MANOUKIAN
Argon

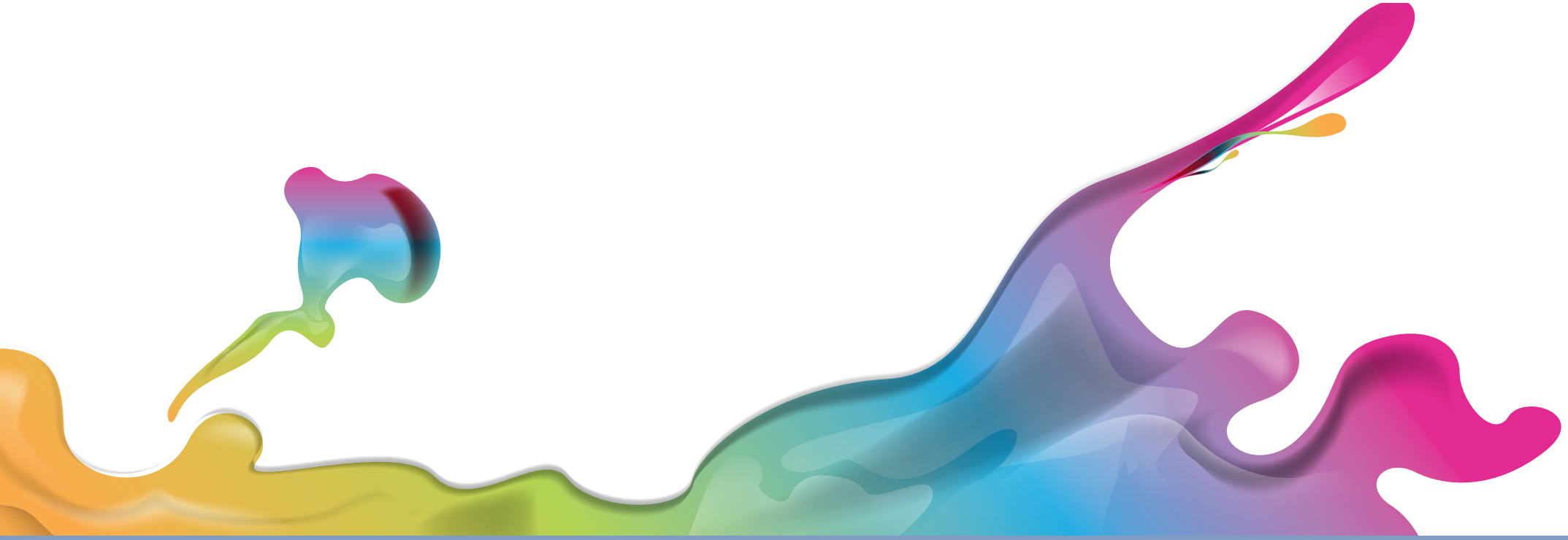
TRANSFER PRINTING

EPTAINKS

TRANSFER PRINTING

TOPICS

- WHAT IS A “TRANSFER SET”
- WHY AND WHEN CHOOSING A TRANSFER PRINTING
- TRANSFER PREPARATION
- EXAMPLES OF TRANSFERS
- FAQ
- HOW TO SELECT THE MOST SUITABLE TRANSFER



