



ITOFIX VM
Bi-Functional Reactive Dyes

MAGNACOLOURS[®]
IMAGINATION INK[®]



ITOFIX VM dyes are a range of dyes based on bi-functional vinyl sulphone and monochlorotriazine chemistry. A very versatile range of dyes that can be applied by exhaust, CPB or continuous dyeing methods, they have excellent compatibility and give superior repeatability.

FASTNESS TEST METHODS

Light Fastness	ISO 105-B02
Wash Fastness	ISO 105-C02
Perspiration Fastness	ISO 105-E02
Water Fastness	ISO 105-E01

SYMBOLS USED IN FASTNESS COLUMNS

C	Staining on cotton
N	Staining on nylon
W	Staining on wool

ITOFIX VM DYEING METHOD

Exhaust

Recipe:

x% Dye
0.5g/l ITOQUEST LJ3-12
y g/l Salt
z g/l Alkali

Method:

Heat to 40°C.
Add chemicals and salt, run for 10 min.
Heat to 60°C.
Add dyes, run for 30 minutes.
Add alkali over 30 minutes.
(by portions or progressive dosing)
Run for 40 to 60 minutes at 60°C.
Drop liquor and rinse, acid rinse, soap at 100°C.

Cold Pad Batch

Recipe:

x g/l Dye
50g/l ITOBUFFER CPB
x/5+8 cc/l Caustic Soda 70TW
(x is dye value in g/l)
0.2g/l Itowet LJ10

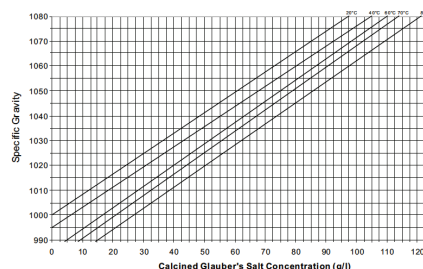
Method:

Make dye solution up to 4/5 total volume.
Make chemical solution up to 1/5 total volume.
Mix dye and chemical solutions and pad immediately.
Batch long test for 16-24 hours (Quick test 30 mins at 60°C).
Rinse, acid rinse, soap at 100°C.

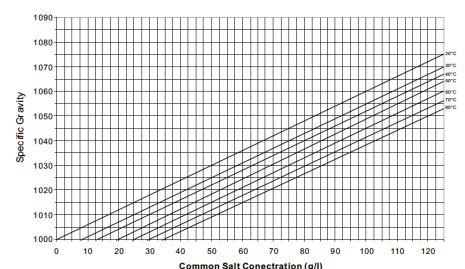
Notes:

Use maximum 50g/l salt when using phthalocyanine dyestuffs in combination with Itofix VM dyes

Specific Gravity of Calcined Glauber's Solutions



Specific Gravity of Common Salt Solutions



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Salt and Alkali Table (Based on 100% strength dyestuffs)

% Dyestuff	Glaubers Salt	Soda Ash	OR	Soda Ash + Caustic 70tw
<0.3	10	10		-
>0.3 - 0.6	20	15		-
>0.6 - 1.0	30	15		-
>1.0 - 1.5	40	20		5+1.0
>1.5 - 3	50	20		5+1.5
>3 - 5	80	20		5+2.0
>5	100	20		5+3.0

ITOFIX	Fastness Properties at 3% (Black VMSNN New at 6%)										
	Sol	Light	Wash 50°C			Alk Persp			Water		
Dyed at 1%, Navy at 2%, Black at 4%	80°C	1/1	C	N	W	C	N	W	C	N	W
Yellow VM4GF 225% Yellow 167	80	5	4/5	4/5	4/5	4/5	4/5	4/5	4/5	4/5	4/5
Yellow VMRL 150% Yellow 145	100	5+	4	4	4/5	4/5	4/5	4/5	4/5	4	4/5
Scarlet VM2GF 150% Red 222	100	5	4	4	4/5	4/5	4	4/5	4/5	4	4/5
Red VMGF 150% Red 223	100	5	4/5	4/5	4/5	4	4	4/5	4/5	4/5	4/5
Red VM3BS 150% Red 195	100	5	4/5	4/5	4/5	4	4	4/5	4/5	4/5	4/5
Red VMEP Conc	100	4	4/5	4/5	4/5	4	4	4/5	4/5	4/5	4/5
Red VM2BF Red 194	100	4	4/5	4/5	4/5	4	4	4/5	4/5	4/5	4/5
Bordeaux VMHLF	100	5+	4/5	4	4	3	4	4/5	4	4	4
Blue VMBRF 150% Blue 221	100	4/5	4	4	4/5	3/4	4	4	4/5	4/5	4/5
Turquoise VMBGFN Blue 231	100	4/5	4	4	4/5	3/4	4	4	4/5	4/5	4/5
Navy VM2GF 150% Blue 194	100	4	4/5	4/5	4/5	4	4/5	4/5	4/5	4/5	4/5
Navy VM3GF 150% Blue 222	100	5	4/5	4/5	4/5	4/5	4/5	4/5	4/5	4/5	4/5
Navy VMBF Blue 222	100	5	4/5	4/5	4/5	4	4/5	4/5	4/5	4	4/5
Black VMSNN New Black Mix	150	5	4/5	4	4/5	4/5	4	4/5	4/5	4/5	4/5

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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