



isocarbo

www.isocarbo.it

isocarbo

Since 1923, ISOCARBO Srl
has been able to develop
innovative and sustainable technology
solutions for the demanding textile sector.







Thanks to its significant expertise in dyeing and printing processes, ISOCARBO produces and offers highly technological and specific product range (disperse dyes, reactive dyes, disperse sublimatic dyes, acid dyes, pigments and all auxiliaries for pretreatment, washing, steaming and finishing).



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ISOCARBO
guarantees the highest production
and technology standards,
in full compliance with the most
restrictive health, safety
and environmental regulations.



Deep know-how of the textile sector and unique experience of more than 90 years, investments in research and strategic industrial assets, allow ISOCARBO to constantly grow at industrial level.



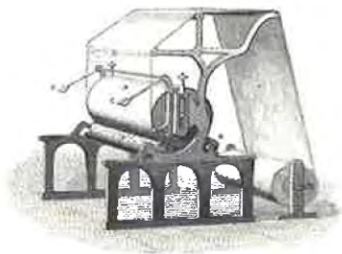
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ISOCARBO plays nowadays
a central role in the
international market
for digital inks



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History

1923

Isocarbo was founded
in Camerlata – COMO – ITALY

1977

Isocarbo moved to a new
10,000 sqm plant in Senna Comasco
COMO – ITALY

1993

The new owner **Valentino Polloni**,
entrusted architect **Manouk Manoukian** with the renewal
and enlargement of the headquarter,
for a more rational and modern building, properly
equipped to keep the pace with the progressive
company development and growth.

2013

Harutiun Manoukian
joined ISOCARBO as shareholder,
bringing his deep expertise to develop,
produce and supply the global market with
Digital Sublimation Inks.
End 2013 ISOCARBO invested to set up the
Chinese branch ISOCARBO Ink Trading Co Ltd in Shanghai.



Product Innovation, Processes Experience,
Efficient Organization, High Technology
Manufacturing Processes
are driving ISOCARBO
close to the market needs.

ISONIK is the
ISOCARBO brand
for digital
inks market



Fashion



Sportswear



Habitat



Signage





Fashion

ISOCARBO is part of the history of the Italian textile industry. Today the Company participates with success to the digital innovation, supplying the textile market not only with its products but also with all the services and supports required to achieve high quality performances.



The continuous synergy and the exchange of information between the laboratories and the team on-field have created the ISONIK ST sublimation inks, especially developed to be compatible with the majority of printing technologies (Epson, Kyocera, Panasonic, Ricoh, Seiko).

The several formulations of ISONIK ST ensure the perfect combination with any kind of paper and fabric (coated and uncoated paper, paper with or without tack, woven or elastic fabrics, light or heavy fabrics, mixed fabrics, etc.) Every series has a wide range of products (all available in stock) that allow not only to cover a vast and complete colour gamut (light colours, fluorescent colours, special and customized colours) but also to provide the selection of the right black, achieving the right depth, intensity and shade in accordance to the personal taste and/or necessity.

Finally, the black colour choice can be the key factor that enables the success of a collection.

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Sportswear

ISOCARBO has consolidated
an absolute leadership
in the clothing
and sportswear sectors.

isonik



The varied selection of inks, services and assistance has created a constant connection with our customers.

This allows us to pass all the tests and certifications required to satisfy the most critical specifications existing on the market today.

Due to high qualitative standards and the investments that have been done in the production process,

ISOCARBO is a unique partner concerning the performances achieved

(quality of printing, consistency and reliability).

New equipments and production processes created "ad hoc" have allowed to develop more and more extreme and sophisticated transfer processes.



These processes are essential for dealing with different sectors: from the traditional sport knitting to the ultra light technical clothing, from footwear to accessories, from ski to any kind of gear sublimated according to the most modern three-dimensional technologies.



Habitat

As main requirements, furniture industry demands constancy in the reproducibility and the absolute fidelity to the original drawing, things that ISOCARBO considers as its main goals.



