



Certificate No.: 6768QMS001

An ISO 9001 : 2008 Company

154, Sudama Industrial Estate, Narol, Ahmedabad - 382 405

Phone : 079 2573 1647

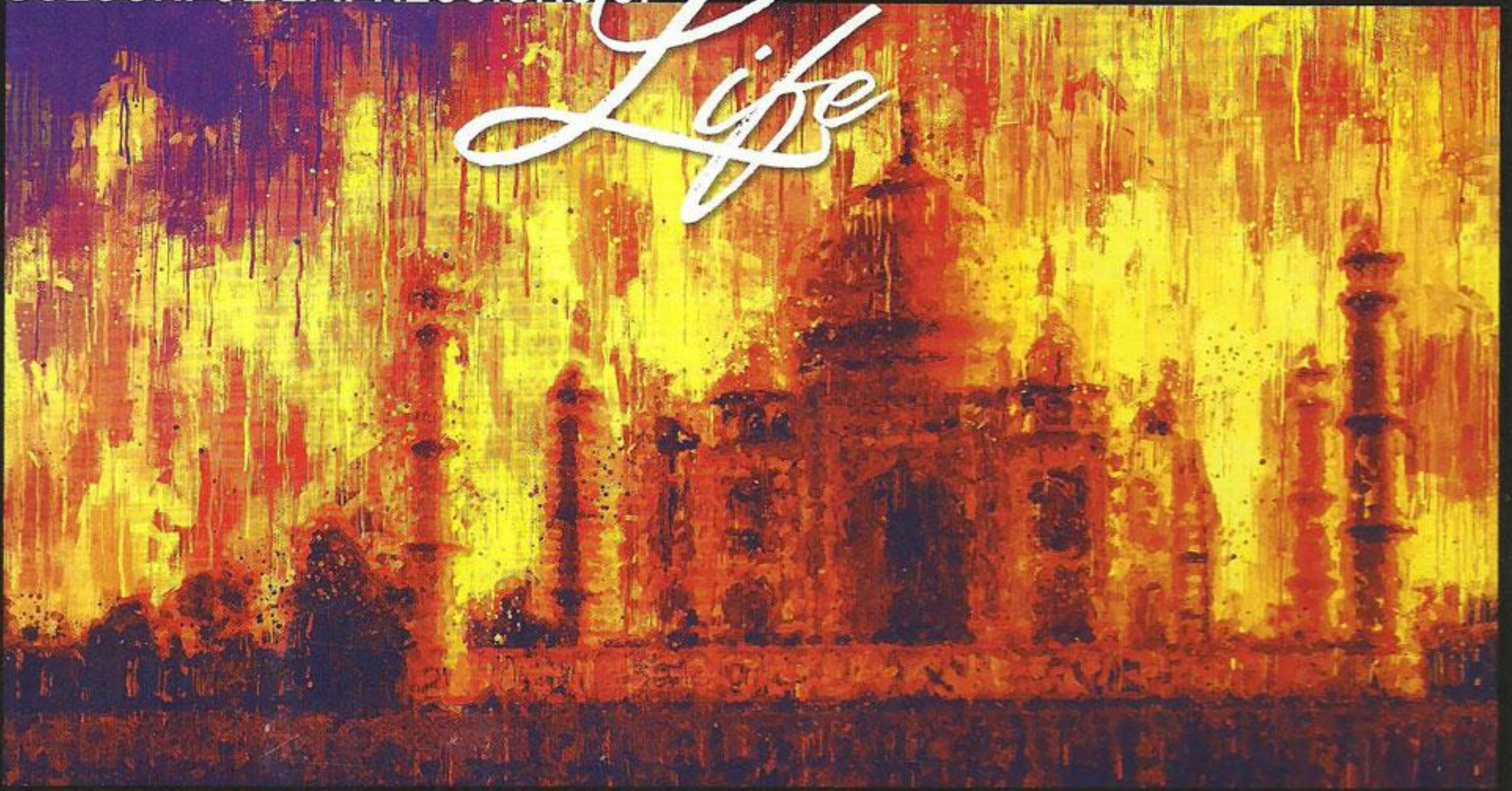
E-mail : spectron@coloursindia.com

Fax : 079 2573 3012

www.coloursindia.com





Memory +91 79 4002 4000





COLOURFUL EXPRESSIONS OF *Life*











Product Name	Shade %		Screen Print On Bleached Mercerised Cotton	Solubility		Dyeing Affinity	Exhaust Dyeing Temp.	Light Fastness (Day Light)		Washing Fastness		Perspiration Fastness		Bleaching	
				gm/l				Shade/Stain		Shade/Stain		Shade/Stain			
Spectron				Neutral	With 30g/l Salt		°C	1/6 SD	1/1 SD	ISO 105 CO 3	ISO 105 CO 4	Alka-line	Acid	Hypo-chlorite	H ₂ O ₂


Fastness Rating: Light - 1 to 8 Increasing Order • Washing & Others - 1 to 5 Increasing Order

Yellow PX4G	0.5	3.0		130	100	Low	80	6	6-7	5/5	4-5 /4-5	4-5 /4-5	4/4	1	4/5
G. Yellow PXGR	0.5	3.0		110	50	Medium	80	5-6	6	5/5	4-5/5	5/5	4-5 /4-5	3	4-5 /4-5
Orange PXRN	0.5	3.0		150	100	Medium	80	3-4	4-5	5/5	5/5	4-5 /5	4/4-5	4	4/4-5
Red PX8B	0.5	3.0		80	10	High	80	3-4	4-5	4-5 /5	4/5	4/3-4	4/3-4	3-4	4/4-5

