



# DISCHARGE PRINTING

# EPTAINKS

# DISCHARGE PRINTING

## TOPICS

WHY DISCHARGE PRINTING?

---

PRINTABLE SUBSTRATES

---

INKS FOR DISCHARGE PRINTING

---

INK FEATURES

---

PREPARATION OF THE SCREEN

---

SPECIAL APPLICATIONS

---

MOST COMMON INCOVENIENCES AND THEIR SOLUTION

---

# DISCHARGE PRINTING

## WHY DISCHARGE PRINTING?

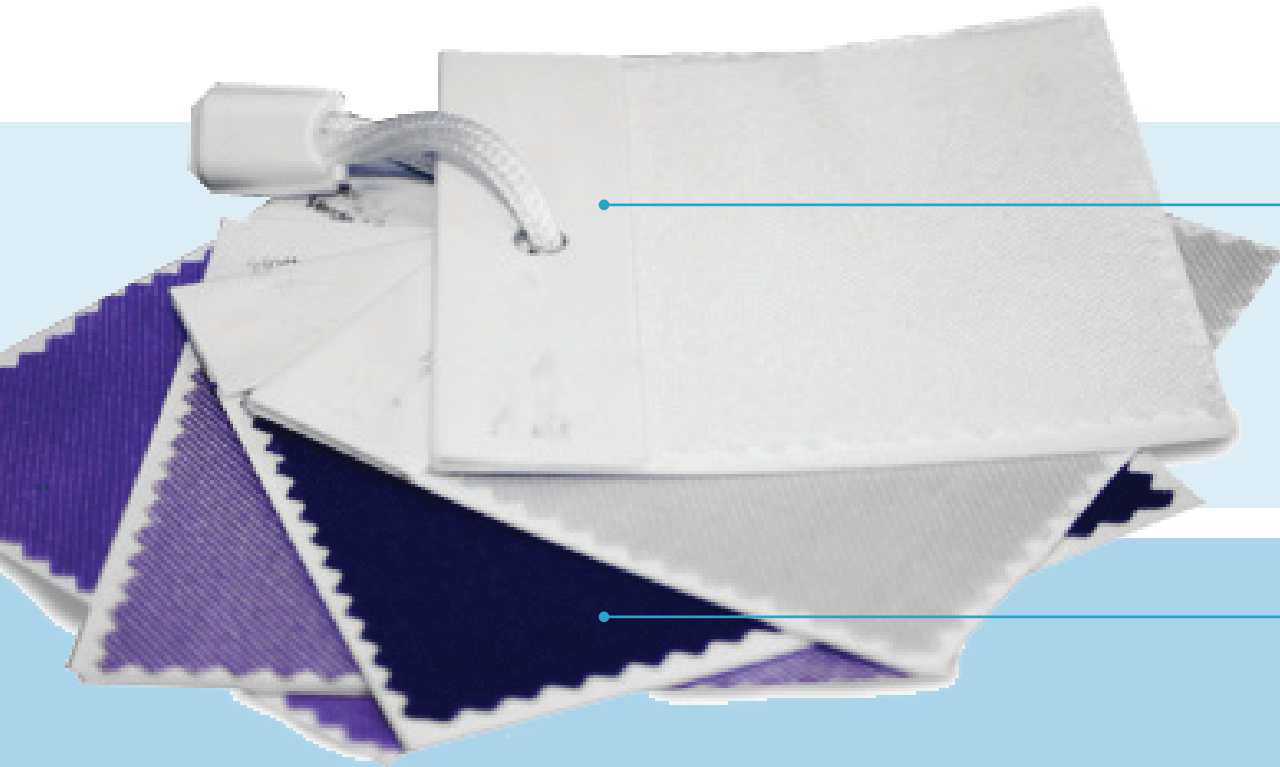
Printing onto light fabrics with transparent inks allows to obtain prints with a very soft final touch. Usually, this is not possible onto dark fabrics, since prints with opaque inks has a rather stiff touch.

