

Texiscreen Aqua AJ

Screen Inks

PRODUCT INFORMATION

Texiscreen Aqua AJ is a water-based textile ink, designed for direct wet-on-wet printing on a wide range of natural and synthetic fabrics.

Approved to the Global Organic Textile Standard



Many Texiscreen Aqua AJ colours have been approved by Soil Association Certification Ltd. to the Global Organic Textile Standard (GOTS).

Only those colours marked in the Colour Range section below have been approved. Other inks, thinners and additives may not be added to these colours if they are being used as part of an organic textile production process that is certified to the Global Organic Textile Standard. All containers of approved colours are clearly marked with a 'Soil Association Approved' label, and only products bearing this label are approved. For further details please go to www.sacert.org

Drying and Curing

Heat Cure:

Standard Colours: 150-170°C for 2-3 minutes

Opaque White: 150-170°C for 3-4 minutes

Cold Curing:

Texiscreen Aqua AJ can be cold cured with the addition of 5% AJ333 Cold Cure Catalyst. **AJ333 must not be used with Metallic Inks (see section 'Safety and Handling')**.

For optimum fastness, prints should be fully heat cured. The curing schedule should be chosen to suit the heat resistance of the fabric concerned. Care must be taken when using infra-red dryers to ensure that prints are fully cured. In addition to conventional heat cure schedules, the following catalyst is available.

Catalyst for Cold Curing (AJ333)

For applications where drying and curing equipment is limited or not available a 5% addition will eliminate the need to heat cure Texiscreen Aqua AJ. However, AJ333 is not recommended for use in AJ025 Opaque White. **AJ333 must not be used in Metallic Colours** (see section 'Safety and Handling').

Catalysed inks have a working life of 12 hours, after which the ink should be discarded. Catalysed ink gives no visible indication that it has exceeded its working life or that it has been catalysed previously. Therefore, care should be taken to avoid exceeding the working life of the ink, as this will greatly diminish its

Main characteristics

Curing

For optimum fastness, Texiscreen Aqua AJ should be heat cured. Can be cold cured with the addition of AJ333 Cold Cure Catalyst.

Thinning & Wash-up

If necessary, thin with up to 5% water.

To increase flow add up to ZT635 WB Flow Thinner.

Wash-up with water. Dried in ink may be washed out with ZT639 Screen Wash Universal if screens have been treated with a hardener.

Mesh

Monofilament. Standard Colours: No. 43-62.

AJ025 Opaque White: No. 34-43.

Stencil Type

Should be water resistant.

Recommend:

Dirasol 25, Dirasol SuperTex or Dirasol 916. For optimum stencil life, each can be treated with Sericure Stencil Waterproofing Agent.

Coverage & Mesh No.

Standard Colours: 15-21m²/ltr. No. 62 monofilament.

AJ025 Opaque White: 12-15m²/ltr. No. 43 monofilament

Fabrics

Cotton, cotton/polyester blends and some synthetic fabrics. The fastness to wash and dry cleaning on wool may be diminished.

Applications

T-shirts, banners, sports and fashion wear, scarves.

Colour Range

Seritone Base Colours with PANTONE® 1000 Matching Formulae available. AJ381 Extender Base for mixing into colours for a lower colour strength.

AJ021 White primarily to produce pastel shades.

AJ025 Opaque White for printing dark fabrics.

AJ403 Opaque White Base for mixing with Pigment Concentrates to produce opaque colours.

Properties

White Spirit free. Low Odour. Intermixable, lightfast, non-bleeding colours. Brilliant transparent shades. Soft handle. Excellent wash and dry clean resistance. Ironable. Optional hot/cold cure schedules. Many Texiscreen Aqua AJ inks are approved by Soil Association Certification Ltd to the Global Organic Textile Standard (GOTS).

IMPORTANT:

Stir well before every use. Due to possible variations in fabrics and drying/curing conditions, it is strongly recommended that fastness and rub resistance properties are proved suitable prior to a production run. With some fabrics, particularly those of a fine fibre, traces of spinning oil may need to be removed before printing.

*PANTONE® is the property of Pantone, Inc.

performance. Ink catalysed with AJ333 should be restricted to use on the 100% cotton and 50/50 cotton/polyester blends typically used in T-shirts.

Where maximum wash fastness is required, it is recommended that Taxiscreen Aqua AJ is used in conjunction with heat curing.

Fastness

Standard Colours:

Light fastness is good, not less than 6 on the Blue Wool Scale. Fully heat cured prints have excellent wash fastness to I.S.O. Tests No. 1 (40°C), 2 (50°C) and 3 (60°C) and the United Kingdom Home Laundering Consultative Council Recommendation No. 3 (60°C). The colours also have very good resistance to dry cleaning and direct ironing.

Colour Matches:

It should be noted that the combination of high wash temperatures and strong detergents can cause colour changes in some colour matches. For this reason, it is essential that all formulations are proofed prior to production to ensure wash fastness properties are acceptable.

Prints produced using ink catalysed with AJ333 are resistant to gentle, low temperature wash programmes such as I.S.O. Test No. 1 (40°C) and the United Kingdom Home Laundering Consultative Council No. 6 (40°C).

Rub Resistance

When fully cured, Taxiscreen Aqua AJ has good resistance to wet/dry rub.

Other Uses

May be used for block printing and painting of fabrics. Suitable for use in schools where non-toxic and water soluble colours may be preferred. Due to the water content, some distortion is unavoidable if used on paper and board.

