Sportswear Transfers

A speciality transfer system, developed to enable the generation of high stretch products for use on previously sublimated materials such as football/sports shirts. The system combines the use of Nylotex NX ink colours plus special dye blocking layers and a selection of specialised adhesives. The combination minimises discolouration of the transferred print by the dyed fabric.

Production of Sportswear Transfers

Production of Sportswear Transfers involves the use of Nylotex NX solvent-based inks backed up with a special adhesive – XM452, TJ452 or TO458. For best results, backing of the colours with a flexibility layer consisting of NB033 Coating White, or alternatively a 50:50 blend of Nylotex NX white and extender base, is recommended. Dye blocking layers are required when transferring onto sublimated materials, or substrates that are prone to dye bleed. White and clear adhesives are available, with clear adhesives being recommended to maximise wash resistance.

Note: when producing PVC free or 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.

Nylotex NX inks

Catalyst: 5% Addition of NB catalyst required
Thinning: If required, up to 20% ZE805 Nylo Thinner. Hot-shop conditions, up to 10% ZE806 Nylo Retarder.
Mesh Count: 34–77
Recommended Paper: TRB08 or TRB20 transfer paper
Drying: Heat set on paper until touch dry. Typically 120°C for 40 - 60 seconds depending on the heat source.
Catalysed ink left over at the end of the printing run should be discarded. Typical pot-life, 8 hours.

Dye Blocking Layer

Ink: VVX44 Special Nylobag Silver
Catalyst: 5% NB Catalyst
Extender Base: Base back with 15-25% of NX381 Extender base to improve adhesion and flexibility
Mesh Count: 43-55
(For best results VVX44 should be air dried overnight rather than force dried).

Adhesive Layer: XM452, TJ452 or TO458

Catalyst: Not required
Thinning: If required, up to 5% ZE591 (for XM452), 5% ON591 (for TJ452) or 5% ZE592 (for TO458).
Best results are achieved unthinned.
Mesh Count: 21-43 depending on detail and opacity required.
Drying: Heat set on paper until touch dry. Typically 120°C for 40 - 60 seconds depending on the heat source.

Transfer Schedule

XM452 and TJ452: 160-170°C for 10-15 seconds, medium to firm pressure.
TO458: 150-160°C for 10-15 seconds, medium to firm pressure

Fastness/Resistance

Wash: Up to 60°C.
Dry Clean: Not Suitable.
Industrial: Not Suitable.

Transfer Equipment

Flat-bed Transfer Press

Products Required

Colours

Nylotex NX solvent-based inks (see relevant Product Information sheet).

Dye Blocking Silver

VVX44 Special Nylobag Silver
Available in 5 ltr containers.

Adhesives

XM452 Clear Adhesive
TJ452 Clear Adhesive - Phthalate Compliant[1]
T0458 Clear Adhesive - Water-based. PVC-free. Phthalate Compliant[1]
Available in 5 ltr containers.

Additives

NB386 NB Catalyst
Available in 1 ltr and 0.2 ltr containers.

ZEA09 Flow Aid
Available in 1 ltr containers.

Reducers

ZE805 Nylo Thinner
ZE806 Nylo Retarder
ZE591 Plastisol Flow Thinner
ON591 Advantage ON Thinner
ZE592 WB Retarder
Available in 5 ltr containers.

Transfer Papers

Transfer papers suitable for producing sportswear transfers:

TRB08 T75 Transfer Paper
700 x 1000 mm size
Packs of 250 sheets
T75 (75 gsm) transfer paper is most suitable for use with single-colour images.

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.

Fujifilm Speciality Ink Systems Limited

- 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

MultiTran XM, Advantage Transfer TJ, Pioneer Transfer TO, Nylotex NX and Nylobag NB:

- Are formulated to be free from any chemicals toxic to health, carcinogenic, mutagenic or reprotoxic according to Directive 67/548/EC.
- MultiTran XM, Advantage Transfer TJ, Pioneer Transfer TO and Nylotex NX 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.

Nylobag NB Catalyst:

- NB386 Catalyst contains isocyanate and should not be used by persons suffering from bronchitis or asthmatic symptoms.

Comprehensive information on the safety and handling of MultiTran XM, Advantage Transfer TJ, Pioneer Transfer TO, Nylotex NX and Nylobag NB is given in the appropriate Safety Data Sheets.

Environmental Information

MultiTran XM, Advantage Transfer TJ and Pioneer Transfer TO:

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

Nylotex NX and Nylobag NB:

- Do not contain ozone depleting chemicals as described in the Montreal Convention.

(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).

FUJIFILM

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PRINTED IN ENGLAND 2962/O11