The option is **DISCHARGE PRINTING**



# DISCHARGE PRINTING

## PRINTING WITH WATER-BASED INKS



### LIGHT FABRIC:

OPAQUE

SEMI-OPAQUE

TRANSPARENT

### DARK FABRIC:

OPAQUE

WHITE BACKGROUND + SEMI-OPAQUE

WHITE BACKGROUND + TRANSPARENT

DISCHARGE PRINTING



# DISCHARGE PRINTING

## STRONG POINTS OF DISCHARGE PRINTING

HIGHEST OPACITY ONTO DARK BACKGROUNDS

EXTREMELY SOFT TOUCH

VERY BRIGHT COLOURS

ANTI-FOIL EFFECT



# DISCHARGE PRINTING

## PRINTABLE SUBSTRATES

DISCHARGE PRINTING MAY USUALLY TAKE PLACE ONTO DARK COLOURED FABRICS DYED THROUGH THE SO CALLED “**DISCHARGEABLE**” DYES

The dyestuff in the dye (background) is destroyed by special reducers, leaving in that way white (coloured, if in the paste is added a pigment as well) areas

### COTTON FABRICS

TEXILAC DISCHARGE LB

TEXILAC DISCHARGE WHITE

TEXILAC DISCHARGE LF

### DENIM FABRICS (JEANS)

TEXILAC DECOLORTEX DENIM



# DISCHARGE PRINTING

## COTTON FABRICS

### BASES

TEXILAC DISCHARGE LB

TEXILAC DISCHARGE WHITE

TEXILAC DISCHARGE LF

### ACTIVATORS

TEXILAC CORRODENTE PM 5-6%

TEXILAC CORRODENTE PM 5-6%

TEXILAC CORRODENTE LF 5%

## DENIM FABRICS (JEANS)

### BASES

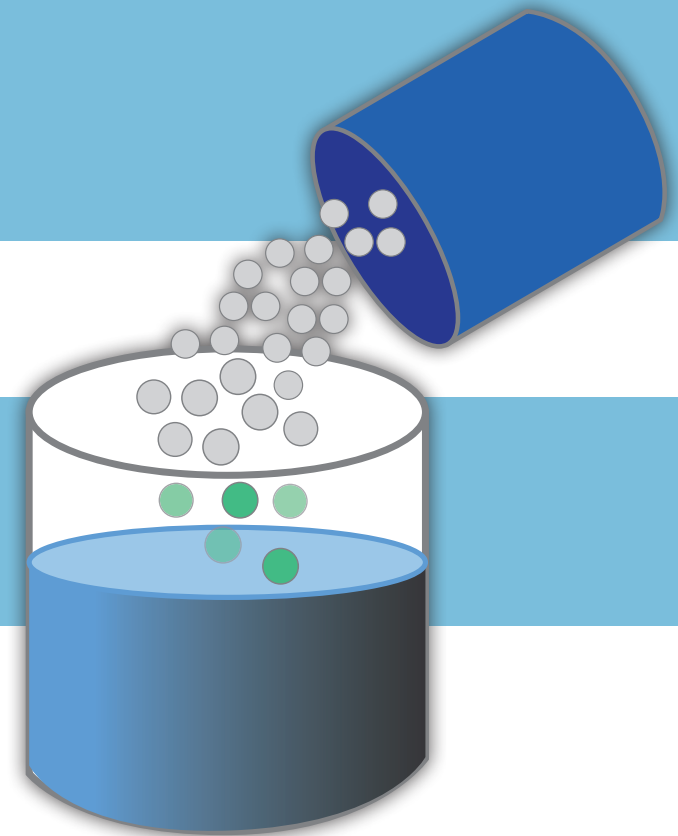
TEXILAC

DECOLORTEX DENIM

### ACTIVATORS

TEXILAC DECOLORTEX

DENIM ATTIVATORE 15%



# DISCHARGE PRINTING

## ADVANTGES FOR THE ENVIRONMENT

### OEKO-TEX®

A free certification system, which is “worldwide” recognized by the international textile world, examining the production cycle for the manufacturing of the article in its wholeness: from raw materials to finished products during all processing phases. The certification system applies to all textile products and toys made of fabric.

