# ECOTRANS® AQ

**Product Information** 

# Water-based Screen Inks 2-pack system

Used in the production of highly washable, highly stretchable, single & multi-colour heat transfers.

## **Substrates:**

Transfer Papers, Transfer Films.



Suitable for use on manual, semi-automatic & fully automatic machines.

List of suitable screen machines on request.

Substrates to be printed must be tested for suitability with the **ECOTRANS® AQ** ink system prior to production runs being carried out. Always test application fully before beginning production run as there is often considerable variance in substrates from different manufacturers and even between different batches.

# **Heat Transfer Label Inks**

82-08- ECOTRANS® AQ Water-based Inks

Highly durable, fast drying ink system for use in climate-controlled printing environments.

For use in sportswear & casual wear transfers.

82-08-HS ECOTRANS® AQ High Stretch Water-based Inks

Highly stretchable, durable, fast drying ink system for use in climate-controlled printing environments.

For use in sportswear & casual wear transfers.

82-31- ECOTRANS® AQ Water-based Inks

Highly screen stable, highly durable ink system for use in almost any printing environment.

For use in sportswear & casual wear transfers.

82-31-HS ECOTRANS® AQ High Stretch Water-based Inks

Highly screen stable, highly stretchable, durable ink system for use in almost any printing environment.

For use in sportswear & casual wear transfers.

82-50- ECOTRANS® AQ Slow Dry Water-based Inks

Extremely screen stable ink system for use in high temperature and low humidity printing environments.

For use in sportswear & casual wear transfers.

82-50-HS ECOTRANS® AQ High Stretch Slow Dry Water-based Inks

Extremely screen stable, highly stretchable ink system for use in high temperature and low humidity printing environments.

For use in sportswear & casual wear transfers.

82-50-US ECOTRANS® AQ Ultimate Stretch Slow Dry Water-based Inks

Extremely screen stable, extremely stretchable ink system for use in high temperature and low humidity printing environments.

For use in single colour Tagless care label transfers only, not suitable for multi-layer transfers.

**Properties** 

Transfers produced with the **ECOTRANS® AQ** ink system give excellent Performance, Durability, Wash & Dry Clean

resistance properties on a wide range of fabrics, when processed in accordance with the TDS recommendations.

Transfers are Soft & Flexible on suitable substrates
Wash Resistances up to 60°C dependent on adhesive

Wash Resistances up to 60°C dependent on adhesive Water Based Pigmented Ink System

Low V.O.C.

OEKO-TEX® Standard 100 Part 1 compliant
OEKO-TEX® Eco-passport compliant

Zero Discharge of Hazard Chemicals (ZDHC) compliant

When correctly Heat Cured the 2-pack ink system produces Durable & Wash Resistant transfers. Performance, Durability and Wash resistances are dependent on the substrate, release film or paper and the adhesive used.

Supplied

As a Mixing Range - Black, Opaque White, Clear, 9 Base Colours & 5 Fluorescent Colours.

FREE Formula guide to match any International Matching System available. Colour Matching Service available.

Use the ECOTRANS® AQ ink coding system to find out your required colour reference code.

Ink and Cross Linker are supplied separately.

ECOTRANS® AQ Stretch Blocking Black inks 82-08-9-59100 and 82-50-9-59100 have been specially formulated to

prevent Sublimation Dye strike through with transfers – see separate data sheets.

MOQ Minimum ordering quantity, 5kg per colour.

**Usage** All inks should be thoroughly mixed gently prior to use as settling of the ink may occur during transportation & storage.

Use as a 2-pack ink system with ECOTRANS® AQ Crosslinker (82-AD-AQ).

Optimum Resistances will be achieved a minimum of 72 hours after printing.

# **ECOTRANS® AQ**

#### **Product Information**

#### Crosslinker

Use as a 2-pack ink system with ECOTRANS® AQ Crosslinker (82-AD-AQ). Use in well ventilated areas.

The "Pot-life" of the 2-pack ink is between 6-8 hours. "Pot-life" is dependent on temperature & humidity levels. For further information refer to **ECOTRANS® AQ** 2-pack Mixing Instructions.