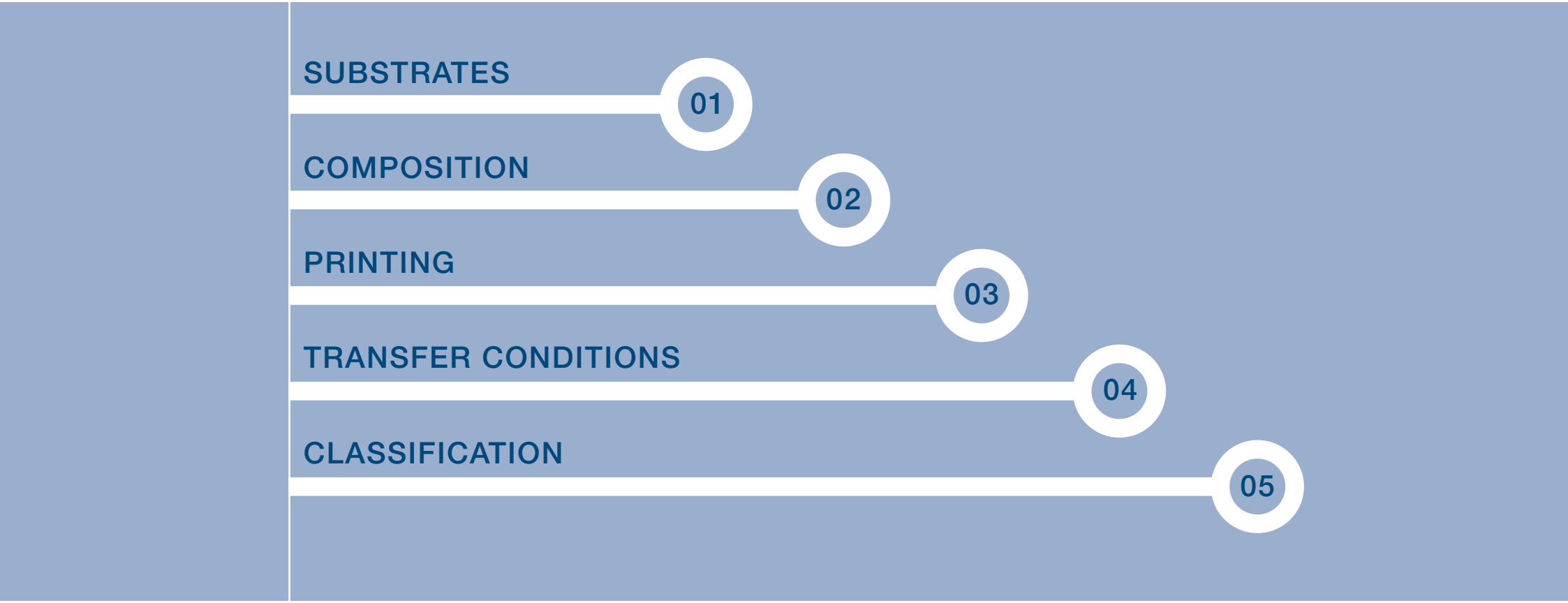
WHAT IS A “TRANSFER SET”

A transfer set is a succession of ink layers, chemically similar or different, that are first applied on a substrate and then transferred through heat onto a fabric.

WHY AND WHEN CHOOSING A TRANSFER PRINTING

- In case a design has to be applied on different types of substrates
- In case a design has to be repeated in different times and in a limited quantity
- It allows to get a definition which is really close to the “graphic” printing one
- It helps optimizing stocks of ready made garments
- It allows to make decorations where direct printing cannot be done

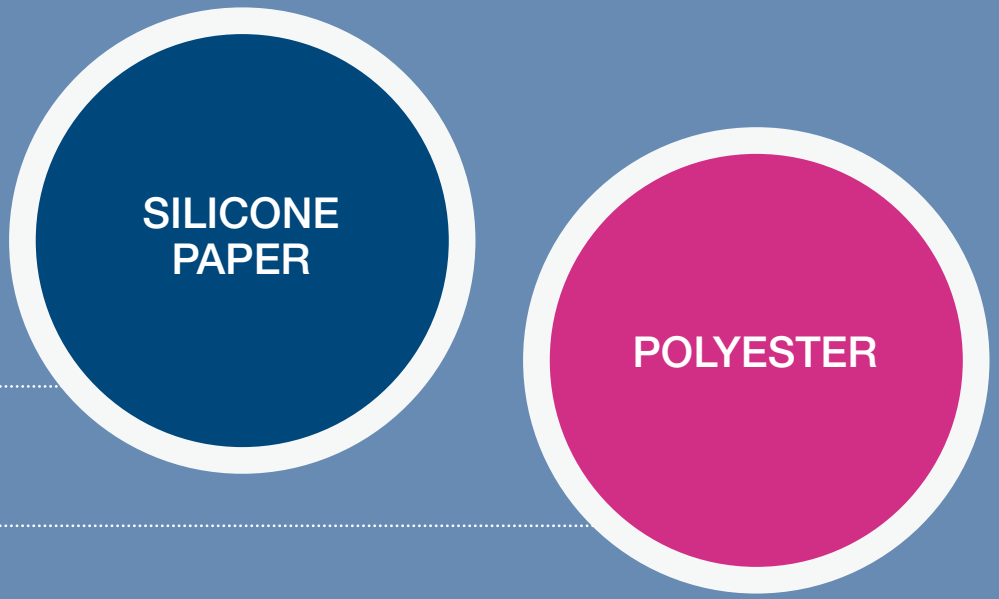
TRANSFER PREPARATION



SUBSTRATES

01

The substrates on which to create the transfer are:



