

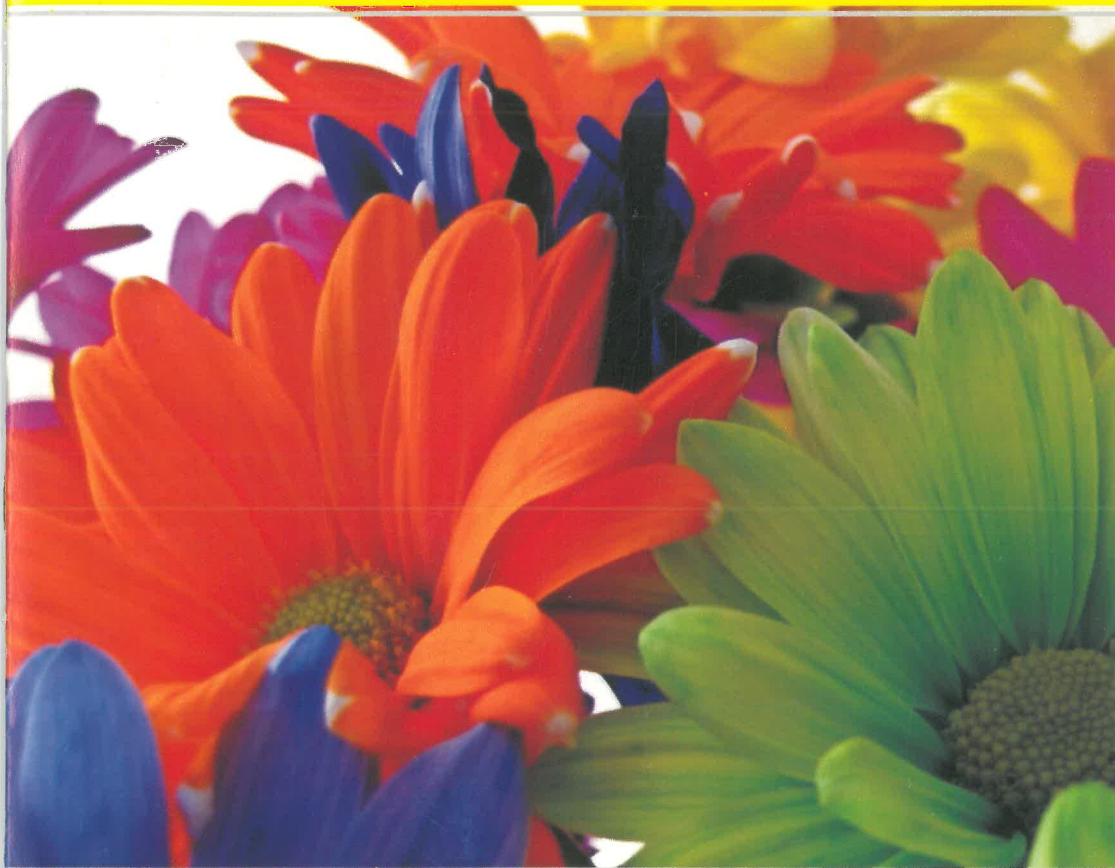


Bodal Chemicals Ltd.

Total Solutions for Light shades Reproducibility

BODACTIVE ELF DYES

HIGH LIGHT FASTNESS REACTIVE DYES



Bodal provide highest quality to your satisfaction



Bodal Chemicals Ltd.

Marketing Office: Dyestuff Division

1011, Venus Atlantis, Prahaladnagar,
Ahmedabad- 380015, Gujarat, India.

