



**ichemco**  
Developing Chemical Excellence

## FLEXOGRAPHIC PRINTING

PRINTING ON PACKAGING TAPES

# ICHEMCO - YOUR PARTNER FOR FLEXO-PRINTING



As soon as the first PP tapes have been introduced in the market, **ICHEMCO** started to develop new dedicated systems for the printing of all sort of carton sealing tapes based on the BOPP technology. Working in close cooperation with **SIAT**, primary manufacturer of PSA tapes printing machines, our goal is to have a solution ready for all your needs.

## UNIVERSAL PRINTING PROCESS (3 passes)

For all types of tapes BOPP (PET, PE)

For: natural rubber / acrylic solvent borne / hot melt / acrylic waterborne TAPES

Printing Machines: SIAT L33 TCCE; SIAT L36 TCCE; SIAT L444

PROCESS	PRODUCTS	Quantity to be applied
Primer	PRIMER EPX2	3-4 g/m <sup>2</sup> wet
	PRIMER EPX2 DRY	3-4 g/m <sup>2</sup> wet (of a 3% solution)
Flexographic-printing	Color Ink PP Nitro	Depending upon requirements
Release treatment	RELEASE PP25 DIL	3-4 g/m <sup>2</sup> wet
	RELEASE PP25 S	3-4 g/m <sup>2</sup> wet (of a 0.5% solution)
	RELEASE PP25 R	3-4 g/m <sup>2</sup> wet (of a 0.5% solution)
	RELEASE K100 D	3-4 g/m <sup>2</sup> wet (of a 0.5% solution)

Primers and Release Agents are also available in the ECO version, completely free of any aromatic solvents. The use of Color Ink PAM C is not recommended since polyamidic inks are soluble in toluene and might be washed away during the Release Treatment step.

## SPECIAL PRINTING PROCESS (2 passes)

For BOPP tapes with acrylic waterborne adhesives, normal or low noise

Printing Machines: SIAT L36 C; SIAT L33/200; SIAT L44

PROCESS	PRODUCTS	APPLIED QUANTITY
Corona Treatment	-	38 – 40 dyne/cm
Flexographic-printing	COLOR INK PP PAM+ADD	Depending upon requirements

Color Ink PP PAM C can also be used, if Additive ST 2 is added (50% ink, 50% additive)

## SIMPLIFIED PRINTING PROCESS (1 pass)

Tape manufacturers supply also BOPP tapes (hot melt or solvent borne) labelled as “easy printable”. These are treated with special lacquers that allow the unwinding and at the same time are able to absorb inks.

Printing Machines: SIAT L33 ; SIAT L444

PROCESS	PRODUCTS	APPLIED QUANTITY
Flexographic-printing	COLOR INK PP PAM+ADD	Depending upon requirements

## PVC PRINTING PROCESS

For PVC tapes with solvent borne adhesives.

Printing Machines: SIAT L33 V; SIAT L44

PROCESS	PRODUCTS	APPLIED QUANTITY
Flexographic-printing	COLOR INK PVC	Depending upon requirements

## UNDER ADHESIVE “SANDWICH” PRINTING (3 passes)

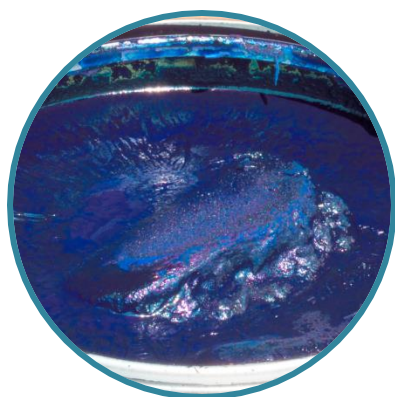
BOPP or PE corona treated (38 - 42 dyne/cm)

Printing machines: Flexographic Printer

PROCESS	PRODUCTS	APPLIED QUANTITY
Corona Treatment	-	38 – 42 dyne
Flexographic	COLOR INK NS + 3-5% ADDITIVE NS (solvent b.)	Depending upon requirements
Adhesive Coating	Adhesive of your choice	variable

### GENERAL GUIDELINES

Gelified ink



**Before starting with the printing it is important to check if the products used are homogeneous and perfectly fluid.**

In case of printing defects (transfer of ink caused by low adhesion), please check the following :

All Products should be homogeneous. If sedimentation or gelification occurred (even moderately cold temperatures below +18°C can generate these problems), warm the product up to 30-50°C and stir it well until it returns perfectly homogenous. If the product is still rather thick at 20°C, add 15-20 % of the specific **DILUENT** (check product list at the end).