SUBSTRATES

01

The substrate should have the following features:

- **High stability to heat**
- **High stability to the inks being used**
- **High release capacity**
  The Transfer must not be damaged during the release

COMPOSITION

02

1	ADHESIVE	It assures adhesion between fabric and transfer
2	ANTI-BLEEDING BARRIER	It protects the transfer design from possible colour migration of synthetic fabrics
3	BACKGROUND WHITE	It grants opacity onto dark substrates
4	GRAPHIC	Colours which compose the design (specular image)
5	PROTECTION LAYER	Transparent layer for a higher fastness

PAPER or POLYESTER

PRINTING

03

The printing method for transfers is wet on dry:
each ink layer needs to be dried before the application of the successive one

The squeegee should always have a correct hardness in relation to the required effect:

- HARD
  high DEFINITION
  low DEPOSIT
- SOFT
  low DEFINITION
  high DEPOSIT

The screen should have a correct out of contact to achieve right printability and definition

TRANSFER CONDITIONS

04

The Transfer onto fabric occurs by means of **heat** and **pressure**.

The Transfer adhesive melts and penetrates into the fabric;
once cold, it turns back solid and physically binds to the fabric

Transfer conditions are the following:

CLASSIFICATION

05

- TRANSFER WITH PLASTISOL INKS
- TRANSFER WITH WATER-BASED INKS
- TRANSFER WITH SOLVENT-BASED INKS
- TRANSFER FOR SPECIAL EFFECTS