Tel : +91-79-4050 3456

Fax : +91-79-4050 3457

Email : dyestuff@bodal.com

Intermediates Division : rameshpatel@bodal.com

Other Chemicals Division : ankitpatel@bodal.com

Technical Support : techbodal@bodal.com

Nainan Mehta

Mobile: +91 99254 55544

Hardik Shah

Mobile: +91 99254 88688

Dipak Shah

Mobile: +91 98250 35271

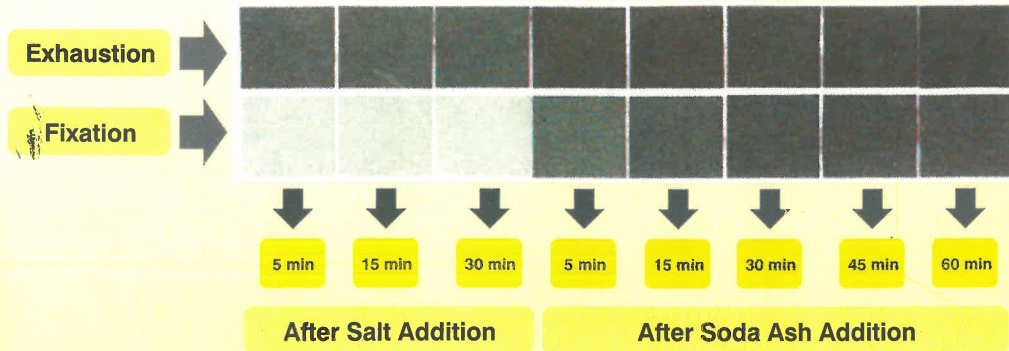
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On-tone build-up – Bodactive ELF Trichromy

Exhaust Dyeing 60° C
Cotton Bleached

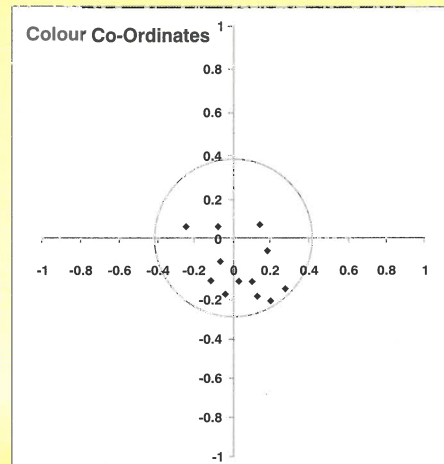
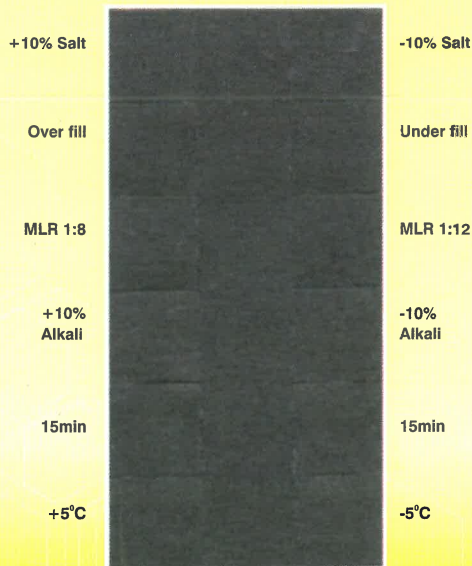
Recipe :

Bod. Yellow ELF	-0.69%
Bod. Red ELF	-0.50%
Bod. Navy ELF	-0.87%
G. Salt- 50 gpl, soda Ash-18 gpl	



- Excellent compability & on-tone build up of trichromatic dyes

Robustness properties – Bodactive ELF Trichromy



Bodactive ELF

High performance reactive dyes for cellulosic substrates & cellulosic blends. Design to reduce the cost of color recipes, in light to medium shade category, without compromising the performance. Extra ordinary performance with dye selection, to improve RFT levels in tertiary shades, because of controlled application properties of dyes.