The colour space of ISONIK ST series allows to obtain unique mixtures in terms of extension, brightness and depth.

In this way, every single detail of the drawing of the textile furnishing is accurately reproduced. The quality of different black mixtures enables to intensify the extension of grey.

The colour's range, the precision of colours, the diffused brilliance, the homogeneity and the absence of any irregularity in the printing permit to reproduce any type of background of any drawing.

Sometimes it is impossible to distinguish a full background produced by printing process from the one dyed, due to the level of perfection achieved.



Signage

ISOCARBO, through the realization of even more advanced products, contributes to the development of digital printing of textile promotional media such as flags, banners, coatings, pop-up and upholstery.



Soft signage demand is constantly increasing and the specifications required for printing have to include some decisive factors such as the production speed, the quick turnover and the correct colour fastness. Dedicated products realized in ISO CARBO's laboratories surpass and sometimes anticipate the required standards, generating brilliant, stable and weather resistant colours, characterized by an excellent two-sided quality.

A close relationship with our customers is the key factor for the improvement and the industrialization of the printing production process, both indirect on transfer paper or direct-to-fabric, also taking into consideration important factors such as pre and post treatment.

The **ST** range

ST-**E**11



VERSATILE

Top quality-to-**price ratio**

ST-**E**22



INTENSE

The best and steady
ink for high quality
industrial processes

ST-**E**33



ACCURATE

Excellent for
direct printing on
flags & banners

ST-E44/**44 EVO**

ST-K11

ST-R11



EXTREME

ST-E44

Dedicated
to **any kind**
of paper

ST-E**44 EVO**

Fast on
any kind
of paper

STRONG

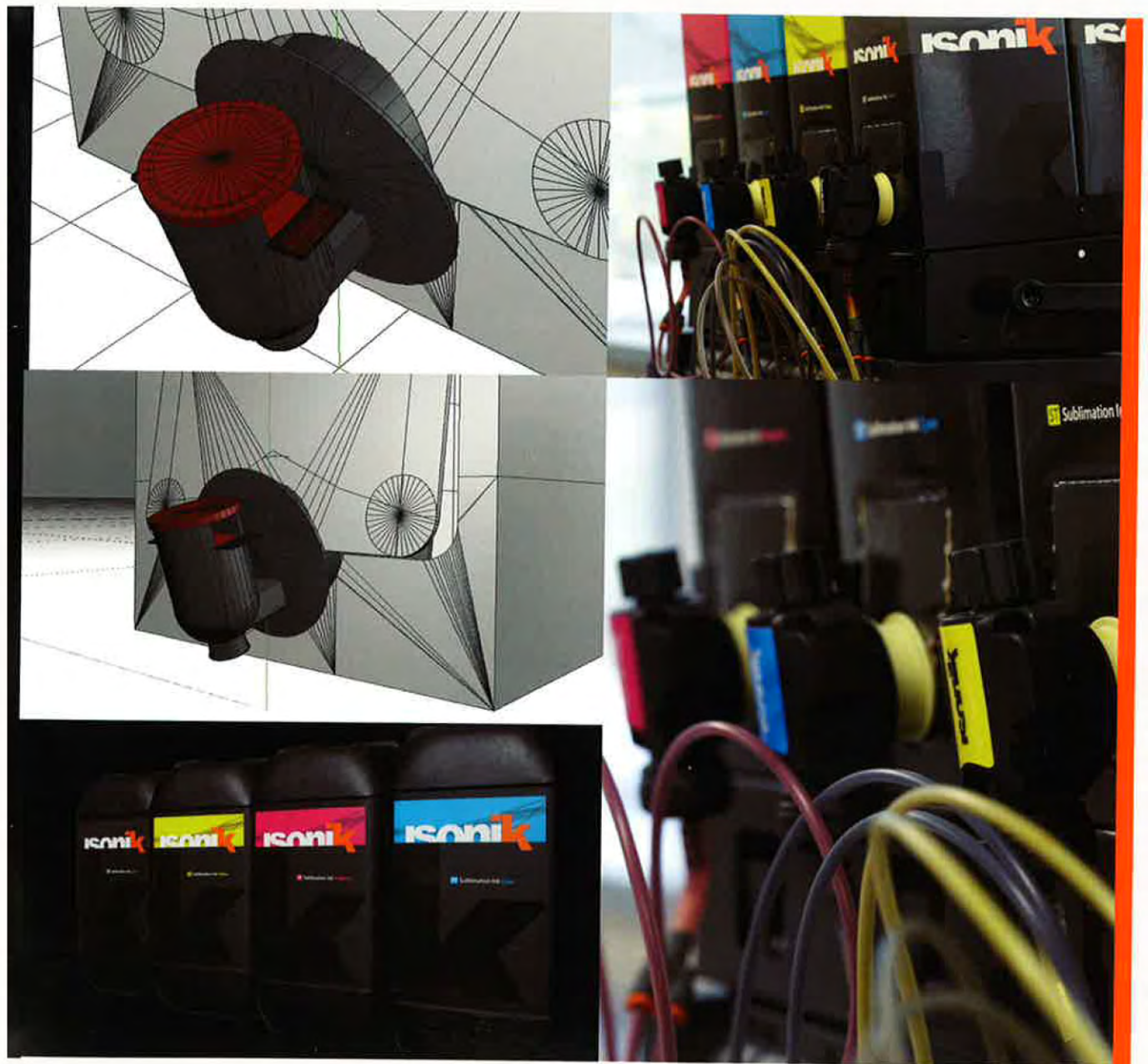
Utmost steady, for
high volume
industrial processes

