Henan Zhongliqi Printing Material Co., Ltd

Offset sublimation ink

Transfer Printing Offset Series

Sublimation inks are designed to apply a mirror image onto paper for transfer to the final substrate. The prints are transferred via heat and pressure onto most polyester or synthetic materials. When first printed onto paper, sublimation inks appear to be weaker and duller than standard inks, however when transferred onto suitable substrates, the dyes develop their true color strength and brilliance.

1. Use Principle
It is used on all kinds of offset machine. With the ink, first print image on paper, then transfer the image onto various materials by heat transfer press, especially for polyester fabric. Under high temperature, the ink will become gas and go into fabric.

2. Printing Techniques
OFFSET (one color, two color and four color machines).

3. Colors
CMYK (Cyan, Magenta, Yellow and Black). If customer need special color, please provide us the fabric and the pantone color number you need.

4. Specific Supports
Coated paper, offset paper, chrome paper, calendered paper from 60-80 gr/m ²with dimensional stability.

5. Suitable Fabrics
Polyester fabric.
Triacetate fabric.
Nylon fabric.
Acrylic fabric.
Polypropylene nitrile fabric.

6. Use Method
(1)Be able to adapt to the demand for middle-speed or high-speed printing.
(2)During the normal condition, use the ink on the machine directly.

7. The printing process just needs 3 steps
(1)Print the image on paper, such as Coated paper, offset paper, chrome paper

(2)Put the printed paper on substrate, such as polyester and nylon fabric.
(3)Put the paper and fabric on the heat-transfer machine. When the temperature reaches 180-220 ℃, the image will be transfer printed from paper onto the substrate.

8. **Product Characteristics**

* No Crust

A. Granule size is less than 5 micron.

B. The ordinary ink won't crust in 6 days at normal temperature. The high-grade ink won't crust all the time.

* Safety

Passed SGS,DGM,MSDS,totally environment-friendly!

* Performance

Apply to high speed printing.
Strong dye degree and excellent transfer ability.
Good ink-water balance.
Nice and clear gradation.
Good sun-proof performance and high light fastness.

*P.S. please make samples before the final printing to confirm the exactly image.

9. Printing reference data

A. To get 50% C on fabric, the color on paper should be 30% C.
B. To make red PS-plate, the ratio is 100% M and 35%-40% Y.
C. To make blue PS-plate, the ratio is 100% C and 20% M.
D. To make green PS-plate, the ratio is 80% C and 90% Y.
E. To get yellow like Asian skin, the ratio is 10%~11% M and 7%-8% yellow and a little cyan, cyan can be adjusted according to requirement.

Use Parameters

Fabric Name	Transfer temperature	Transfer Pressure	Transfer Time
Polyester fabric	205℃～220℃	0.5kg/cm2	10～30 seconds
Polyester low flexibility fabric	195℃～205℃	0.5kg/cm2	30 seconds
Three-acetate fiber fabric	190℃～200℃	0.5kg/cm2	30～40 seconds
Nylon fabric	195℃～205℃	0.5kg/cm2	30～40 seconds
Acrylic fabric	200℃～210℃	0.5kg/cm2	30 seconds
Two-acetate fiber fabric	185℃	0.5kg/cm2	15～20 seconds
Gather propionitrile fabric	190℃～220℃	0.5kg/cm2	10～15 seconds

For alumina plate, stainless steel plate, copper plate and porcelain with the coating, the heat transfer temperature can refer to the temperature for polyester fabric.

Dye degree

Light Fastness	Magenta	Yellow	Cyan	Black
	5-6	6	4	4

The black is deep black.

Please be noted:
The control of the colors is always carried out after the transfer of the final supports. The relationship between the temperature and the time of contact is important in order to have the optimal color resistance and ink penetration (the longer the time of transfer, the better the ink penetration of the fabric).

Package&Pictures:
1kg/tin or 2kg/tin.

Shelf life & Keeping Condition:
Shelf life: 3 year from production data.
Store: avoid sunlight and water.