AquaTex C
Water-based Textile Printing Ink

Area of Application

Water-based textile printing ink for printing on non-finished cotton, cotton blends as well as on non-finished synthetics made from polyester, polyamide, viscose, lycra and acetate fibres.

Metallic colors are only available in the water-based ink line Nori-Tex. Please pay attention to the Technical Information “Nori-Tex”!

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.

Note

Textile fabrics have different weaving structures and may be starched which may reduce the ink’s adhesion and the ink’s fastness. In the same way, finishes may lead to yellowing when exposed to heat. Preliminary tests for this reason are necessary on cotton fabrics as well as on synthetics.
**Characteristics**

AquaTex C produces soft-feel and smooth prints; the grip of the textiles is practically not influenced.

**Ecological Information**

AquaTex C is a water-based ink system and does constitutionally not contain any petrol, other solvents or formaldehyde. This means the ink is made without addition of such chemicals.

**Printability**

AquaTex C does not tend to clogging. The hiding power of AquaTex C 944 White Opaque can be considerably increased by intermediate drying (infrared dryers).

**Mesh and Stencil Selection**

Depending on the motives and the substrate to be printed, polyester fabrics with 21 to 80 threads/cm (50 to 200 threads/inch) are used whereas for fine details and process printing up to 120 threads/cm (300 threads/inch) are used. For AquaTex C 944 White Opaque polyester fabrics in the range from 15 – 43 threads/cm resp. 38 – 110 threads/inch are recommended.

For manufacturing stencils water resistant emulsions must be used (e.g. Pröll Norikop 7 SD, 7 S or Pröll Norikop 8 HR, re-decoatable). For periodicals and printing in big series, permanent stencils for textile printing are to be used.

**Drying and Fixing of the Ink**

AquaTex C dries in the air, at room temperature (approx. 30 – 40 min.) as well as in hot air and IR-textile dryers. The drying time depends on the performance of the respective textile dryer.

The ink can be fixed in 2 ways:

1. **Cold fixing with Fixative:**
   Before printing, 2 % of Fixative (AquaTex C 944 White Opaque 3 % of Fixative) are carefully stirred in the ink. This is to achieve a very good wash resistance without any change of color.
   (DIN 54014, mechanical wash at 40 °C (104 °F),
   DIN 54010, mechanical wash at 60 °C (140 °F),
   washing machine at 95 °C (203 °F))

2. **Heat setting:**
   If it is not wanted to add Fixative, very good wash resistance according to the tests mentioned under “cold fixing” can be achieved by heat setting. After drying, the prints are thermo fixed in hot air for approx. 2 – 3 min. at 130 – 150 °C (260 – 300 °F).
2. **High opaque color shade AquaTex C 944 White Opaque:**

Only by a combination of Fixative and heat, good long-term wash resistance can be achieved. Add 3 % of Fixative to the ink and after drying subject the print to heat setting for 5 to 10 min. at 150 °C (300 °F).

For heat setting also infrared dryers can be used. Ironing presses and irons are suitable as well. However, it must be taken into consideration that the hot ironing area must cover the printed area during the whole curing time.

Before heat setting, synthetics as well as natural fibres should be checked regarding their temperature resistance.

**Washing Instructions**

It is recommended to wash textiles, which are printed with high opaque color shades, on the left side. Washing temperature max. 40 °C (100 °F).

Sufficient fixed prints of AquaTex C, can be dry-cleaned, too.

**Screen Cleaning**

Wet ink residues on the screen can be removed with water. Dried ink is removed either with Aqua-Jet®-Cleaner L 47603, Cleaner 6614 or Cleaner Concentrate 6953, (see Technical Information „Cleaner Concentrate 6953“).

**Auxiliaries**

The textile ink **AquaTex C** is supplied press ready.

The following auxiliaries can expand the area of application:

- AquaTex Thickener Paste: By adding 5 %, the viscosity can be increased, if necessary.
- AquaTex Thinner: Adding 3 – 5 % reduces the viscosity without noticeable changes of color.
- AquaTex C may also be thinned with water. Addition of 15 – 20 % of water may light up the color.
- Aqua-Jet® Retarder VZ 100: Adding max. 5 % prevents from clogging.
- AquaTex Fixative: Adding 2 % (in case of AquaTex C 944 White Opaque 3 % is necessary) results in a very good wash resistance. Pot life of AquaTex C with Fixative: 6 – 8 hours.

After expiry of the pot life ink – Fixative – mixtures should not be used any longer.
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 at temperatures between 5 °C (40 °F) and 25 °C (75 °F).

Disposal

Before pouring waste into the sewage, it should be pretreated according to state-of-the-art technology.

Safety precautions – General indications:

When working with chemicals, the usual safety precautions are to be observed. These are besides the rules of the Accident Prevention & Insurance Associations a good ventilation of the work place as well as good skin care and protection.