TRANSFER PRINTING

TRANSFER WITH PLASTISOL INKS

TRADITIONAL PLASTISOL TRANSFER

HOT SPLIT TRANSFER

OFF SET TRANSFER

TRANSFER WITH WATER-BASED INKS

TRANSFER FOR WORKING CLOTHES

TRANSFER FOR ELASTIC FABRICS

TRANSFER FOR SPORTSWEAR

TRANSFER WITH SOLVENT-BASED INKS

"GRAPHIC" TRANSFER

TRANSFER FOR NYLON FABRICS

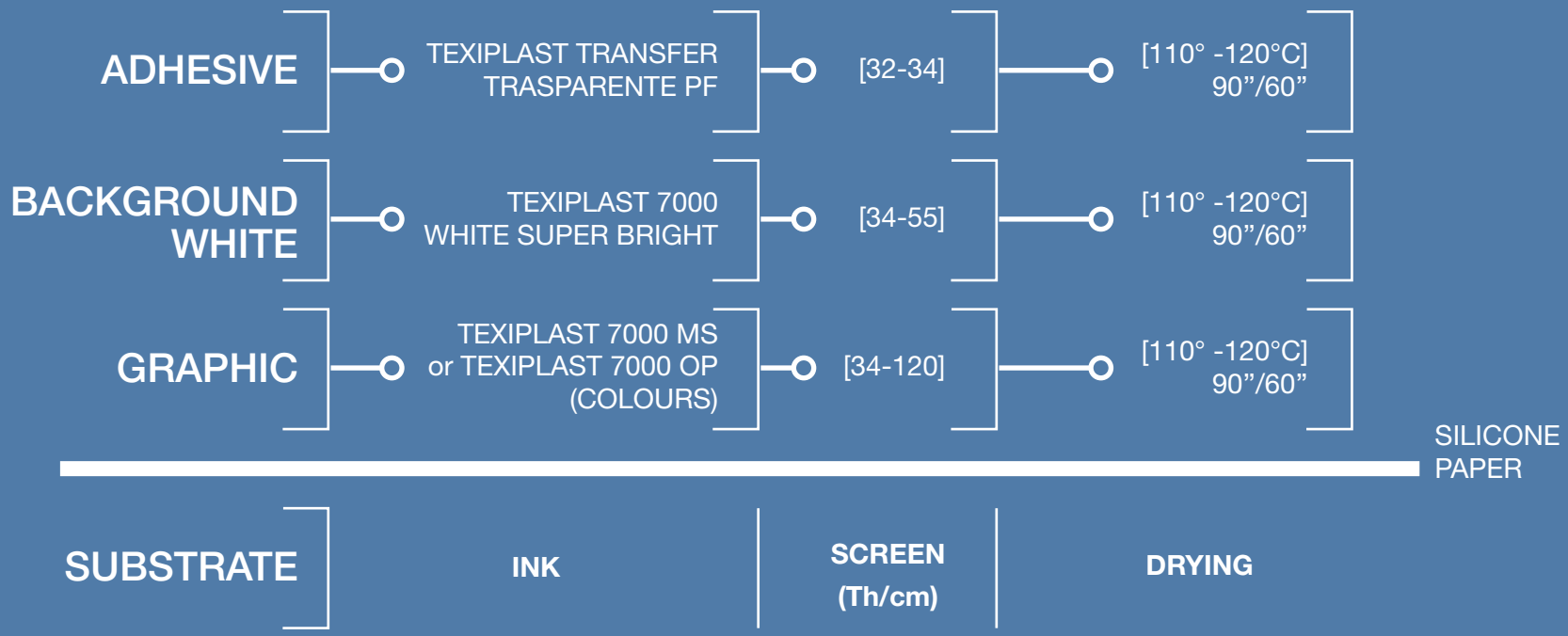
TRANSFER FOR SPECIAL EFFECTS

GLITTER TRANSFER

PUFF TRANSFER

TRANSFER WITH PLASTISOL INKS

TRADITIONAL PLASTISOL TRANSFER



TRANSFER CONDITIONS	TEMPERATURE: 180°C	TIME: 12 SECONDS	PRESSURE: 4 bar	PEEL – OFF: COLD

TRANSFER WITH PLASTISOL INKS

HOT SPLIT TRANSFER

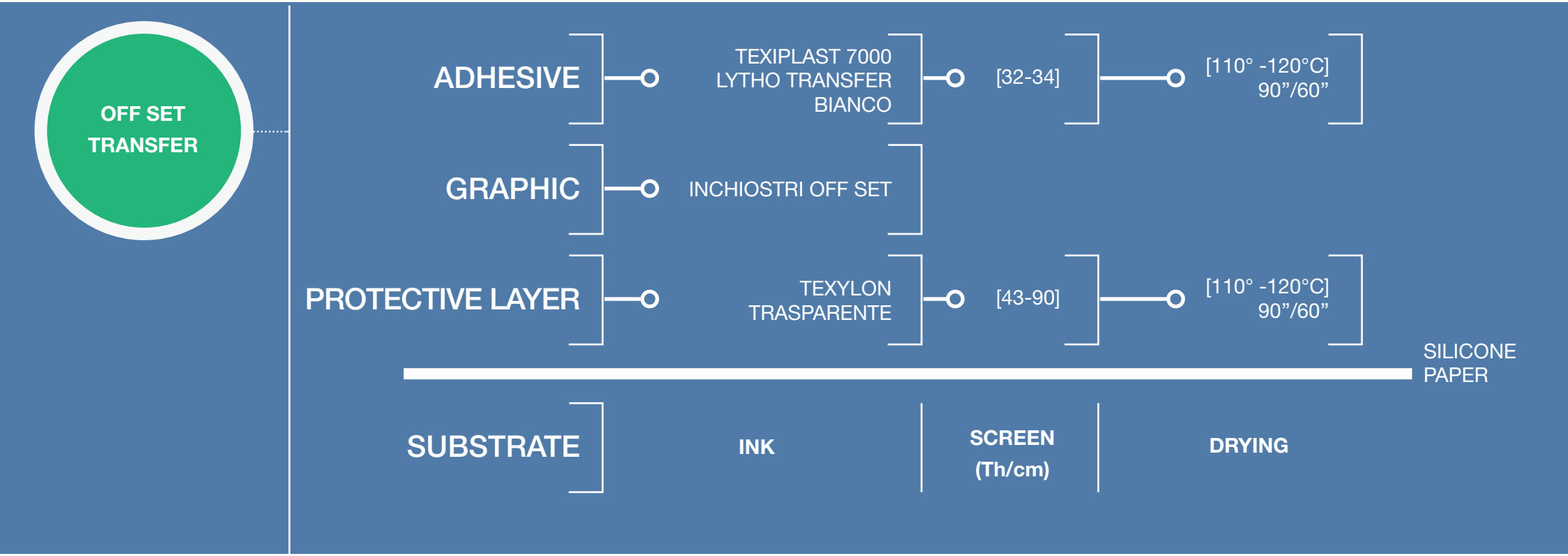
	INK	SCREEN (Th/cm)	DRYING
ADHESIVE	TEXIPLAST TRANSFER TRASPARENTE PF	[32-34]	[110° -120°C] 90”/60”
BACKGROUND WHITE	TEXIPLAST 7000 WHITE SUPER BRIGHT	[34-55]	[110° -120°C] 90”/60”
GRAPHIC	TEXIPLAST 7000 MS or TEXIPLAST 7000 OP (COLOURS)	[34-120]	[110° -120°C] 90”/60”