Colour Matching

AJ103 should not be used in a colour match with AJ001. This is due to a potential reaction between the orange pigment in AJ103 with black pigment in AJ001 that may lead to the detection of an aromatic amine listed in Appendix 8 of the REACH Regulation (formerly covered by Directive 2002/61/EC). AJ001 and AJ103 can be expected to pass tests carried out in accordance with the test methods set out in Appendix 10 to the REACH Regulation (as amended), either on their own or mixed with any other colour from the Taxiscreen Aqua AJ range.

PANTONE® Matching System

The Taxiscreen Aqua AJ range includes 9 Seritone base colours plus Black, White and Extender Base to produce accurate simulations of PANTONE colours in the coated ('C' suffixed) section. See section 'Fastness' for important information concerning resistance properties of colour matches. The Fujifilm package includes:

1. PANTONE® Colour Formula Guide

2. Fujifilm Formula Guide

Formulations given in percentages by weight.

3. PANTONE Formula Scales

Pre-programmed with PANTONE shades to ensure maximum accuracy, speed and cost savings.

Printing Dark Fabrics

For multi-colour, wet-on-wet printing onto dark fabrics, Texopaque Classic OP and Advantage ON screen inks should be used (see Product Information Sheets). Colour values are greatly influenced by the fabric to be printed and the same colour can give substantially different results on different fabrics.

Metallics

If metallic shades are required, Texopaque Advantage ON should be used. Please refer to the relevant product information sheet.

Standard Colours

Taxiscreen Aqua AJ:

* AJ001	Black
* AJ021	White
* AJ025**	Opaque White
* AJ057 (S)	Seritone Yellow (GS)/Primrose
* AJ046 (S)	Seritone Yellow (RS)/Golden Yellow
* AJ103 (S)	Seritone Orange/Orange
* AJ122 (S)	Seritone Red (YS)/Scarlet
* AJ152	Brick Red
* AJ153 (S)	Seritone Red (BS)/Carmine
* AJ154 (S)	Seritone Magenta/Fuchsia (#)
* AJ132 (S)	Seritone Violet/Violet
* AJ218 (S)	Seritone Blue/Azure
* AJ219	Oxford Blue
* AJ316 (S)	Seritone Green/Sea Green
* AJ381	Extender Base
AJ403	Opaque White Base

Available in 5 ltr containers.

(BS) Blue Shade (GS) Green Shade
(RS) Red Shade (YS) Yellow Shade
(S) Seritone Base colours

** = Do not use with AJ333 Cold Cure Catalyst

Products marked * are approved by Soil Association Certification Ltd to the Global Textile Standard (GOTS).

Catalyst for Cold Curing:

AJ333 AJ Cold Cure Catalyst

Additives for Taxiscreen Aqua:

ZT635 WB Flow Thinner

Available in 1 ltr containers.

Ancillary Products

During printing, fabrics have to be held to the table by means of a pressure sensitive adhesive to ensure good definition is obtained. FlashFix and T-Fix Extra Spray Adhesives are suitable for this purpose. (See relevant Product Information Sheets).

Fujifilm Speciality Ink Systems Limited:

- Has certification to the International Environmental Standard, ISO 14001.
- Has certification to the Quality Management Standard, ISO 9001.
- Has certification to the Occupational Health and Safety Standard, ISO 18001.
- Is committed to minimising the risk to users of our products, and also to minimising the impact of our activities on the environment, from formulation through to production and supply.
- Research and development team, work to an in house Health Safety and Environmental policy, termed 'Design for Health, Safety and Environment', with the aim of proactively developing products with the least impact on health, safety and the environment.
- Regularly review and monitor our impacts and activities, setting objectives and targets as part of a continual improvement process.
- Is committed to reducing waste through better use of raw materials, energy, water, re-use and recycling.

Safety and Handling

Texiscreen Aqua AJ:

- Has a flashpoint greater than 55°C and is therefore not classified as a 'dangerous substance' under the Dangerous Substances and Explosive Atmospheres Regulations (DSEAR). With the exception of AJ333 which has a flashpoint of 47°C.

- Do not use AJ333 Cold Cure Catalyst in Metallic Colours as this can lead to an exothermic reaction, which could cause the container to explode.
- Unless otherwise indicated, colours in the range are routinely tested and supplied EN71-3 2013 approved.
- Products marked (‡) are formulated to comply with EN71-3 2013, but are not routinely tested for compliance with the standard.

Comprehensive information on the safety and handling of Texiscreen Aqua AJ inks and solvents is given in the appropriate Safety Data Sheets.

Environmental Information

Texiscreen Aqua AJ:

- Does not contain ozone-depleting chemicals as described in the Montreal Convention.
- Is formulated free from aromatic hydrocarbons.

The information and recommendations contained in this Product Information sheet, as well as technical advice otherwise given by representatives of Fujifilm Speciality Ink Systems Limited and its associated companies, whether verbally or in writing, are based on our present knowledge and believed to be accurate. However, no guarantee regarding their accuracy is given as we cannot cover or anticipate every possible application of our products and because manufacturing methods, printing stocks and other materials vary. For the same reason our products are sold without warranty and on condition that users shall make their own tests to satisfy themselves that they will meet fully their particular requirements. Our policy of continuous product improvement might make some of the information contained in this Product Information sheet out of date and users are requested to ensure that they follow current recommendations.

FUJIFILM SPECIALITY INK SYSTEMS LIMITED

Pysons Road, Broadstairs
Kent CT10 2LE
United Kingdom
T: +44 (0)1843 866668
F: +44 (0)1843 872184
www.fujifilm.eu