ACTIVE

Ideal for ongoing and
constant production
processes

Innovative Packaging
Solutions





Environmental Care



Isonik ST products
do not contain heavy metals,
APEOs, solvents and other
toxic/hazardous substances
according to the European regulation
and the ecological requirements
of international standards.



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Isonik ST-E22

The best and steady ink
for high quality industrial processes

isonik



onik

ST-E22



EPSON
FROM DX3 TO DX7



SPORTSWEAR /
SPORTS
EQUIPMENT



BRILLIANT AND
VIVID COLOURS



TRANSFER
PRINTING



HIGHEST MARKET
REQUIREMENTS



FOR COATED AND
UNCOATED PAPER



STORAGE
CONDITIONS
5-35°C
TEMPERATURE
DRY AND WELL
VENTILATED
ENVIRONMENT



PRINTING
CONDITIONS
20-25°C
TEMPERATURE
40-60 HR
HUMIDITY
RANGE



SHIPMENT
TRANSPORT
5-35°C
TEMPERATURE
REFRIGERATE
CONTAINER FOR
LONG DISTANCE



TRANSFER
CONDITIONS
200-210°C
FOR 35-45 SEC.



PACKAGING
AVAILABLE
5KG TANK
2KG, 5KG BOX



PRODUCT
HEAT-SENSITIVE
NO MORE 35°C
NO EXPOSURE
TO DIRECT
SUN LIGHT

Main features

Product Performances

Printability			■ ■ ■	
Colour Gamut			■ ■ ■	
Dye concentration			■ ■ ■	
Drying speed		■ ■		
Colour Yield coated paper			■ ■ ■	
Colour Yield uncoated paper			■ ■ ■	

Process Performances

Industrial production		■ ■		
Long-run production			■ ■ ■	
Fashion papers		■ ■		
Sportswear papers			■ ■ ■	
Transfer rate			■ ■ ■	
Ink saving			■ ■ ■	

SUFFICIENT ■
GOOD ■ ■
VERY GOOD ■ ■ ■
EXCELLENT ■ ■ ■ ■



Isonik ST-E22

The best and steady
ink for high quality industrial processes

Product description

Isonik ST-E22 is a water-based digital sublimation ink for transfer printing. The product is suitable for all printers equipped with Epson piezoelectric technology. The long-run test performed on different printers such as Roland, Mimaki, Mutoh and Epson has shown good run ability with all Epson printing heads (DX3, DX4, DX5, DX7). Thanks to its features, Isonik ST-E22 fulfills the highest market requirements.