### OEKO-TEX®: THE WORLD WIDE TEXTILE STANDARD

The certification system applies to:

1. **FINISHED GARMENT:** Oeko-Tex® Standard 100
2. **PROCESS AND PRODUCTION SITES:** Oeko-Tex® Standard 1000
3. **BOTH:** Oeko-Tex® Standard 100 Plus

CERTIFICATIONS ARE ALWAYS AND EXCLUSIVELY REFERRED TO THE ARTICLE. IT IS NOT POSSIBLE TO CERTIFY SUBSTANCES OR PREPARATIONS





# DISCHARGE PRINTING

## ADVANTGES FOR THE ENVIRONMENT

### OEKO-TEX®: APPLICATION FIELDS & NORM SPECIFICATIONS

The Oeko-Tex® Standard 100 refers to articles and states that: the more a finished garment is in contact with the skin – considering its sensitivity –, the more restrictive are the limits imposed by the standard. The classes listed in the Regulations are four, like the threshold values of interest:

#### CLASS I

To this class belong textiles and textile toys designed for children up to 3 years. Some articles included in this class are: underwear and bed linen, rag dolls and so on.

#### CLASS II

To this class belong textile products having a large part of their surface in direct contact with the skin; they are designed for children above 3 years as well as for adults. Some articles included in this class are: underwear and bed linen, towelling articles in direct contact with the skin and wearing apparel such as T-Shirt and shirts.

#### CLASS III

To this class belong textile products that are not in direct contact with the skin or are in contact with a small area, such as coats and jackets.

#### CLASS IV

To this class belong textile products designed for Interior Decoration such as wall paper, furnishing fabric, table linen, carpets and wall coverings.



# DISCHARGE PRINTING

## INK FEATURES

### TEXILAC DISCHARGE LB

HIGHEST OPACITY ONTO DARK SUBSTRATES  
EXTREMELY SOFT TOUCH  
VERY BRIGHT COLOURS  
ANTI-FOIL EFFECT

TWO-COMPONENT INK  
“ACTIVATOR”: TEXILAC CORRODENTE PM  
POT-LIFE: 6 - 8 HOURS  
GOOD PRINTABILITY  
IT IS RECOMMENDED TO WASH THE CLOTHES BEFORE USING THEM

### TEXILAC DISCHARGE LF

LOW FORMALDEHYDE CONTENT  
HIGHEST OPACITY ONTO DARK BACKGROUNDS  
EXTREMELY SOFT TOUCH  
VERY BRIGHT COLOURS

ANTI-FOIL EFFECT  
TWO-COMPONENT INK  
“ACTIVATOR”: TEXILAC CORRODENTE LF  
POT-LIFE: 6 - 8 HOURS  
IT IS RECOMMENDED TO WASH THE CLOTHES BEFORE USING THEM

### TEXILAC DISCHARGE WHITE

HIGHEST OPACITY ONTO DARK BACKGROUNDS  
HIGH WHITENESS

TWO-COMPONENT INK  
“ACTIVATOR”: TEXILAC CORRODENTE PM  
POT-LIFE: 6-8 HOURS  
IT IS RECOMMENDED TO WASH THE CLOTHES BEFORE USING THEM



# DISCHARGE PRINTING

## INK FEATURES

### TEXILAC DECOLORTEX DENIM

HIGHEST OPACITY ONTO DARK BACKGROUNDS  
EXTREMELY SOFT TOUCH

IT MAY BE USED through SCREEN PRINTING and by SPRAYING  
POT-LIFE: 6 - 8 HOURS  
“ACTIVATOR”: TEXILAC DECOLORTEX DENIM ATTIVATORE  
IT IS RECOMMENDED TO WASH THE CLOTHES BEFORE USING THEM