All 2-pack inks will IRREVERSIBLY HARDEN after mixing. When printing is completed, or if printing is interrupted for more than 15 minutes, the screen mesh, screen machinery & equipment used must be thoroughly cleaned to prevent permanent damage.

Ink Type Recommended addition levels

 Coloured Inks
 3.0% 82-AD-AQ

 White Inks
 2.0% 82-AD-AQ

 Anti-Dye Migration Inks
 1.0% 82-AD-AQ

Printable Adhesives Do not use crosslinker in adhesives.

#### Squeegee

For Screen flat-bed printing, it is recommended to use a medium (Shore hardness 70-75°) square-edged squeegee.

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Ink Type	Passes	Mesh Recommendation	Mesh Range Recommendation
Coloured Inks	1-2 Layers	90T (229 threads/inch)	61 - 90T (155 - 229 threads/inch)
White Inks	1-2 Layers	61T (155 threads/inch)	43 - 77T (110 - 195 threads/inch)
Anti-Dye Migration Inks	1-2 Layers	61T (155 threads/inch)	36 - 61T ( 90 - 155 threads/inch)
Printable Adhesives	1-2 Layers	36T ( 92 threads/inch)	29 - 43T ( 74 - 110 threads/inch)

#### **Heat Curing**

Dry the printed sheet in a drying tunnel, ensuring that each layer is completely dry before continuing.

82-08- Recommended drying conditions: 110°C for 60 seconds

Range: 80 - 110°C for 45 - 60 seconds (depending on dryer, air flow, screen mesh)

82-31- Recommended drying conditions: 130°C for 60 seconds

Range: 110 - 130°C for 45 - 60 seconds (depending on dryer, air flow, screen mesh)

**82-50-** Recommended drying conditions: 150°C for 120 seconds

Range: 130 - 150°C for 60 - 120 seconds (depending on dryer, air flow, screen mesh)

#### **Additives**

For maximum opacity, print without the addition of any **ECOTRANS® AQ** additives.

Ink becomes thick due to ink drying / evaporation	add water		<b>↑</b> 10%
Ink requires thinning without affecting drying rate	add Viscosity Modifier	(82-AD-VM)	<b>↑</b> 5%
Ink dries too fast in the screen &/or small designs	add Retarder	(82-AD-RE)	<b>↑</b> 5%
Ink dries too fast / high ambient temperature	add Ink Stabiliser	(82-AD-ST)	<b>↑</b> 3%
Excessive bubbling caused when mixing	add Anti-foam	(82-AD-AF)	<b>↑</b> 1%
Pin-holing occurs when printing	add Wetting Agent	(82-AD-WA)	<b>↑</b> 1%

#### **ENSURE ONLY ECOTRANS® AQ ADDITIVES ARE USED**

#### **Cleaners**

PERFECTOS® AQ Performance Cleaner (99-10-82) For cleaning screen and machine parts.

PERFECTOS® AQ Screen Refresher (99-10-83) Used to keep the screen stable and open when printing small image

areas, or for liberal use after the print run is complete, prior to washout.

PERFECTOS® Citrus Hand Cleaner (99-10-HCC) Solvent-free heavy-duty hand cleaner.

## DO NOT PUT CLEANERS INTO INK

# **Shelf Life**

For specific expiry and use by period refer to product label. As a guideline standard mixing range items are suitable for use 3 years from manufacture, and within 12 months of opening. Security Inks only have a shelf life of 6 months.

For maximum shelf life, keep containers closed and store in a cool environment between **5°C** (41°F) and **35°C** (95°F), out of direct sunlight and away from any heat sources.

Ensure the lid is replaced onto any unused ink in the container to prevent skinning.

#### Safety

Refer to the specific **PERFECTOS®** Safety Data Sheets for information on the safety & handling of this range of inks, available on request.

**ECOTRANS® AQ** Test Specifications & \*Declarations are available on request.

## Notes

All Products supplied in bulk quantities & require weighing out prior to mixing / printing as the ratios may vary dependent on colour & substrate to be printed.

Screen Emulsion must be suitable for use with Water Based inks - See PERFECTOS® 99-SM-WBEMUL.

Quality Control tests carried out to **PERFECTOS®** specifications unless otherwise agreed prior to supply of product. Please use the contact details below for further assistance or information





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ISO 45001 Occupational Health and Safety Management CERTIFIED