SILICONE PAPER HOT SPLIT

SUBSTRATE

TRANSFER CONDITIONS	TEMPERATURE:	TIME:	PRESSURE:	PEEL – OFF:
	180°C	10 SECONDS	4 bar	HOT

TRANSFER WITH PLASTISOL INKS



TRANSFER CONDITIONS	TEMPERATURE: 180°C	TIME: 12 SECONDS	PRESSURE: 4 bar	PEEL – OFF: COLD

TRANSFER WITH WATER-BASED INKS

TRANSFER FOR WORKING CLOTHES

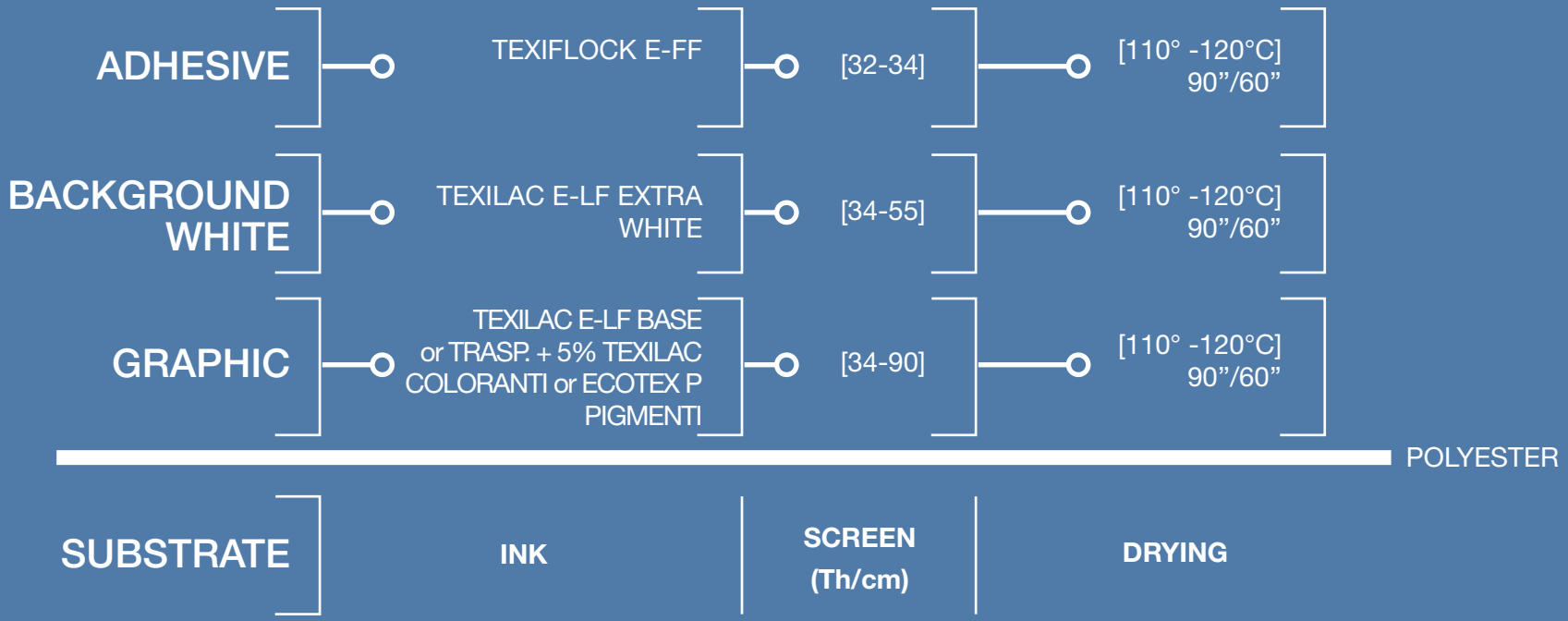
SUBSTRATE	INK	SCREEN (Th/cm)	DRYING
ADHESIVE	TEXIFLOCK AR	[32-34]	[100° -120°C] 90”/60”
BACKGROUND WHITE	TEXILAC BIANCO LUCIDO	[32-43]	[110° -120°C] 90”/60”
GRAPHIC	TEXILAC TRASP. LUCIDO +5% TEXILAC COLORANTI or ECOTEX P PIGMENTI	[43-90]	[110° -120°C] 90”/60”
PROTECTIVE LAYER	TEXILAC TRASPARENTE LUCIDO	[90-100]	[110° -120°C] 90”/60”