# DISCHARGE PRINTING



## COMPATIBLE PIGMENTS

### COTTON FABRICS

TEXILAC DISCHARGE LB

TEXILAC DISCHARGE WHITE

TEXILAC DISCHARGE LF

### PIGMENTS

ECOTEX P – TEXILAC COLORANTI\*

ECOTEX P – TEXILAC COLORANTI\*

ECOTEX P – TEXILAC COLORANTI\*

\* The pigments must be selected for discharge printing

### DENIM FABRICS (JEANS)

TEXILAC

DECOLORTEX DENIM

### PIGMENTS

NONE



# DISCHARGE PRINTING

## CURING

### 1° METHOD

#### COTTON FABRICS

	CURING
TEXILAC DISCHARGE LB	160°C, 3 MINUTES
TEXILAC DISCHARGE WHITE	160°C, 3 MINUTES
TEXILAC DISCHARGE LF	160°C, 3 MINUTES

#### DENIM FABRICA (JEANS)

#### CURING

TEXILAC	160°C, 4 MINUTES
DECOLORTEX DENIM	

### 2° METHOD

This method may be used when it is not possible to cure the printed clothes directly (1st method)

#### COTTON FABRICS

	DRYING	CURING
TEXILAC DISCHARGE LB	100°C, 2 MINUTES	160°C, 3 MINUTES
TEXILAC DISCHARGE WHITE	100°C, 2 MINUTES	160°C, 3 MINUTES
TEXILAC DISCHARGE LF	100°C, 2 MINUTES	160°C, 3 MINUTES

# DISCHARGE PRINTING

## SCREEN PREPARATION

THE PREPARATION OF THE SCREEN HAS TO RESPECT THE FOLLOWING PARAMETERS:

**34-55**  
TH / CM

TEXILAC DISCHARGE LB

**43-55**  
TH / CM

TEXILAC DISCHARGE WHITE

**34-55**  
TH / CM

TEXILAC DISCHARGE LF

**34-43**  
TH / CM

TEXILAC DECOLORTEX DENIM

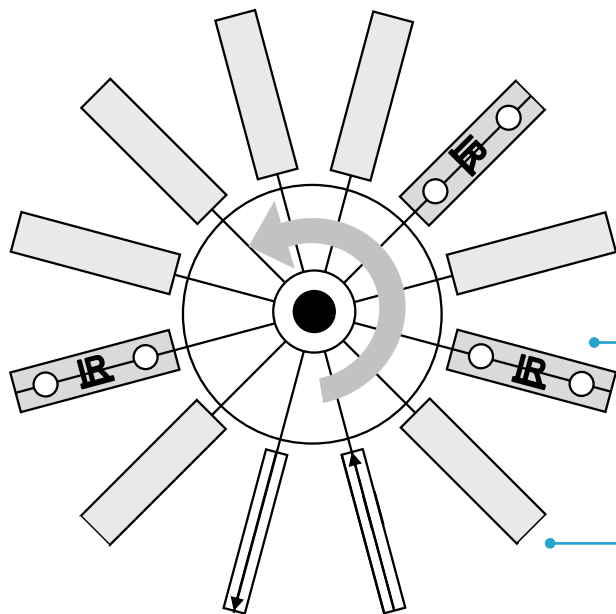
# DISCHARGE PRINTING

## BACKGROUND

DISCHARGE printing may be used as a background and may be overprinted with:  
PLASTISOL INKS  
TRANSPARENT WATER-BASED INKS

The advantage of such an application is the achievement of softer printings than the traditional ones, having good results in HIGH DEFINITION effects and FOUR-COLOUR PROCESS