Main features

Isonik ST-E22 has brilliant and vivid colors that allow to obtain a very wide and deep color gamut. Its newly developed formulation has a high dye concentration and good drying properties together with intense color yields. Isonik ST-E22 also grants the best color release at standard transfer conditions (200/210°C-35/45 sec). Product's rheological properties confer it an excellent jettability and very good drying properties, so Isonik ST-E22 is suitable for fast long-run productions without the constant interruptions for cleaning procedures. The best performance of Isonik ST-E22 can be achieved with any application referred and addressed to the sportswear market, with different types of sublimation paper and whenever the attention to detail is required.

Applications

Isonik ST-E22 is recommendable for 100% polyester fabrics or in blends with different fibers (lycra, viscose, cotton, acrylic) with a minimum percentage of 70%. It can also be used on any substrate (alu, wood, ceramic, glass, etc.) usually unsuitable for the sublimation process, after doing a pretreatment with polyester-polyamide resins. Isonik ST-E22 is suitable for sportswear, technical sport equipment (snowboard, ski, wakeboard, bike frame, etc), garments, flag and banners, ceramics, wood, gadgets and decorations.

Instructions

The product is ready for use.

- Keep Isonik ST-E22 at room temperature at least 24h before use.
- Set the operation conditions as follows:
 - temperature range: 20-25°C
 - relative humidity range: 40-60 RH %
- Transfer Isonik ST-E22 by using a calender or a flat press at a temperature of 200-210°C for 35/45 sec.
- Follow the label instructions and the MSDS enclosed.

Preliminary test is recommended in order to set the best operative parameters (T°C/t sec) and to achieve the desired result.

IMPORTANT:

Product performance could vary according to the hardware, software, paper and type of process used.

Packaging and Shipment conditions

Isonik ST-E22 is available in 5Kg tank and 2Kg or 5Kg boxes.

The product is heat-sensitive. Extensive exposure at a temperature higher than 35°C may irreversibly damage its properties.

- Shipment instructions:
 - temperature range: 5-35°C
 - refrigerated container is suggested for long distance shipment.
- Storage instructions:
 - Avoid exposure to direct sun light.
 - Store Isonik ST-E22 in a dry and well ventilated environment at a temperature range of 5-35°C.

Technical features

Colour	Code ST-E22	Light Fastness (EN ISO 105 B 02)	Washing Fastness (EN ISO 105 C 02)	Perspiration Fastness (EN ISO 105 E 04)	Sublimation Class
Black Night	271	5-6	4-5	4-5	B-C
Cyan	230	5-6	4-5	4-5	C
Magenta	210	6-7	4-5	5	C
Yellow	200	6-7	4-5	4-5	B
Iso Black	274	5-6	4-5	5	B-C
Light Cyan	231	5-6	4-5	4-5	C
Light Magenta	211	6-7	4-5	5	C
Turquoise	232	6-7	5	5	C
Blue	240	6	4-5	5	B-C
Orange	250	5-6	4-5	5	B
Total Black	272	6	4-5	5	B-C
Yellow Fluo	280	4	4-5	5	B
Pink Fluo	281	5	4-5	5	C
Full Black	273	5-6	4-5	5	B-C
Light Black	290	6	4-5	5	B-C
Light Light Black	291	5-6	5	5	B-C

NOTE: the listed results are referred to 100% PES fabrics. For any different fabrics and further details, please contact us.