SILICONE PAPER or POLYESTER

TRANSFER CONDITIONS	TEMPERATURE:	TIME:	PRESSURE:	PEEL – OFF:
	180°C	15 SECONDS	4 bar	COLD

TRANSFER WITH WATER-BASED INKS

TRANSFER FOR ELASTIC FABRICS



TRANSFER CONDITIONS	TEMPERATURE: 180°C	TIME: 15 SECONDS	PRESSURE: 4 bar	PEEL – OFF: COLD

TRANSFER WITH WATER-BASED INKS

TRANSFER FOR SPORTSWEAR

SUBSTRATE	INK	SCREEN (Th/cm)	DRYING
ADHESIVE	TEXIFLOCK E-FF	[32-34]	[100° -120°C] 90”/60”
ANTI-BLEEDING BARRIER	AQUA WHITE +30% 96.125 ARGENTO NO LEAFING	[32-55]	[100° -120°C] 90”/60”
BACKGROUND WHITE	AQUA WHITE	[34-55]	[100° -120°C] 90”/60”
GRAPHIC	AQUA BASE or TRASPARENTE +5% TEXILAC COLORANTI or ECOTEX P PIGMENTI	[34-90]	[110° -120°C] 90”/60”
POLYESTER			

TRANSFER CONDITIONS	TEMPERATURE:	TIME:	PRESSURE:	PEEL – OFF:
	180°C	15 SECONDS	4 bar	COLD

TRANSFER WITH SOLVENT-BASED INKS

"GRAPHIC" TRANSFER

SUBSTRATE	INK	SCREEN (Th/cm)	DRYING
ADHESIVE	TEXIPLAST TRANSFER TRASPARENTE PF	[32-34]	[100° -120°C] 90"/60"
BACKGROUND WHITE	TEXIPLAST 7000 WHITE SUPER BRIGHT	[43-55]	[100° -120°C] 90"/60"
GRAPHIC	VINILFLAT (COLOURS)	[77-120]	[100° -120°C] 90"/60"
PROTECTIVE LAYER	VINILFLAT TRASPARENTE	[90-100]	[100° -120°C] 90"/60"

SILICONE PAPER

TRANSFER CONDITIONS	TEMPERATURE:	TIME	PRESSURE:	PEEL – OFF:
	180°C	15 SECONDS	4 bar	COLD

TRANSFER WITH SOLVENT-BASED INKS

TRANSFER FOR NYLON FABRICS

	INK	SCREEN (Th/cm)	DRYING
ADHESIVE	TEXYLON STICK	[32-43]	[100° -120°C] 90”/60”
GRAPHIC	TEXYLON (COLOURS)	[55-120]	[100° -120°C] 90”/60”
PROTECTIVE LAYER	TEXYLON TRASPARENTE	[90-100]	[100° -120°C] 90”/60”
SUBSTRATE			

