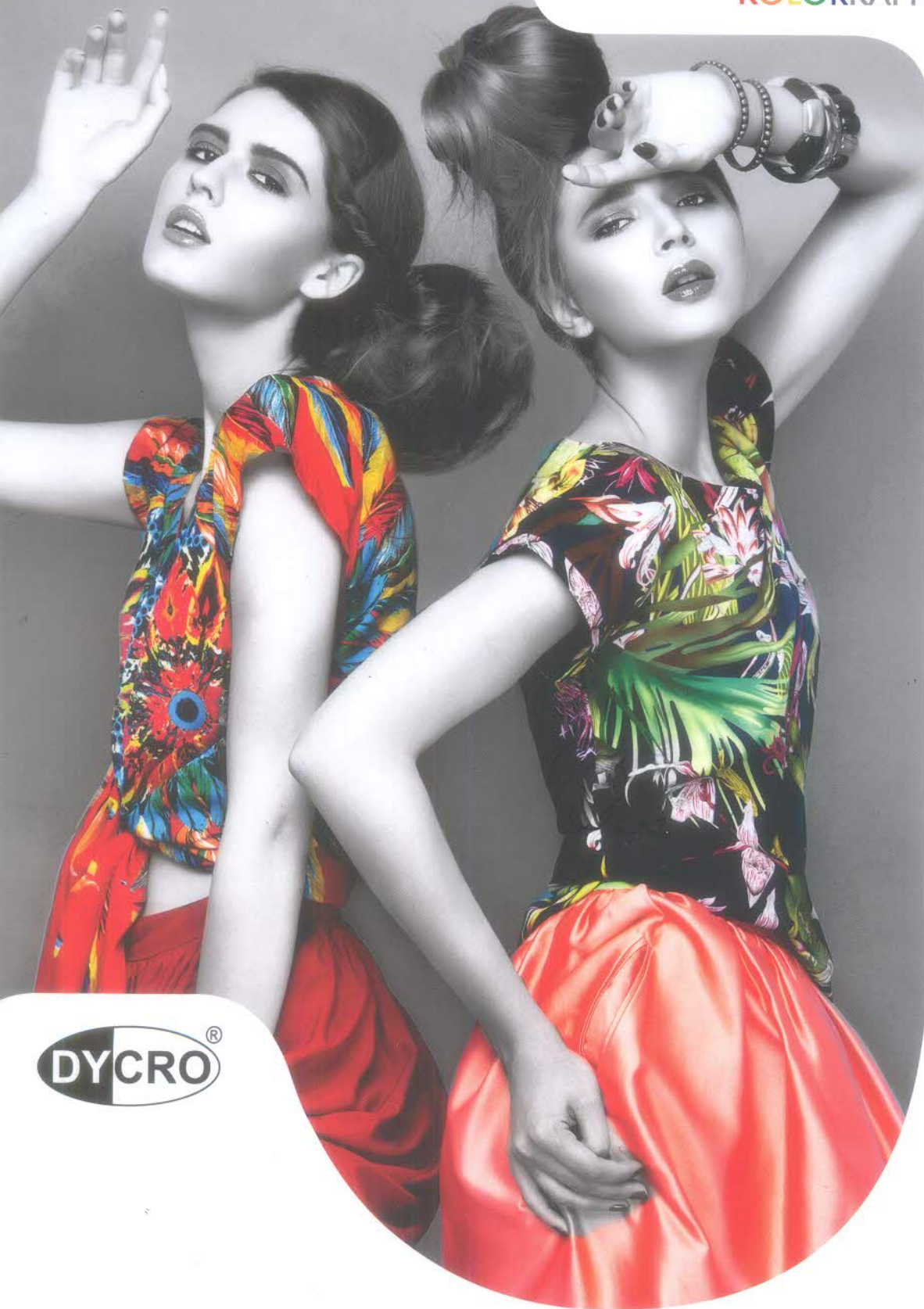




DYCRO[®]