DISCLAIMER

The information included in this document are based on the actual experience and knowledge and they are not intended to be exhaustive. This product is for professional use only. Any product usage other than those specifically recommended with no further confirmation by Isocarbo is at one's own risk. Isocarbo guarantees that all given instructions about Isonik ST-E22 are correct. Isocarbo has no control over either the quality or the conditions of the substrate or factors that may affect Isonik ST-E22 performance. Isocarbo strongly recommends that extensive preliminary tests are performed, in order to evaluate any unexpected product behavior. Unless otherwise approved in writing, Isocarbo shall not be liable for any different performance, loss or damage due to unaccepted use of Isonik ST-E22. Isocarbo ensures its commitment to ongoing product development and improvement, hence the content of this technical sheet is susceptible to changes.

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Isonik ST-E33

Excellent for direct printing on Soft signage

isonik



EPSON

ST-E33



EPSON
FROM DX3 TO DX7



FLAGS / BANNERS



BRILLIANT AND
VIVID COLOURS



TRANSFER
PRINTING



DIRECT
PRINTING



FOR COATED
PAPER



STORAGE
CONDITIONS
5-35°C
TEMPERATURE
DRY AND WELL
VENTILATED
ENVIRONMENT



PRINTING
CONDITIONS
20-25°C
TEMPERATURE
40-60 HR
HUMIDITY
RANGE



SHIPMENT
TRANSPORT
5-35°C
TEMPERATURE
REFRIGERATE
CONTAINER FOR
LONG DISTANCE



TRANSFER
CONDITIONS
200-210°C
FOR 35-45 SEC.



PACKAGING
AVAILABLE
5KG TANK
2KG, 5KG BOX



PRODUCT
HEAT-SENSITIVE
NO MORE 35°C
NO EXPOSURE
TO DIRECT
SUN LIGHT

Main features

Product Performances

Printability			■ ■ ■	
Colour Gamut			■ ■ ■	
Dye concentration			■ ■ ■	
Drying speed		■ ■		
Colour Yield coated paper			■ ■ ■	
Colour Yield uncoated paper		■ ■		
Colour Yield direct printing			■ ■ ■	

Process Performances

Industrial production		■ ■		
Long-run production			■ ■ ■	
Fashion papers			■ ■ ■	
Sportswear papers			■ ■ ■	
Transfer rate			■ ■ ■	
Ink saving			■ ■ ■	

SUFFICIENT
GOOD
VERY GOOD
EXCELLENT



Isonik ST-E33

Excellent for direct printing on Soft signage

Product description

Isonik ST-E33 is a water-based digital sublimation ink dedicated to direct printing process and transfer printing as well. The product is suitable for all printers equipped with Epson piezoelectric technology. The long-run test performed on different printers such as Roland, Mimaki, Mutoh and Epson has shown good run ability with all Epson printing heads (DX3, DX4, DX5, DX7), fulfilling the highest market requirements.

Main features

Isonik ST-E33 has brilliant and vivid colors that allow to obtain a highly wide and deep color gamut. Its formulation gives to the product good drying properties both on fabrics and paper; as it can easily pass through the fiber, it is the best choice to print on two-sided fabrics. By transfer printing too, Isonik ST-E33 grants the best color release at standard conditions (200/210°C–35/45 sec). It has an excellent jettability and very good drying properties, so it is suitable for fast long-run productions, without the constant interruptions for cleaning procedures.

Applications

Isonik ST-E33 is recommendable for 100% polyester fabrics or in blends with different fibers (lycra, viscose, cotton, acrylic) with a minimum percentage of 70%. It can also be used on any substrate (alu, wood, ceramic, glass, etc.) usually unsuitable for the sublimation process, after doing a pretreatment with polyester-polyamide resins. Isonik ST-E33 is specifically formulated for banners and flags even if it is suitable for sportswear, technical sport equipment (snowboard, ski, wakeboard, bike frame, etc), garments, ceramics, wood, gadgets and decorations.

Instructions

The product is ready for use.

