



ITOFIX P
Reactive Dyes For Printing

MAGNACOLOURS[®]
IMAGINATION INK[®]

ITOFIX P

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ITOFIX P dyes are ideally suited to printing applications, but can equally be used for dyeing in a pad/dry/pad/steam method for medium to full shades.

Print Recipe

Stock Thickener

Sodium alginate thickener	400 parts
Urea	100-200 parts
Resist salt	10 parts
Penetrating agent	5 parts
Sodium bicarbonate	25-30 parts
Water	X parts
	1000 parts

Print Paste

Stock thickener	X parts
Itfix P dyes	Y parts
	1000 parts

FIXATION

Fixation

Goods are printed, then dried and can be fixed in any of the following ways:

1. Steaming at 103-105°C for 10 minutes
2. Thermofixation at 150-200°C for 5 minutes
3. High temperature steaming at 140-150°C for 3-5 minutes

FASTNESS TEST METHODS

Light Fastness	ISO 105-B02
Wash Fastness	ISO 105-C02
Perspiration Fastness	ISO 105-E02
Chlorinated Water	
Fastness	ISO 105-E03

SYMBOLS USED IN FASTNESS COLUMNS

Co	Staining on cotton
CS	Change of shade

DYEING

Pad-Dry-Pad-Steam

Dye Padding:

Itfix P dyes	x g/l
Wetting agent	2 g/l
Anti migrating agent	10g/l
Mild oxidant	5g/l
Padding temp	25°C

Drying:

Temp - 100-200°C
Allow fabric to cool

Chemical Padding

Dye conc (g/l)	<20	20-40	40-60	>60
Salt	250	250	250	250
Soda Ash	20	20	20	20
Caustic Soda (50%)	3	4	6	8

Steaming:

102-105°C
for 45-90 seconds

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ITOFIX	Fastness Properties						
	Sol	Light	Wash		Alk Persp	Acid Persp	Chlorinated Water
Illustrated at 25 g/kg, Grey and Black at 60g/kg	30°C (g/l)	1/1 SD	CS	Co	CS	CS	CS
Yellow PN7G Yellow 095	70	5-6	4-5	4-5	5	5	3
Yellow PN4G Yellow 018	100	6	4	4-5	4	4	2-3
Yellow PNR Orange 012	80	5-6	4-5	4-5	5	5	4
Orange PNR Orange 013	150	4-5	5	5	4-5	4-5	4
Red PNB Red 024	130	4-5	5	5	4-5	4-5	3-4
Red PN3B Red 045	150	4	5	5	4	4	3-4
Red PN6B 150% Red 218	150	4	5	5	4-5	4-5	3-4
Red PN8B Red 031	80	4-5	4	3-4	4	4	3
Purple PNB Violet unk	50	4	4-5	3	4	4	3
Turquoise PNG 150% Blue 072	120	4-6	4	3-4	4	3-4	3-4
Turquoise PN5G Blue 025	120	5-6	4	3-4	4	3-4	3
Blue PN3R Blue 018	133	5-6	5	5	5	5	4
Blue PN5R Blue 013	120	6	4	4-5	4-5	4	3
Navy PNR Black 039	100	4-5	4-5	4-5	4	4	3
Brown PN4R Brown 009	80	4-5	4-5	4-5	3	3	4
Grey PTG Black 013	150	4	4-5	4-5	4	4	4
Black PN Black 008	80	6	4-5	4-5	4-5	4-5	4
Black PGR 150% Black 038	120	5-6	5	5	4-5	4-5	4-5

REACTIVE DYE RANGES



Application Method	Best Quality	Also Suitable	Cheapest Recipe
EXHAUST			
Warm 50-60°C	ITOFIX VM (pale to medium shades)	ITOFIX VSRR (pale shades)	ITOFIX VS (med-full)
	ITOFIX VMHLF (highest light fastness)	ITOFIX VSRGB (medium to full)	
		ITOFIX VMS (very full shades)	
Hot 80-130°C	ITOFIX CTSNR (pale to full shades)	ITOFIX CT (pale to full shades)	
	ITOREACT (pale to medium shades)		
Cold Pad Batch	ITOFIX VM (pale to medium shades)	ITOFIX VSRR (pale shades)	ITOFIX VS (med-full)
	ITOFIX VMHLF (highest light fastness)	ITOFIX VSRGB (medium to full)	
		ITOFIX VMS (very full shades)	
Pad-Dry-Pad-Steam	ITOFIX VMHLF (highest light fastness)	ITOFIX VSRR (pale shades)	ITOFIX VS
	ITOFIX P (medium to full shades)	ITOFIX VSRGB (medium to full)	
		ITOFIX VMS (very full shades)	
Pad - Dry - Steam	ITOFIX P (pale to full shades)	ITOFIX VSRR (pale shades)	ITOFIX VS
		ITOFIX VSRGB (medium to full)	
		ITOFIX VMS (very full shades)	
Pad - Steam		ITOFIX VM (pale to medium)	ITOFIX VS
Pad-Dry-Thermofix	ITOFIX P (pale to full shades)	ITOFIX VSRGB (medium to full)	ITOFIX VS
	ITOFIX VMHLF (highest light fastness)	ITOFIX VMS (very full shades)	
E Control	ITOFIX P (pale to full shades)	ITOFIX VSRR (pale shades)	ITOFIX VS
	ITOFIX VMHLF (highest light fastness)	ITOFIX VSRGB (medium to full)	
Printing	ITOFIX P (pale to full shades)		ITOFIX VS

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