DYCROFIX P

DYCROFIX P



Steam Print	Dycrofix "P" MCT Dyes	Solubility g/l at RT	Fastness Properties				Suitability						
			Light (Xenon Test) (1/1 & 1/6) ISO-105-B02	Washing ISO-105-C03 Effect / Stain	Perspiration Alkaline / Acidic	Chlorinated Water (ISO-105-E03)	Atmospheric Steaming 8-12 Min. - 102 C°	Superheated Steam 6-8 Min. - 175 C°	Thermofixation 5 min. - 150°	Two Phase Steaming 90 Sec. - 125 C°	Silicate	Resist under VS Dyes	Dischargeability
3.0%													
	Yellow P4G	80	5-6 5	5 5	4-5 5	3	S	S	S	S	S	S	G
	Yellow P6G	100	6-7 6	5 5	5 5	3	S	S	S	S	S	S	G
	G. Yellow PR	100	6 5-6	5 5	5 5	4	S	S	S	S	S	S	F
	G. Yellow PGRN	100	6 5-6	5 4-5	5 4	4	S	S	S	S	S	S	F
	Orange P2R	100	5 4-5	5 5	5 4	4	S	S	S	S	S	S	F
	Orange P4R	100	5 5-6	5 5	5 5	4	S	S	S	S	S	S	F
	Scarlet PRN	100	4-5 5	5 5	5 4	4	S	S	S	S	S	S	P
	Red PBN	130	5 4-5	4-5 5	4 4-5	3-4	S	S	S	S	S	S	P
	Red P2B	130	4-5 5	4-5 5	4-5 4	3	S	S	S	S	S	S	P
	Red P4BN	150	4 4	5 5	5 5	3-4	S	S	S	S	S	S	G
	Red P6B	150	5 4-5	4 5	4 4	4-5	S	S	S	S	S	S	F
	Red P8B	130	4-5 5	5 5	5 5	4-5	S	S	S	S	S	S	F

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3.0%													
	Magenta PB	100	5-6 5	5 5	4 4	4	S	S	S	S	S	S	P
	Purple P3R	80	5-6 5	5 5	3 4	4	S	S	S	S	S	S	P
	Blue P5R	120	5-6 5	5 5	4-5 4	2	S	S	S	S	S	S	P
	Blue P3R	130	6 6	4-5 5	4 4-5	2	S	S	S	S	FS	S	P
	Blue P2R	100	4-5 5	4 5	4 4	4	S	S	S	S	S	S	P
	Tq. Blue PGR	120	5-6 6	4 4	4 3-4	4	S	NS	S	S	S	S	F
	Olive Green P2G	100	4-5 5	4-5 5	4-5 4-5	3-4	S	S	S	S	S	S	P
	Brown P2R	120	5-6 6	5-6 5	5 5	4	S	S	S	S	S	S	G
	Red Brown P4R	100	4-5 5	4 5	3-4 3-4	3-4	S	S	S	S	S	S	G
	Black PN	100	4-5 5	4-5 5	4-5 4-5	4	S	S	S	S	S	S	P
	Black PGR	120	5-6 6	5 5	5 5	5	S	S	S	S	S	S	G
	Black P2R	120	5-6 6	5 5	5 5	5	S	S	S	S	S	S	G

DYCROFIX P



This pattern card illustrates the Dycrofix 'P' dyes from JAGSON which are suitable for printing of cellulosic fibers.