0.25%

1.0%

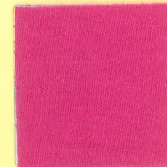
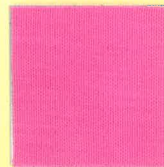
Bodactive Yellow ELF

Best for combination shades with very good light fastness



Bodactive Red ELF

Best combination red for Light and Medium critical shades



Bodactive Blue ELF

Best for Light to Medium shades with high light fastness



Bodactive Navy ELF

Reddish navy component with good fastness



Bodactive Dyes		Bodactive Yellow ELF	Bodactive Red ELF	Bodactive Blue ELF	Bodactive Navy ELF
Standard Depth		2.3%	3.0%	3.3%	3.6%
Solubility (g/L) at 30°C		100	100	80	100
Process Suitability	Exhaust	S	S	S	S
	Cold Pad Batch	S	S	S	S
	Continuous Dyeing	S	S	S	S
Migration Index (%)		87	95	82	92
Fixation Yield (%)		84	88	83	90
Light Fastness (AATCC/16E, 20 AFU)	1/25	4-5	4	4	3-4
	1/6	4-5	4	4	3-4
	1/1	4-5	4	4-5	4
Washing (Ch/CO)	ISO 105 C06 C2S @ 60°C	4-5 4-5	4-5 4-5	4-5 4-5	4-5 4-5
	ISO 105 C06 E2S @ 95°C	4-5 4	4-5 4	4-5 4-5	4-5 4
Water (Ch/CO) ISO 105 E01		4-5 4-5	4-5 4	4-5 4	4-5 4
Crooking Fastness (ISO 105 X12)	Dry	4-5	4-5	4-5	4-5
	Wet	4	4	4	4
Chlorinated Water (ISO 105 E03 / 20 ppm)		4	4	4	4
Perspiration (ISO 105 E04)	Acid	4-5 4-5	4-5 4-5	4-5 4	4-5 4
	Alkaline	4-5 4-5	4-5 4-5	4 4	4-5 4-5
Oxidation Bleach Damage (M&S C10 A)		4 ON TONE	4 ON TONE	4 ON TONE	4 ON TONE

Key to abbreviations : S-Suitable, NS-Not Suitable Fastness properties - Upper: Shade Change, Lower : Staining on cotton

- High fastness level
- Very good lab-to-bulk & bulk-to-bulk reproducibility
- On-tone built-up characteristics
- Very good light fastness in light shades

- Robust dyeing characteristics
- Excellent washing-off properties
- High degree of fixation
- Attractive shade
- Compatible with BNC & C Range

Chemical Recommendations – Exhaust

Salt Soda Method		Substrate CO Bleached Liquor Ratio 1:08							
BODACTIVE ELF %	<0.1	>0.1-0.25	>0.25-0.5	>0.5-1.0	>1.0-2.0	>2.0-3.0	>3.0-4.0	>4.0-5.0	>5.0
Salt (g/l)	10	15	20	30	40	50	60	70	80
Soda Ash (g/l)	8	10	12	14	16	18	20	20	20

Mix Alkali Method		Substrate CO Bleached Liquor Ratio 1:08							
BODACTIVE ELF %	<0.1	>0.1-0.25	>0.25-0.5	>0.5-1.0	>1.0-2.0	>2.0-3.0	>3.0-4.0	>4.0-5.0	>5.0
Salt (g/l)	10	15	20	30	40	50	60	70	80
Soda Ash (g/l)	5	5	5	5	5	5	5	5	5
Caustic Flakes (g/l)	0.5	0.5	0.5	1	1	1	1.5	1.5	1.5

Chemical Recommendations – Cold Pad-Batch dyeing

BODACTIVE ELF

Alkali Table		Substrate CO Bleached Liquor Ratio 1:08					
BODACTIVE ELF (g/l)	< 10	>10-20	>20-30	>30-40	>40-50	>50-60	>60-70
Sodium Silicate (ml/l) 37°-40° Bé (69°-77° Tw)	70	70	70	70	70	70	70
Caustic Soda (ml/l) 36° Bé (66° Tw)	4	6	8	10	12	14	16
Sodium Silicate (ml/l) 40°-43° Bé (77°-85° Tw)	60	60	60	60	60	60	60
Caustic Soda (ml/l) 36° Bé (66° Tw)	5	7	9	11	13	15	17
Sodium Silicate (ml/l) 48°-50° Bé (100°-106° Tw)	50	50	50	50	50	50	50
Caustic Soda (ml/l) 36° Bé (66° Tw)	-	0.5	2	4	6	8	10