

## Technical features

TECHNICAL DATA SHEET

Colour	Code ST-E44	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.

### 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-E44 are correct. Isocarbo has no control over either the quality or the conditions of the substrate or factors that may affect Isonik ST-E44 performance. Isocarbo strongly recommends that extensive preliminary test is 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-E44. 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-E44

Dedicated to any kind of paper

# isonik



## ST-E44

 <b>EPSON</b> 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				■ ■ ■ ■ ■

SUFFICIENT  
GOOD  
VERY GOOD  
EXCELLENT

## Product description

Isonik ST-E44 is a water-based digital sublimation ink for transfer printing with the highest concentration. 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 is ideal for industrial printing and transfer process based on high speed equipments.

## Main features

Isonik ST-E44 has brilliant and vivid colors that ensure a wide and deep color gamut. Its formulation, characterized by a high dye concentration, gives to the product intense color yields and excellent drying properties, on light and uncoated papers, with a good quality. Isonik ST-E44 grants also the best color release at standard transfer conditions (200/210°C-35/45 sec). The excellent jettability of this product enables the end user to manage long-run productions avoiding the interruptions for cleaning procedures. The best performance of Isonik ST-E44 can be achieved with any kind of sublimation papers, so it is considered one of the most versatile products of the Isonik series.

## Applications

Isonik ST-E44 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 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 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-E44 by using of 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. 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 in a dry and well ventilated environment at a temperature range of 5-35°C.