An incomplete drying process after the coating is also a common source of problems. Incomplete drying can be caused by an excessive use of **RETARDERS** (more than 5% is not recommended).

Check if the applied coating weight is correct.

Check shelf-life of the products, if it exceeded the TDS indication, Ichemco cannot guarantee a flawless print.

After stirring and heating:





## PRIMERS

	Properties	Packaging
PRIMER EPX 2	Ready to use primer for Universal Printing Process	20 kg
PRIMER EPX 2 ECO	Ready to use aromatic solvent free primer	20 kg
PRIMER EPX 2 DRY	Powder version, to be dissolved in solvent mixture	50 kg



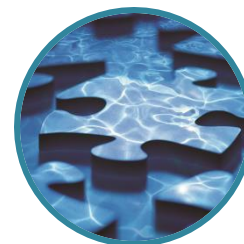
## INKS

	Properties	Packaging
COLOR INK PP NITRO	For Universal Printing Process	10 Kg
COLOR INK PP PAM C	For Special and Simplified Printing – Additive ST2 is required	10 kg
COLOR INK PP PAM + ADD	For Special and Simplified Printing Process	10 kg
COLOR INK PVC	For PVC packaging tapes	10 kg
COLOR INK RPVC	For flexible PVC	10 kg
COLOR INK PVC F	Fluorescent inks for PVC	10 kg
COLOR INK WK	For kraft paper	10 kg
COLOR INK NS	For Under Adhesive Printing, solvent borne	10 kg
COLOR INK WN	For Under Adhesive Printing, waterborne	10 kg



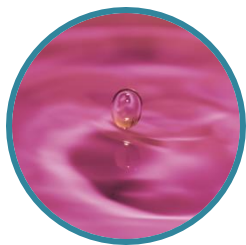
## RELEASE AGENTS

	Properties	Packaging
RELEASE PP25 DIL	Ready to use release for Universal Printing Process	20 kg
RELEASE PP25 ECO DILUITO	Ready to use release for Universal Printing Process Free of aromatic solvents	20 kg
RELEASE PP25 S /R	Concentrated version, to be diluted with toluene	50 kg
RELEASE K100 D	Release in powder form for the Universal printing process; to be dissolved in toluene or octane/IPA	20 kg



## ADDITIVES

	Properties	Packaging
ADDITIVE ST2	Can be added to COLOR INK PAM C and COLOR INK PAM + ADD. Increases ink transfer resistance	10, 20, 50 kg
ADDITIVE ST2 ECO	Aromatic solvent-free version of Additive ST2	10, 20, 50 kg
ANTI-STICK VARNISH	Flexographic transparent ink, used to create non-sticky areas on the adhesive side	10 kg



## DILUENTS

	Properties	Packaging
DILUENT RP	Diluent for Primer & Release	20 kg
DILUENT C Nitro	Diluent for Nitro inks	15 kg
DILUENT C PAM	Diluent for Eco Inks and PAM+ADD inks	15 kg
DILUENT C PVC	Diluent for PVC Inks	15 kg
THINNING VARNISH PAM+ADD	Transparent ink to reduce final viscosity	10 kg
CUTTING VARNISH PAM+ADD	Transparent ink, keeps viscosity unchanged	10 kg
THINNING VARNISH R/PVC	Transparent ink for R/PVC keeps viscosity unchanged	10 kg



## RETARDERS

	Properties	Packaging
RETARDER C PAM	Retarder for COLOR INK PAM C, COLOR INK PAM+ADD	15 kg
RETARDER C PVC	Retarder for Color Ink PVC series	18 kg
RETARDER C Nitro	Retarder for Color Ink Nitro series	15 kg


The complete list of inks, and the technical and safety data sheets of all products dedicated to flexographic printing are available on our web site at the address:

[www.ichemco.it/inks](http://www.ichemco.it/inks)

### For more information

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