## EXAMPLE



TEXIPLAST 7000 MS or OP  
AQUA TRASPARENTE + PIGMENTI

INTERMEDIATE DRYING

TEXILAC DISCHARGE LB  
TEXILAC DISCHARGE WHITE  
TEXILAC DISCHARGE LF

## OVEN CURING CONDITIONS

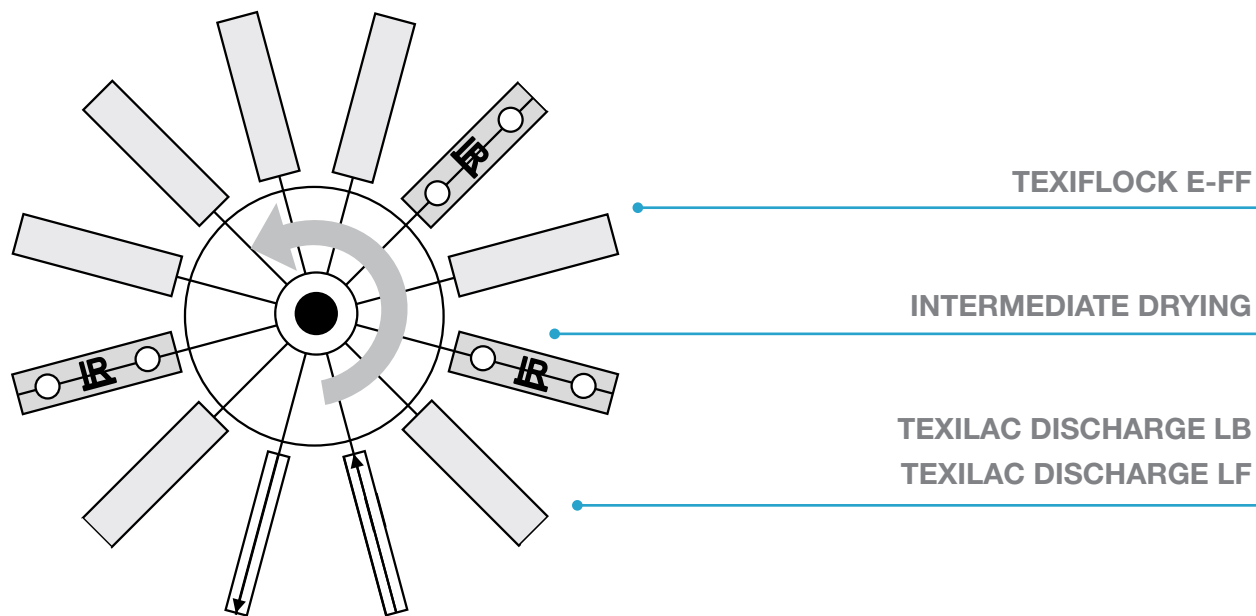
TEMPERATURE: 150°C - 160°C  
TIME: 2 - 3 MINUTES

