refer to our technical leaflet "General Information on Screen Printing Inks" which may be downloaded from our website www.proell.de, click Download ⇒ Screen Printing Inks ⇒ General information on screen printing inks.

All color shades of Aqua-Jet[®] KSF constitutionally do not contain any pigments based on toxic heavy metals (DIN EN 71, part 3).

Gloss

Basic colors have a satin gloss finish. If necessary, a matt finish can be obtained by adding 1 – 2 % Matting Agent 2009.

Thinning	For good ink flow add 1 % Defoamer L 36273 before printing. The ink must be thinned with approximately 10 % water. It is also possible to add up to 20 % Retarder L 47716 instead of water.
Mesh	All polyester fabrics commonly used for screen printing are suitable for printing Aqua-Jet® KSF.
Stencil	Water-resistant emulsions or capillary films are necessary. Pröll recommends Diazo UV Polymer Emulsion Norikop 7 S.
Drying	The drying time depends on the substrate, drying equipment, and especially climatic conditions such as humidity, temperature etc. Adhesion, scratch resistance, and final hardness of the ink film are only achieved after complete evaporation of the water (or retarder) contained in the printed ink film.
Other Directions for Processing	Before printing it is recommended to moisten the stencil on the squeegee side, so even very fine details can be printed. During short printing stops (up to 5 minutes) the screen must be flooded with an ink layer of approx. 2 - 3 mm. Prior to longer printing stoppage, the screen should be wiped and cleaned. When printing again, the screen has to be remoistened.
Overprinting	Overprinting with Aqua-Jet® KSF 093 provides a satin matt finish. A gloss finish can be achieved using Aqua-Jet® KSF 093/010.
Crosslinking	2 % of Crosslinker L 20749 should be added to increase blocking and abrasion resistance of the ink film and the resistance to water and cleaning agents. <u>Attention:</u> The crosslinker may impair the adhesion on polystyrene. Testing is necessary.
Cleaning of Screens and Utensils	Inks remaining on stencils and utensils should be removed as soon as possible. Spray ink covered equipment with water or liquid cleaner to avoid complete drying. 2 or 3 minutes after application of the cleaner the stencil can be washed, using a high pressure cleaner if possible. Avoid eye and skin contact with alkaline cleaners, use personal protective equipment (e. g. gloves and glasses).

Auxiliaries

- **Defoamer L 36273**
Add 1 % to ink before printing, stir thoroughly.
- **Retarder L 47716**
Acts as a retarder paste, i. e. the viscosity of the ink is not noteworthy decreased. Add approximately 15 % - 20 %.
- **Crosslinker L 20749**
Addition of 2 % improves blocking and abrasion resistance as well as resistance against water and cleaning agents.
Adhesion can be improved. On polystyrene testing is necessary.
- **Aqua-Jet® Liquid Cleaner L 34642**
Proven cleaner for wet water based inks.
- **Aqua-Jet® Liquid Cleaner L 47603**
Cleaner with low content of solvents but good cleaning power for undried inks.
- **Cleaning Concentrate 6953**
Solvent free universal cleaner, can be diluted with water (see Technical Information).
- **Cleaner 6614**
Solvent based cleaner for dried inks remaining in the mesh. The mesh should be dry before application.

Shelf Life

Allow the ink as well as all the auxiliaries to be added to adjust to room temperature in the closed container before use.

The shelf life stated on the label assures the ink's quality and refers to unopened original cans stored in a dry place at temperatures between 5 °C (40 °F) and 25 °C (75 °F).

Aqua-Jet® KSF will be delivered in plastic cans and should not be stored below 0 °C (32 °F).

The information contained in the technical information/instruction sheets or other product information sheets is based on product testing conducted by Pröll. Because printing and environmental factors critically affect each individual ink application, the above mentioned information and instructions represent only general recommendations concerning product characteristics and directions for use and should not be construed as representing express warranties regarding the product. The information and instructions in no way release the purchaser from his obligation to verify and test the inks and their application for the specific request, regarding: product characteristics, weather resistance, mixing proportions, gloss, thinning, special mixtures, printability, drying speed, cleaning, effects on or of other materials to be contacted and safety precautions. All details contained in the instruction sheet "General Information on Screen Printing Inks" are to be considered. The further manufacture and use of products containing our inks by the purchaser takes place beyond our control, and the responsibility for further application and use of our product resides solely with the purchaser. Pröll disclaims any warranties, express or implied.

This information supersedes all previous technical information.