SILICONE PAPER

TRANSFER CONDITIONS	TEMPERATURE:	TIME:	PRESSURE:	PEEL – OFF:
	160°C	15 SECONDS	4 bar	COLD

TRANSFER FOR SPECIAL EFFECTS

GLITTER TRANSFER

SUBSTRATE	INK	SCREEN (Th/cm)	DRYING
ADHESIVE	TEXIPLAST TRANSFER TRASPARENTE PF	[32-34]	[110° -120°C] 90”/60”
GRAPHIC “BACKGROUND”	TEXIPLAST GT TRASPARENTE + 20% GLITTERS	[12-32]	[110° -120°C] 90”/60”
GRAPHIC “DESIGN”	TEXIPLAST 7000 PROCESS	120	[110° -120°C] 90”/60”

SILICONE PAPER “GLOSS”

TRANSFER CONDITIONS	TEMPERATURE:	TIME:	PRESSURE:	PEEL – OFF:
	180°C	12 SECONDS	4 bar	COLD

TRANSFER FOR SPECIAL EFFECTS

PUFF TRANSFER

	INK	SCREEN (Th/cm)	DRYING
ADHESIVE	TEXIPLAST TRANSFER TRASPARENTE PF	[32-34]	[110° -120°C] 90”/60”
BACKGROUND WHITE	TEXIPLAST 7000 WHITE SUPER BRIGHT + TEXIPLAST ADD. RIGONF. PF	[34-43]	[110° -120°C] 90”/60”
GRAPHIC	TEXIPLAST 7000 MS o TEXIPLAST 7000 OP (COLOURS)	[34-120]	[110° -120°C] 90”/60”

SILICONE PAPER HOT SPLIT

SUBSTRATE

TRANSFER CONDITIONS	TEMPERATURE:	TIME:	PRESSURE:	PEEL – OFF:
	180°C	10 SECONDS	4 bar	HOT

FAQ

REGISTER TROUBLES

01 THE PAPER MOVED DUE TO OVERHEATING

Stabilize the paper before printing the 1° colour, by drying it in the same conditions to use for the other colours

02 THE PAPER IS NOT ENOUGH STABLE OR UNSUITABLE FOR THE INK BEING USED

Change type of paper

03 SCREEN MESH WITH INSUFFICIENT TENSION

Use screens with tension between 18 - 21 N/cm

04 PAPER “CURLING” - WATER-BASED PRINTING

Stabilize the paper before printing or use transfer polyester substrates, more suitable for water-based inks

FAQ

TRANSFER DIFFICULTY

01 EXCESSIVE DRYING OF THE ADHESIVE

Check drying conditions of the adhesive. Too high conditions can damage irreparably the adhesive

02 UNSUITABLE TRANSFER CONDITIONS

Pressure, time and temperature have to be appropriate. If pressure cannot be increased, transfer time has to be longer

03 UNCORRECT TRANSFER RELEASE

Handle with care the piece before peeling off the transfer. In case the transfer foil tends to raise when the piece is taken from the heat press, image borders could come off from the piece

FAQ

POOR WASH RESISTANCE

01 UNCORRECT COMPOSITION OF THE TRANSFER

Print as first layer a transparent ink, which assures a higher mechanical wash resistance

02 UNCORRECT FILM PREPARATION TO PRINT THE ADHESIVE

Prepare the screen for the adhesive with a film which has a slightly larger dimension than the one of the design

HOW TO SELECT THE MOST SUITABLE TRANSFER

TRANSFER WITH HIGH DEFINITION

The Transfer prepared with **Vinilflat** (“graphic” transfer) is the one with the highest definition; excellent results can be achieved anyway with the Transfer prepared with **Texylon** (transfer for nylon fabrics)

TRANSFER WITH SOLVENT-BASED INKS

HOW TO SELECT THE MOST SUITABLE TRANSFER

TRANSFER WITH HIGH STABILITY IN THE SCREEN

Transfer prepared with **Texiplast** does not present any drying of the ink on the screen

TRANSFER WITH PLASTISOL INKS

TRADITIONAL PLASTISOL TRANSFER

HOT SPLIT TRANSFER

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