



General Purpose Plastisol Transfers

Plastisol Transfers are made by printing plastisol inks onto a special transfer paper, then heat setting each colour. The transfer is applied to a garment using a heat press and a combination of time and pressure.

Prints may be overprinted with a special adhesive to give better adhesion to synthetic substrates or to reduce the transfer temperature to as low as 160°C.

The end uses for plastisol transfers include most garments which are made of cotton or blends of at least 50% cotton.

Production of Cold Peel Transfers

Cold Peel transfers are those in which the whole of the printed ink film is transferred to the garment.

Inks: Use Texopaque Classic OP or Texopaque Advantage ON ink unthinned to gain maximum opacity and adhesion.

Mesh Count: 21-62 (or up to 120 if a back-up white or adhesive is used).

Drying: Heat set on paper until touch dry. Typically 110-120°C for 30-60 seconds dependent on the heat source.

Thinning: If required, up to 5% ZE591 Plastisol Flow Thinner or ON591 Advantage Thinner.

Recommended paper: TRB08, TRB20, TRW29 transfer papers.

Transfer

Place the garment on the lower platen and position the transfer on top, print side down. Close the heat press and leave for 10-15 seconds. Open the press, carefully remove the garment with the transfer still in place and allow to cool. When cold, carefully peel the paper from the garment, to leave the print attached. Cold Peel transfers produce prints that are usually flexible and wash-resistant but, as with all plastisol prints, they are not resistant to ironing. These properties will vary depending on the ink and printing conditions used.

Recommended Transfer Schedule

185-190°C, 10-15 seconds, high pressure, wait until paper has cooled prior to removal. When using an adhesive, 160-170°C is recommended (see section on Printable Adhesives and Adhesive Powder)

NOTE: when producing Advantage ON Phthalate Compliant⁽¹⁾ transfers, ensure that the correct adhesives and thinners are used to avoid contamination.

Due to the complex nature of decorating garments with transfers, customers must confirm suitability through pre-production testing.

Gloss Transfers

Utilising the Cold Peel method onto a high gloss transfer paper allows the creation of high impact gloss transfers, of particular appeal to the fashion and speciality markets.

Mesh: 21-62 (or up to 90 if a back-up white or adhesive is used)

Recommended paper: TRQ97 transfer paper

Recommended Transfer Schedule: 170-190°C, 10-15 seconds, high pressure, wait until paper has cooled prior to removal.

Glitter Effects

Incorporating a flaked, coated polyester glitter into conventional translucent/clear plastisol products leads to striking, high impact transfers. A variety of flake sizes are available, with maximum impact being generated by 0.008 sq inch (0.2 mm) glitter flakes.

Mixing Ratio: Up to 25% Glitter (by weight) may be added

Mesh: 10.5 or coarser for 0.008 sq inch (0.2 mm) flakes. 21-34 with 0.004 sq inch (0.1 mm) flakes.

Recommended paper: TRQ97

Recommended Transfer Schedule: 170-190°C, for 10-15 seconds, medium pressure, wait until paper has cooled prior to removal.

Printable Adhesives and Adhesive Powder

XM452 Clear Adhesive can be used to overprint OP colours, and TJ451 White Adhesive or TJ452 Clear Adhesive to overprint ON colours, to give better adhesion to synthetic substrates or to reduce the transfer temperature to as low as 160°C.

Recommended Mesh: 21-43

Recommended Transfer Schedule: 160-170°C for 10-15 seconds.

Maximum adhesion onto synthetic garments can be achieved using the XM378 Transfer Adhesive powder. To use this process, print the plastisol print as recommended, then sprinkle the adhesive powder onto the back of the wet ink prior to setting. Vacuum or shake to remove excess. Transfer would then be as recommended for printable adhesives.

Fastness/Resistance

Wash: Up to 60°C.

Dry Clean: Not suitable.

Direct Iron: Not suitable.

Industrial: Not suitable.

Recommended Transfer Equipment

Flat-bed Transfer Press

Rotary Presses

It is important not to over cure, especially with multicolour transfers, as adhesion and transfer properties can be affected.

Due to the variable nature of synthetic coatings, prints should be fully tested for suitability before commencing production.

Products Required

Colours

Texopaque Classic OP plastisol inks
Texopaque Advantage ON plastisol inks - Phthalate Compliant⁽¹⁾

Refer to the individual product information sheets for the colours available and full application details for the Classic OP and Advantage ON ink ranges.

Adhesives

XM452 Clear Adhesive
TJ451 White Adhesive - Phthalate Compliant⁽¹⁾
TJ452 Clear Adhesive - Phthalate Compliant⁽¹⁾
Available in 5 ltr containers

XM378 Transfer Adhesive Powder - Phthalate Compliant⁽¹⁾
Available in 1 kg containers

Reducer

ZE591 Plastisol Flow Thinner
ON591 Advantage Thinner - Phthalate Compliant⁽¹⁾
Available in 5 ltr containers

Transfer Papers

Transfer papers recommended for producing Cold Peel general purpose plastisol transfers:

TRW29 Vegetable Parchment Paper

700 x 1000 mm

Packs of 250 sheets

Vegetable Parchment Paper is the thinnest transfer paper and is an economical option for single or non-registered colour transfers. Multi-colour transfers are not recommended for use with Vegetable Parchment Paper.

TRB08 T75 Transfer Paper

700 x 1000 mm

Packs of 250 sheets

T75 (75 gsm) transfer paper is the standard recommendation for cold peel transfers. The wide format of application leads to suitability for both plastisol and solvent-based ink systems.

TRB20 T105 Transfer Paper

700 x 1000 mm

Packs of 250 sheets

T105 (105 gsm) transfer paper is used where maximum stability in paper is required. This is most suitable for use with multi-colour images where registration is critical and shrinkage is to be kept to a minimum.

TRQ97 Glitcote Transfer Paper

635 x 965 mm

Packs of 500 sheets

High gloss transfer paper can be used in combination with plastisol inks to generate high gloss prints. The transfer paper is single sided with the reverse side having no release coating. Glitcote Transfer paper can also be used as a post-press process, to give a gloss finish.

Fujifilm Speciality Ink Systems Ltd

- Has certification to the International Environmental Standard, ISO 14001.
- 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 & 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

Classic OP, Advantage ON, Special Advantage TJ and Multitran XM:

- Are formulated to be free from any chemicals toxic to health, carcinogenic, mutagenic or reprotoxic according to Directive 67/548/EC.
- Are formulated free from lead and other heavy metals and are tested to comply to the EN71-3: 1995 Toy Safety Standard.
- Have a flashpoint greater than 55°C and are therefore not classified as "dangerous substance" under the Dangerous Substances and Explosive Atmospheres Regulations (DSEAR).
- 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.

Comprehensive information on safety and handling is given in the appropriate Safety Data Sheets.

Environmental Information

Special Advantage TJ and Multitran XM:

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

Classic OP and Advantage ON:

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

(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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