- Keep Isonik ST-E33 at room temperature at least 24h before use.
- Set the operation conditions as follows:
 - temperature range: 20-25°C
 - relative humidity range: 40-60 RH %
- By direct printing, use Isonik ST-E33 on pretreated fabrics only.
- Printed fabric is fixed at a calender or a flat press at a temperature of 200-210°C for 35/45 sec. When fixed, fabric is ready for use.
- Washing is suggested in order to remove chemical additives used for pretreatment and the unfixed color waste.
- Follow the label instructions and the MSDS enclosed.

Preliminary test is recommended in order to set the best operative parameters (T°C/t sec) and to achieve the desired result.

IMPORTANT:

Product performance could vary according to the hardware, software, paper and type of process used.

Packaging and Shipment conditions

Isonik ST-E33 is available in 5Kg tank and 2kg and 5 Kg boxes.

The product is heat-sensitive.

Extensive exposure at a temperature higher than 35°C may irreversibly damage its properties.

- Shipment instructions:
 - temperature range: 5-30°C
 - refrigerated container is suggested for long distance shipment.
- Storage instructions:
 - Avoid exposure to direct sun light.
 - Store Isonik ST-E33 in a dry and well ventilated environment at a temperature range of 5-30°C.

Technical features

Colour	Code ST-E33	Light Fastness (EN ISO 105 B 02)	Washing Fastness (EN ISO 105 C 02)	Perspiration Fastness (EN ISO 105 E 04)	Sublimation Class
Cyan	230	5-6	4-5	4-5	C
Magenta	210	6-7	4-5	5	C
Yellow	200	6-7	4-5	4-5	B
Black	270	6	4-5	4-5	B-C
Orange*	250	5-6	4-5	5	B
Blue*	240	6	4-5	5	B-C
Turquoise*	232	6-7	5	5	C
Red*	220	6-7	4-5	5	B-C
Light Cyan*	231	5-6	4-5	4-5	C
Light Magenta*	211	6-7	4-5	5	C

* available from May 2016

NOTE: the listed results are referred to 100% PES fabrics. For any different fabrics and further details, please contact us.

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Isonik ST-E44 EVO

Fast on any kind of paper

isonik

ST-E44 EVO



EPSON
FROM DX3 TO DX7



INDUSTRIAL
PROCESSES



BRILLIANT AND
VIVID COLOURS



TRANSFER
PRINTING



HIGH
CONCENTRATION



FOR COATED AND
UNCOATED PAPER



STORAGE
CONDITIONS
5-35° C
TEMPERATURE
DRY AND WELL
VENTILATED
ENVIRONMENT



PRINTING
CONDITIONS
20-25° C
TEMPERATURE
40-60 HR
HUMIDITY
RANGE



SHIPMENT
TRANSPORT
5-35° C
TEMPERATURE
REFRIGERATE
CONTAINER FOR
LONG DISTANCE



TRANSFER
CONDITIONS
200-210°C
FOR 35-45 SEC.



PACKAGING
AVAILABLE
5KG TANK
2KG, 5KG BOX



PRODUCT
HEAT-SENSITIVE
NO MORE 35°C
NO EXPOSURE
TO DIRECT
SUN LIGHT

Main features

Product Performances

Printability				■ ■ ■ ■ ■
Colour Gamut			■ ■ ■	
Dye concentration				■ ■ ■ ■ ■
Drying speed				■ ■ ■ ■ ■
Colour Yield coated paper			■ ■ ■	
Colour Yield uncoated paper				■ ■ ■ ■ ■

Process Performances

Industrial production				■ ■ ■ ■ ■
Long-run production				■ ■ ■ ■ ■
Fashion papers				■ ■ ■ ■ ■
Sportswear papers				■ ■ ■ ■ ■
Transfer rate				■ ■ ■ ■ ■
Ink saving				■ ■ ■ ■ ■



Isonik ST-E44 EVO

Fast on **any kind of paper**

Product description

Isonik ST-E44 EVO is a water-based digital sublimation ink for transfer printing with the highest technical characteristics. The product is suitable for all printers equipped with Epson piezoelectric technology. The long-run test performed on different printers such as Roland, Mimaki, Mutoh and Epson has shown excellent properties of run ability with all Epson printing heads (DX3, DX4, DX5, DX7). Thanks to its outstanding performance, Isonik ST-E44 EVO is ideal also for the most demanding user in terms of productivity and colour yield.

