

Product Information

SERICOL

Texopaque OP

Phthalate Compliant⁽¹⁾ Plastisol Inks

Texopaque OP is a conventional plastisol ink for direct printing and maximum opacity. Plastisol inks are designed for printing most natural and synthetic fabrics. Texopaque OP incorporates Fujifilm's unique 'Co-Plus' Technology that eliminates build-up.

Co-Plus - what is this?

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 for longer
Soft gel - easy to handle on and off screen
Soft hand - prints are comfortable to wear

Intermixing and Compatibility with Other Inks

Texopaque OP is intermixable with other Fujifilm plastisols

Curing

The ink film must reach 160°C

Thinning

To increase flow, use up to 5% OP591 Texopaque OP Thinner

Wash-up

Wash-up with ZT639 Screen Wash Universal, ZS640 Tursub or Actisol Superjet Screen Spray

Mesh

Monofilament 34-100

Stencil Type

Most direct stencil materials are suitable
Recommended: Dirasol SuperTex or Dirasol 916

Coverage & Mesh No.

12-16m²/ltr. No. 43 monofilament

Applications

Most knitted and woven fabrics. Typically used for T-shirts, sweatshirts, 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.



Properties

Exceptional opacity. Lead-free. Excellent wet-on-wet printability. Unlimited screen stability. High wash resistance. Build-up free.

Before Use

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

Curing Information

Texopaque OP inks must be heat cured at a minimum of 160°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 depending 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

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. Under optimum conditions, dwell times of less than 3 seconds can be readily achieved.

Fastness

Texopaque OP has good wash fastness to ISO Tests Nos. 1 (40°C), 2 (50°C) and 3 (60°C).

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 fabric 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.**

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 and 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

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

For transfer printing please refer to 'Texopaque Transfer System' product information sheet.

PANTONE® Matching System

The Texopaque OP range includes Seritone base colours plus Black, White and Extender Base to produce accurate simulations of the 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 Color Formula Guide - The original PANTONE book.
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.

Standard Product Range

OP001		Black
OP021		White
OP025		Super White
OP042	(S)	Light Chrome
OP043	(S)	Mid Chrome
OP045		Yellow
OP101		Light Orange
OP124	(S)	Deep Red
OP134	(S)	Red
OP162	(S)	Light Red
OP165	(S)	SMS Magenta
OP166	(S)	SMS Violet
OP199		Warm Red
OP203	(S)	Mid Blue
OP206	(S)	Deep Blue
OP207		Navy Blue
OP212		Blue
OP227		Light Blue
OP283		Bright Green
OP285	(S)	Deep Green
OP320		Green

(YS) = Yellow Shade

(S) = Seritone Base Colours

Available in 1ltr and 5ltr units.

The above products have a shelf life of approximately 48 months.

OP210		Ultra Blue
OP381		Extender Base
OP396		Trich Extender Base

Available in 5ltr units.

The above products have a shelf life of approximately 48 months.

Speciality Products

OP037		Athletic White
OP038		Athletic Base
OP327		Phosphorescent Green
OP370		Bling Base
OP397		Multi-use Glitter Base
OP398		Standard Glitter Base
OP421		Metatran Adhesive
OP451		Transfer White Adhesive
OP452		Transfer Clear Adhesive
OP475		Metallic Gold
OP476		Metallic Silver
OPA03		Litho Back Up White

Available in 5ltr units.

The above products have a shelf life of approximately 24 months.

OP378		Transfer Adhesive Powder
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Available in 5ltr and 15ltr units.

The above product has a shelf life of approximately 48 months.

Trichromatic Colours

OP004		Strong Trich Black
OP058		Strong Trich Yellow
OP135		Strong Trich Magenta
OP215		Strong Trich Cyan

Available in 5ltr units.

The above products have a shelf life of approximately 48 months.

Press Ready Colours

OPR04	Press Ready Black
OPR15	Press Ready Cyan
OPR35	Press Ready Magenta
OPR58	Press Ready Yellow

Available in 5ltr units.

The above products have a shelf life of approximately 48 months.

Fluorescent Colours

OP077	Fluorescent Yellow
OP119	Fluorescent Orange
OP179	Fluorescent Red
OP180	Fluorescent Magenta
OP294	Fluorescent Green

Available in 5ltr units.

The above products have a shelf life of approximately 30 months.

Additives

OP384	Matting Additive	(Ø)
OP419	Extra Expanding Additive	(±)
OP439	Soft Hand Base Additive	

Available in 5ltr units.

The above products have a shelf life of approximately 48 months.

OP417	Standard Expanding Additive	(±)
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Available in 1ltr and 5ltr units.

The above product has a shelf life of approximately 48 months.

Thinners/Reducers

OP591	Thinner
ZS640	Tursub

Available in 5ltr units.

OP591 has a shelf life of approximately 48 months and Tursub has a shelf life of approximately 72 months.

Super Opaque White does not share the build-up resistance of the standard colours.

Flash Cure Whites

For details and comparisons of Flash Cure Whites, see 'Flash Cure Whites' product information sheet.

Trichromatic Inks

For details and comparisons of the plastisol trichromatic ink ranges see 'Special Plastisol Inks and Additives' product information sheet.

Special Purpose and Special Effect Inks

A range of special purpose and special effect plastisol inks such as metallics and a range of additives and modifiers such as catalysts, etc. is available. See 'Special Plastisol Inks and Additives' product information sheet.

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. Flash Fix and T-Fix Extra Spray Adhesives are suitable for this purpose (see relevant product information sheet).

Storage

Store in a cool, dry place in tightly sealed containers. Texopaque OP inks should not be stored in direct sunlight, or near heat sources and should be kept away from peroxides. For optimum shelf-life, all products should be stored at moderate

temperatures between 5°C and 30°C. Storage outside of these temperatures may lead to deterioration in the performance of the product.

When stored at optimum storage conditions, Texopaque OP standard product range inks are expected to have a shelf life of approximately 48 months from the date of manufacture. For the shelf life of all other OP inks please contact FSIS.

Safety and Handling

Texopaque OP Inks:

- Are formulated to be free from any chemicals toxic to health, carcinogenic, mutagenic or reprotoxic according to Directive 67/548/EC.
- 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.
- Products marked (Ø) are not formulated to comply with EN71-3 2013.

Comprehensive information on the safety and handling of Texopaque OP inks and associated products is given in the appropriate Safety Data Sheets.

Environmental Information

Texopaque OP Inks:

- Do not contain ozone-depleting chemicals as described in the Montreal Convention.
- Are formulated free from aromatic hydrocarbons.
- Are free from any volatile solvent and can therefore be considered to have less impact on the environment when compared to solvent-based products.

Öko-Tex Standard 100

Contact your Fujifilm supplier for the latest information concerning the compliance of Fujifilm Inks.

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 45001.
- 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.

Important: The Texopaque OP range has been developed not to contain phthalates restricted for use by Council Directive 76/769/EEC (as amended). 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 restricted phthalate materials from previous use with other plastisols.

*PANTONE® is the property of Pantone, Inc.

⁽¹⁾Phthalate Compliant means that the products listed in this Product Information Sheet are formulated not to contain the Phthalates restricted for use by Council Directive 76/769/EEC (as amended).

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.

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