Red PXB	0.5	3.0		80	50	Medium	80	4-5	5-6	5/5	4-5 /4-5	5/4-5	5/4-5	-	4-5
Red PX3B	0.5	3.0		90	65	Medium	80	4	4-5	4/4	4/4	5/4-5	5/4-5	-	4
Red PX5B	0.5	3.0		70	55	Medium	80	4-5	5	4-5 /4-5	4/4	4-5 /4-5	4-5 /4-5	-	3-4
Red PX7B	0.5	3.0		100	80	Low	80	4-5	5	5/5	5/5	4/4	4/4	3-4	4/4

Magenta PXN	0.5	3.0		80	80	Medium	80	4-5	4-5	4-5 /4-5	4/ 4-5	4-5 /3	4/ 3-4	1	2-3 /3
Blue PX3R	0.5	3.0		100	60	Medium	80	5-6	6	4-5 /5	4-5 /5	4-5 /5	4/ 4-5	4-5	4-5 /5
Blue PX5R	0.5	3.0		100	40	Medium	80	5	6	5/5	4-5 /4-5	4-5 /4-5	4/ 4-5	1	3/3
Turq. Blue PXGR Conc	0.5	3.0		100	80	High	80	5	6	4-5 /4	4-5 /4	5/ 4-5	4/ 4-5	3-4	-

Red Brown PX4R	0.5	3.0		90	30	Low	80	4	4-5	5/ 4-5	5/ 4-5	4-5 /3-4	4/ 4-5	4-5	5/ 4-5
Navy PXG	0.5	3.0		90	70	Medium	80	4-5	5	4-5 /4-5	4/ 4-5	4/ 4-5	4-5 /4-5	-	4
Black PXN	1.0	5.0		40	40	Low	80	4-5	6	5/5	4-5 /5	4-5 /3	4/4	4	3/5
Jet Black PXDN	1.0	5.0		100	100	High	60	3	4-5	4-5 /5	4-5 /5	5/4	5/4	2	4-5 /4-5

Black PXGR	1.0	5.0		100	90	Medium	80	5	5	4-5 /5	4-5 /4-5	4-5 /4-5	4-5 /4-5	-	4-5
---------------	-----	-----	--	-----	----	--------	----	---	---	-----------	-------------	-------------	-------------	---	-----

The information contained herein is provided in good faith without warranty

SPECTRON "PX" DYESTUFF PRINTS ON COTTON

Spectron "PX" reactive dyes on cellulosic fabric are fixed in an alkaline medium which creates chemical bond between fibre and dye. Spectron prints have high brilliancy and very good fastness properties. To obtain deep and brilliant prints on cotton fabric, the material should be either mercerized or causticised with caustic soda at 22°Be strength. For regenerated cellulosic (Viscose) fabric, tensionless causticisation with 6-8°Be. Caustic Soda improves the brilliance and color yield of dye. For high wet modulus fibre (Polynosic) caustic soda concentration must be increased to 20°Be to get the best results.

There are two distinct methods of direct printing of Spectron "PX" dyes.

- (1) One Phase Printing:** In this process alkali is added direct to print paste and prints are fixed in continuous or star steamer with saturated steam.
- (2) Two Phase Printing:** Print paste do not contain alkali and it is adjusted to a neutral or slightly acidic pH with addition of monosodium phosphate Fixation is done in a separate operation by padding in an alkaline fixation liquor. Since print paste is free of alkali & urea, self life of print paste and prints before fixation is unlimited. Prints are insensitive to various drying condition. Best colour yield obtain in this method.

Suitable Thickeners: Neutral Sodium alginate and modified guar gum are suitable. The addition of 10 gm/kg Sodium Hexa Meta Phosphate in stock paste is recommended for easy wash off and better handle of fabric.

Print Paste Recipe:

	One Phase Method	Two Phase Method
	Parts	Parts
Spectron "PX" Dye	X	X
Hot Water 80°C	25	25
Urea	5-10	----
Neutral Thickening	45	45
Sodium Bicarbonate	1-2.5	----
Resist Salt (1:2 Soln)	3	3
Water &/Or Thickening	Y	Y
Total >>	100	100

- (1) One Phase Method:** Print -- dry at 80-100°C, then steamed in saturated steam for 3-7 minutes in continuous steamer or 15-20 minutes in starager.

Precaution: Steam the goods immediately after printing. Protects the prints from acidic atmosphere before steaming.

- (2) Two Phase Cold Dwell Method:** The fabrics are printed with a print paste without alkali and urea, dried and then nip padded with Sodium Silicate solution of specific gravity 47°Be (102°Tw) having a ratio of Sodium oxide to Silicdioxide, 1:2.1 (Na₂O : SiO₂ = 1.2.1) Give a 15 seconds air passage to reduce the risk of smudging of prints. This is also possible by addition of 50gm/l Aluminium Sulphate in the fixation liquor. Then the goods are batched or piled on platform and covered with polythene sheet to avoid drying. Dwell the fabric for 16-24 hours then after treated.

Two Phase Short Time Cold Dwell Method:

Fixation liquor is prepared as follows:

800 ml. Sodium Silicate 56°Be
100 ml. Caustic Soda 38°Be
100 ml. Water
1000 ml.

Printed fabric padded through fixation liquor and dwell for 2-3 hours & after treated.

After Treatment: Rinse in cold water with overflow • Rinse at 40°C with 1 g/l SHMP water (Easy removal of silicate) • Repeat • Hot wash at 90°C with 1 g/l Neutral detergent • Repeat • Hot wash at 90°C plane water • Cold wash

Hot washes may be increased in case of Dark shade prints.

Note: In two phase cold dwell method to obtain optimum colour yield of Spectron Turq. Blue G Conc. 5.0% urea &/or 1.0% Soda Ash in print paste is recommended.