

GARMENT PRINTING PRODUCTS – K3 and K2 Opaque Inks

PRODUCT ATTRIBUTES

HIGHLY PIGMENTED (DEEP COLORS):

K3 : Can be used for photo-printing on apparel, even on dark background with base coat of White (K 2000+).

This allows the printer to achieve full ground coverage with minimum no. of strokes/rounds leading to higher productivity of print shop.

K2 Opaque series for flat prints without base coat on Medium and dark fabrics..

TRANSFER PRINTING:

Can be also used for transfer printing (with K2 Foil/Transfer Adhesive).

RSL COMPLIANCE

Comply to Eco Passport and GOTS Standards.

Apparels manufactured using these will meet Oekotex100 and GOTS standards .

USER FRIENDLY AND SAFE:

They can be cleaned easily with water even after 1 to 2 hours and this will not have any harmful effect on the skin. (unlike Solvent based inks).

Print Properties:

1. **FEEL** : Soft, smooth & stretchable.

2. WASH DURABILITY:

Prints done with K3 and K2 Opaque series of inks will be able to maintain softness, smoothness and stretchability even after 5 washes.* The Fabric should be having a good Absorbency (0.5 Sec.).

(*at 40°C temp. with 20 gpl of ECE / Persil detergent in front loading washing m/c with 3kg of dummy fabric).

These are ironable and will not crack after 50 washes like plastisol prints.

3. CROCK FASTNESS:

- **Prints done with these inks will give guaranteed crock rating of Wet (3-4) and Dry (4)**, even with darkest shades, (to be checked after 24 hours of printing & curing). Subject to proper flashing and curing.

QUALITY ASSURANCE TO RETAILERS

- Prints with Our products will show almost 90% retained performance in terms of stretch, smoothness and softness even after 5 severe wash cycles. This ensures original feel/look is maintained.
- This helps Retailers to create brand value.

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PRODUCT RANGE

Sr. No.	K3 Inks (Soft and Matt Colours)	K2 Opaque Inks
1	K3 Black	
2	K3 Marine, K3 Blue G, K3 Blue R	K2 Op. Blue G K2 Op. Blue R
3	K3 Red, K3 Brilliant Red K3 Scarlet K3 Orange	K2 Op. Red K2 Op. Scarlet K2 Op. Orange
4	K3 Yellow	K2 Op. Yellow
5	K3 Green K3 Violet	K2 Op. Green K2 Op. Violet

CURING

The dryer temperature setting should be minimum 140°C for 150 seconds (longer driers are recommended) / 170 -180°C for 60 seconds are also ok. .
Exact time and temperature should be optimized based on dryer and type of print. Ensure full drying.

PRINTING TECHNIQUE

Sr. No.	Particulars	Base Coat	Top Coat
1	Mesh	48 to 62T	62 to 120T
		Screens used for printing should be preferably made of heat set polyester with tension of 25 N/Cm. Our Inks can allow Printing at finest Meshes. So choose Mesh No. based on ink deposition needed for ground coverage.	
2	Viscosity	Add Zase 5100 thickener for getting extra deposition.	

Base Coats:

1. Opacity improvement:

75% thickness of the print is due to base coat hence minimizing this is critical.
Instead of pure white base coat, go for beige colour coat to improve brightness..

2. Stretch improvement/ Cracking control:

For infant baby wear fabrics like Single jersey with Lycra etc.
Use suitable base coats of 70 to 80 % clear and balance white to get stretch, with gloss control etc.

Wet on wet print (Top Coat):

Excellent re-emulsification properties of our Inks helps to avoid build up on backside of screens leading to smooth print runs.

To reduce deposition, viscosity may be reduced slightly with K2 Inks Reducer or Ran 5000 TSP @ 5 to 10%.

For thickening of Inks use Zase 5100.

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PHOTO EMULSIONS : Water resistant photo emulsion.
Test: Rub ink / water on dried photo emulsion surface, it should resist scrubbing action.

FRAMES : Aluminium to avoid contamination due to rust.

MESH TENSION : 25 - 40 N/cm. [lower than 20 Newton/cm is not recommended]

OFF CONTACT : Min. 2 mm (between fabric and screen).

SQUEEGEE Square & sandwich Squeegee with shore hardness no. 60/90/60 or 70/90/70 is preferred.

PALLETS : It is desirable to have aluminium pallets for improved heat Transfer.

FLASH :

Photoprints	No. of Colours	4	8	12
	No. of Flashes	1	2	3

Flash attachments with airflow are highly recommended for improved productivity.

TROUBLE SHOOTING

FABRIC MODIFIER:

R-77: To improve wetting and flow of ink on the fabric.

PRINT QUALITY MODIFIERS:

	Product	Dosage (%)
Very Matt Finish	K2 Matt	5 to 15
Brightness	FLSC Inks (Check Formaldehyde to meet compliance standards)	1 to 5
Feel	Print softener – R-55	1 to 3

CRACKING :

Low GSM : This can be controlled by proper thickness of printed portion and to some extent by addition of K2 Clear/ K3 Clear+.

HIGH GSM : Penetration improvement with lower viscosity is a must.

CLIMATE CHANGES:

Hot and Dry Conditions : Spray water intermittently

Humid Conditions : Make sure fabric is dry. Additional flash may be used (airflow through flash will help).

STORAGE

- Do not store in direct sun or at a temperature higher than 45°C.
- Always keep the lid closed after withdrawal of material from the can.
- Minimum shelf life of the product is 18-24 months.
- For extended storage, once the can is opened, pour 50 gms. of water on the top surface and then close the lid tightly.

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DISCLAIMER

The information and data contained herein are given in good faith but without warranty. We recommend that before using our products, the customer should make his/her own tests to determine the suitability of the products for his/her own purpose under his/her operating conditions. As the circumstances under which our products are stored, handled and used are beyond our control, we cannot assume any responsibility for their use by the customers.