1. Pretreatment of the goods

To ensure optimum results in reactive printing of woven or knitted fabric all impurities in the fibre, lubricants, auxiliaries and processing chemicals that could react with reactive dyes or adversely affect the printing process must be removed. To obtain maximum colour yield brilliancy levelness and wet fastness properties on cotton, it has been mercerized or treated with a caustic soda solution of at least 22 °Be (16.4%) Regenerated cellulosic fibres should be treated in a tensionless state with a caustic soda solution of approx 6-8 °Be (4-5%) Alkaline pretreatment improves further dimensional stability and facilitates washing-off of the prints

2. Print paste preparation

Most important ingredient is the thickener

Sodium alginate is the ideal thickener for the purpose, which does not react with the dyestuff and can be very easily washed off

Print recipe

A. Stock thickener

Sodium alginate thickener	400-600 Parts
Urea	100-200 Parts
Dycrogol (Resist Salt)	10 Parts
KBI Liquid	5 Parts
Sodium Bicarbonate	25-30 Parts
Preservative	0.5-1.0 Parts
Water	X Parts
	1000 Parts

B. Print paste preparation

Stock thickener	X Parts
Dycrofix 'P' Dyes	Y Parts
	1000 Parts

3. Fixation

The following fixation methods can be used as per availability of equipment:

Fixation medium for one-phase printing	Substrate	Time min	Temperature	Alkali
Saturated steam	WO/silk	10-20	102 °C	Sodium Acetate
Saturated steam	CO,CV	8-12	102 DC	Sodium Bicarbonate or Soda Ash
Hot air*	CO	5	150 °C	
Hot air*	PES/CO	1	190-200 C	
Superheated steam*	PES/CO	6-8	175 X	

* with higher amounts of urea.

4. Two-phase prints

First of all the dried prints are impregnated open-width and crease-free with an alkaline fixation liquor and after that fixed as per the available equipment.



A horizontal padder with steel/rubber roller arrangement has effective to apply the alkaline fixation liquor which should allow both face padding and immersion of the fabric, depending on its structure and weight. The padding roller which comes into contact with the printed side of the fabric should be made of steel (S) and the nip roller should be covered with rubber (R).

DYCROFIX P



Fixation Liquors :

Electrolyte / alkali		
Water	x	cm ³
Soda ash	150	g
Common salt	100	g
Potash	80	g
Caustic soda 32 5%	50	cm ³
Sodium silicate	50	cm ³
(Na ₂ O:SiO ₂ 1:3:3)		
	1,000	cm ³

Sodium silicate		
a) Na ₂ O:SiO ₂ 1:1.7-2.0	1,000	cm ³
b) Na ₂ O:SiO ₂ 1:3.3	1,000	cm ³

Fixation medium : superheated steam
Substrate : cotton, viscose
Time : 90 sec
Temperature : 125 °C

5. Washing-off

To obtain a clean white ground, high brilliancy and good fastness properties, carry out a proper washing-off process.

There are two stages for washing-off of prints. One is to remove thickeners, chemicals and unfixed dyes and another one is to maximize fastness properties.

In first stage, to obtain a clean white ground, swell the dry thickening film and remove the swollen thickening, residual alkali, unfixed reactive dye and auxiliaries

The best results are achieved with a specific water flow, e.g. by spraying the goods with a low liquor level, effective separation of the rinse baths and rapid liquor exchange at 90-95 °C. If this is not possible, we recommend starting the washing-off process wrth cold water.

In two-phase methods, the swollen thickening, alkali, unfixed dye and auxiliary should be removed by spraying intensively at 40 °C, preferably without standing liquor.

After this, the goods are washed first at 60-70 °C and then at 90-95 °C.

The prints should be washed-off in soft water to prevent formation of sparingly soluble calcium alginate. It is important to washed-off all unfixed and hydrolysed dye components completely if it's still present in the woven or knitted fabric. As basically this is a diffusion process, the time/temperature relationship is important.

In the washing-off process, not too much trust should be placed in the action of any detergents used for water soluble dyes

It is very important to ensure that the baths are close to the boil. As the temperature rises, the substantivity of hydrolysed dye declines and the rate of diffusion increases. This assists the removal of the hydrolysed dye from the fibre.

The information provided here is in good faith, as our current knowledge of the product without liability.