

Textile Screen

Inks

ADVANTAGE ONI

Phthalate Free Plastisol Inks

Features

- No Build-up- improves productivity
- Excellent opacity- high impact prints
- Low fibrillation
- Soft gel - easy to handle - on and off screen
- Soft hand - prints are comfortable to wear
- Excellent wash resistance

TEST INKS ON SUBSTRATES
BEFORE PRODUCTION RUN

SERICOL
More than ink...Solutions.
FUJIFILM

Advantage ONI is part of the Texopaque Series of direct printing, maximum opacity, plastisol inks designed for printing most natural and synthetic fabrics. The series incorporates Sericol's unique 'Co-Plus' Technology which eliminates build-up. Advantage ONI inks are formulated to be phthalate free. See section Environmental Information.

Co-Plus - what is it?

The interaction of specially engineered raw materials, optimising their internal cohesive forces, to eliminate build-up.

What does it mean for you?

- No build-up - improves productivity
- Excellent opacity - high impact prints
- Low fibrillation - prints look better - longer
- Soft gel - easy to handle - on and off screen
- Soft hand - prints are comfortable to wear

Curing Information

Advantage ONI inks must be heat cured at a minimum of 140°C to achieve full wash fastness. Differences in film weight, drying equipment and fabric will greatly affect the dwell time required, but 1.5-3 minutes is typical. Some infra-red units can achieve full cure in a very short time. Time will vary dependant on colour (dark colours curing faster than light colours).

It is essential that the entire thickness of the ink film has time to reach the cure temperature or resistance properties will not be achieved. Evaluate your cure schedule by testing the print at the wash schedule it will ultimately be expected to pass.

Flash curing

Under optimum conditions, dwell times of less than 3 seconds can be readily achieved. ONI 756 Advantage Flash Cure White should be used, if a low phthalate print is required. Many factors affect the dwell time required for flash curing. These include the type and wavelength of the equipment used, and the distance between the curing unit and the print. Additional factors such as fabric and ink colour, film weight and coverage are also crucial.

Fastness

Texopaque Advantage ONI has good wash fastness. It passes 5 washes at 60°C/ 90 minutes.

Colour Matches It should be noted that the combination of high wash temperatures and strong detergents can cause colour changes in some colour matches, particularly when very small additions of a base colour are added. For example, pastel shades can change colour as the trace additions of base colours are affected in harsh wash cycles. For this reason, it is essential that all formulations are proofed prior to production to ensure wash fastness properties are acceptable. Prints may be ironed from the back of the fabrics at a cool setting, with a cloth over the printed area.

Prints will not resist dry-cleaning and garments should be marked to this effect

Thinning

To increase flow, use up to 5% ONI 591 Advantage ONI Thinner.

Wash-up

Wash up with SS639 Screen Wash Universal.

Mesh

Monofilament 34-120

Stencil Type

Most direct stencil materials are suitable.

Recommended:

Dirasol SuperTex or Dirasol 125.

Coverage & Mesh No.

12-16m²/l^{tr}. No. 43 monofilament.

Applications

Most knitted and woven fabrics typically used for T-shirts, Sweat Shirts, Sports and Fashion Wear, Badges, Hats and Caps, Travel Bags, Footwear.

Fabrics

Suitable on most common, natural and synthetic, fibres, i.e. Cotton, Cotton/polyester blends. Many grades of synthetic fabrics.

IMPORTANT:

Stir well before every use. Users should satisfy themselves that Advantage ONI is compatible with specific textiles and resistance properties are acceptable before commencing production runs.

Fibrillation

Fibrillation occurs when fibres from the garment break through the ink film during a wash cycle to give a faded appearance.

While fibrillation has the look of poor wash fastness it is not caused by the loss of ink, it occurs even with fully cured prints. There are several methods to minimise fibrillation, however, each results in increased print handle:

- Increase ink film weight
- Use a flash-cure ground coat (FW756 Advantage Flash Cure White)
- Add 0.5-1% of ZE1 010 Thixotropic Additive.

As demand for low handle/low film weight prints increases, so does the likelihood of fibrillation. The complex relationship of ink, print technique and garment, reinforces the need to wash test-prints to customer requirements prior to production.

Transfer Printing

Phthalate free transfers can be produced by using Advantage ONI in conjunction with a phthalate free transfer adhesive (XMAII). For production of multi-colour transfers, each colour should be heat set on the transfer paper.

Heat Setting:

100°C for 30-60 seconds.

It is important that transfers are not over-set, as the adhesion of the transfers to the garment may be impaired.

Transfer Application:

The finished transfer may be applied in a heat transfer press at approximately 180-190°C for 10-15 seconds. Care must be exercised with heat sensitive fabrics. The transfer paper should be allowed to cool down before removal.

Colour Range Advantage ONI

ONI 001 (S) Black

ONI 021 (S) White

ONI 025 Extra Opaque White

ONI 042 (S) Seritone Yellow (G/S) / Light Chrome

ONI 043 (S) Seritone Yellow (R/S) / Mid Chrome

ONI 101 Light Orange

ONI 162 (S) Seritone Orange / Light Red

ONI 165 (S) Seritone Magenta

ONI 166 (S) Seritone Violet

ONI 127 Deep Violet

ONI 134 (S) Seritone Red (Y/S) / Red

ONI 124 (S) Seritone Red (B/S) / Deep Red

ONI 203 (S) Seritone Blue / Mid Blue

ONI 206 (S) Seritone Blue (R/S) / Deep Blue

ONI 285 (S) Seritone Green / Deep Green

ONI 381 Extender Base

ONI 382 Low Bleed Extender Base

ONI 756 (S) Advantage Flash Cure White

ONI 417 Expanding Base

(S) = Seritone Base colours

Trichromatic Colours

ONI 215 Trichromatic Cyan

ONI 135 Trichromatic Magenta

ONI 058 Trichromatic Yellow

ONI 004 Trichromatic Black

Thinners/Reducers

ONI591 Advantage ON Thinner

Available in 5ltr 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).

Safety and Handling

Advantage ONI:

- Is formulated to be free from any chemicals toxic to health, carcinogenic, mutagenic or reprotoxic.
- Is formulated free from lead and other heavy metals and is tested to comply to the EN71-3: 1995 Toy Safety Standard.
- Should be stored away from heat.
- Comprehensive information on the safety and handling of Advantage ONI screen inks and solvents is given in the appropriate Sericol Safety Data Sheets, available upon request.

Environmental Information

Advantage ONI:

- Does not contain ozone-depleting chemicals as described in the Montreal Convention.
- Is formulated free from aromatic hydrocarbons, which are known to have an adverse effect on the environment.
- Is free of any volatile solvent and is therefore beneficial to the environment when compared to solvent-based products.

Important:

The Advantage ONI range has been developed using non-phthalate plasticisers, however the possibility for low level contamination during the manufacturing process exists. In addition users must be aware of potential sources of contamination such as squeegees, flood coaters, screens and curing equipment, which may all, contribute trace amounts of phthalate from previous use with other plastisols.

The information and recommendations contained in this Product Information sheet, as well as technical advice otherwise given by representatives of our Company, whether verbally or in writing, are based on 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