Main features

Isonik ST-E44 EVO has brilliant and vivid colors that ensure a wide and deep color gamut. Due to its high dye concentration and its innovative formulation, Isonik ST-E44 EVO is the right choice for the particularly difficult prints on substrates, where extreme drying speed and high color yields are the minimum requirements for high quality printings. Isonik ST-E44 EVO grants also the best color release at standard transfer conditions (200/210°C-35/45 sec). The unique rheological properties of Isonik ST-E44 EVO ensure long-run productions avoiding the interruptions for cleaning procedures. Isonik ST-E44 EVO grants an excellent color yield on any kind of sublimation papers.

Applications

Isonik ST-E44 EVO is recommendable for 100% polyester fabrics or in blends with different fibers (lycra, viscose, cotton, acrylic) with a minimum percentage of 70%. It can also be used on any substrate (alu, wood, ceramic, glass, etc.) usually unsuitable for the sublimation process, after doing a pretreatment with polyester-polyamide resins. Isonik ST-E44 EVO is suitable for sportswear, technical sport equipment (snowboard, ski, wakeboard, bike frame, etc), garments, flag and banners, ceramics, wood, gadgets and decorations.

Instructions

The product is ready for use.

- Keep Isonik ST-E44 EVO at room temperature at least 24h before use.
- Shake gently before use.
- Set the operation conditions as follows:
 - temperature range: 20-25°C
 - relative humidity range: 40-60 RH %
- Transfer Isonik ST-E44 EVO by using a calender or a flat press at a temperature of 200-210°C for 35/45 sec.
- Follow the label instructions and the MSDS enclosed.

Preliminary tests are recommended in order to set the best operative parameters (T°C/t sec) and to achieve the desired result.

IMPORTANT: Product performance could vary according to the hardware, software, paper and type of process used.

Packaging and Shipment conditions

Isonik ST-E44 is available in 5Kg tank and 2Kg or 5Kg boxes.

Isonik ST-E44 EVO is available in 5Kg tank and 2Kg or 5Kg boxes.

The product is heat-sensitive. Extensive exposure at temperature higher than 35°C may irreversibly damage its properties.

- Shipment instructions:
 - temperature range: 5-35°C
 - refrigerated container is suggested for long distance shipment.
- Storage instructions:
 - Avoid exposure to direct sun light.
 - Store Isonik ST-E44 EVO in a dry and well ventilated environment at a temperature range of 5-35°C.

Technical features

Colour	Code ST-E44 EVO	Light Fastness (EN ISO 105 B 02)	Washing Fastness (EN ISO 105 C 02)	Perspiration Fastness (EN ISO 105 E 04)	Sublimation Class
Black Night	271	5-6	4-5	4-5	B-C
Cyan	230	5-6	4-5	4-5	C
Magenta	210	6-7	4-5	5	C
Yellow	200	6-7	4-5	4-5	B
Light Cyan	231	5-6	4-5	4-5	C
Light Magenta	211	6-7	4-5	5	C
Turquoise	232	6-7	5	5	C
Blue	240	6	4-5	5	B-C
Orange	250	5-6	4-5	5	B
Yellow Fluo	280	4	4-5	5	B
Iso Black	274	5-6	4-5	5	B-C
Pink Fluo	281	5	4-5	5	C
Full Black	273	5-6	4-5	5	B-C
Light Black	290	6	4-5	5	B-C
Light Light Black	291	5-6	5	5	B-C

NOTE: the listed results are referred to 100% PES fabrics. For any different fabrics and further details, please contact us.

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