# DISCHARGE PRINTING



## COMBINATION WITH MYTEX

### EXAMPLE



### OVEN CURING CONDITIONS

TEMPERATURE: 100°C - 110°C  
TIME: 1-2 MINUTES

### TRANSFER CONDITIONS

TEMPERATURE: 150°C  
TIME: 15 SECONDS  
PRESSURE: 3 bars



# DISCHARGE PRINTING

## MOST COMMON INCONVENIENCES AND THEIR SOLUTION

### NOT VERY BRIGHT COLOURS

#### 1- THE FABRIC MAY NOT BE COMPLETELY DISCHARGE

Verify the dischargeability of the used fabric

#### 2- WRONG TH/cm NUMBER OF THE SCREEN

Reduce the number of TH/cm – change the Screen

### THE COLOUR DOES NOT DEVELOP

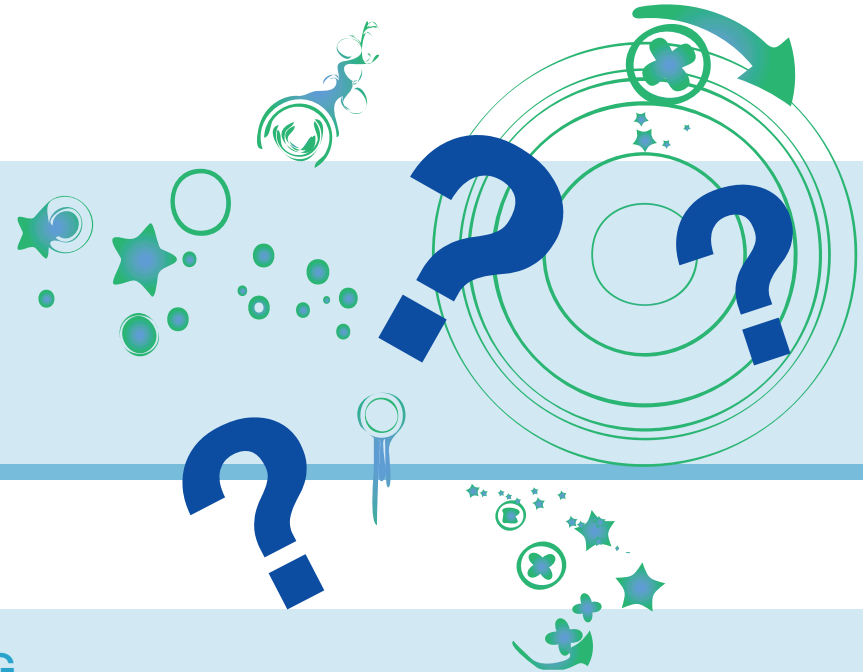
#### 1- THE SELECTED PIGMENT DOES NOT RESIST DISCHARGING

Select an appropriate pigment

### CHANGEABLE RESULTS DURING THE TIME

#### 1- THE INK HAS EXHAUSTED HIS “DISCHARGING” POWER

Always maintain the ink fresh in the screen through frequent addition of “fresh” ink



# EPTAINKS

## **Epta Inks SpA**

Via A. De Gasperi, 1 - 22070 Luisago (CO), Italy  
Ph. +39 031 9090111 Fax +39 031 920505  
www.eptainks.com

## **Epta Inks SpA**

Via Zamenhof, 12 - 36100 Vicenza, Italy  
Ph. +39 0444 914382 - Fax +39 0444 918196

## **Epta China Chemicals Co., Ltd.**

Building A12, No.5399, Waiqingsong Road  
Qingpu I.Z. - 201700 Shanghai, China  
Ph. +86 21 69211223 - 69211286  
Fax +86 21 69211225

## **Epta Spain S.L.U.**

Can Coll, 15 - naves 22-23 - 08185 Lliçá de Vall  
Barcelona, Spain  
Ph. +34 93 8439217 - Fax +34 93 8439127

## **Epta Inks Türkiye**

Egitim Mah. , Acikgoz Sok. Ogun Is Merkezi No. 2  
Kat 2 D:8, 34722 Hasanpasa - Kadikoy, ISTANBUL  
Ph. 0216 - 3383016 - Fax 0216 3383089

## **Epta India (PVT) Ltd.,**

(A Subsidiary of Epta Inks, SpA., Italy)  
No.8, 5th street, PudhuThottam, Sheriff Colony  
Tiruppur - 641 604, India  
Ph. 0421-2210244,2216988 - @mail: info@eptainks.co.in

## **BE NATURAL, BE FREE!**

Every two seconds a forest area - sizing a football field - is destroyed!

We believe in developing a Sustainable Chemistry as we believe that the respect for the environment is part of our responsibility. With a few simple, everyday efforts you can help us to reduce pollution, consume less energy and water and produce less waste:

- Download our brochures from our website
- Spread the information to your customers through internet and @mail
- Print brochures only if really necessary choosing Recycled Paper

**Do like us: BE NATURAL, BE FREE**