



Bodal Chemicals Ltd.
COLOURS. INTEGRATION. INNOVATION.

Bodactive A New Definition of Dyeing

BODACTIVE C RANGE



Common Still **UNIQUE**



Bodal Chemicals Ltd.®

BODACTIVE C RANGE (VS DYES)

	STD Depth 1/1	2.0%	4.0%	General Properties				
				Solubility g/l	Fixation Temperature (Exhaust Dyeing)	Dischargeability	Suitability For Process	
				30°C			Exhaust	CPB
				Water				
Bodactive Yellow CG	4.50%			100	60°C	D	S	S
Bodactive Yellow CGR	1.15%			100	60°C	D	S	S
Bodactive Yellow CRN H/C	1.20%			100	60°C	D	S	S
Bodactive Golden Yellow CR	0.90%			100	60°C	D	S	S
Bodactive Orange C2R	1.85%			100	60°C	ND	S	NS
Bodactive Orange C3R	2.00%			80	60°C	D	S	NS
Bodactive Red C5B	3.10%			100	60°C	D	NS	S
Bodactive Red CRBL	1.50%			80	60°C	ND	S	NS
Bodactive Red CRB (New)	1.70%			100	60°C	ND	S	S
Bodactive Red CBS	1.60%			100	60°C	ND	S	S
Bodactive Violet C5R	2.20%			100	60°C	ND	S	S
Bodactive Turquoise Blue CG	2.90%			100	80°C	ND	S	S
Bodactive Turquoise Blue C2GP	2.10%			100	80°C	ND	S	S
Bodactive Blue CR	2.10%			100	60°C	ND	S	NS
Bodactive Blue CBB	2.30%			100	60°C	D	S	S
Bodactive Blue C3R	3.00%			100	60°C	ND	S	NS
Bodactive Navy BG-I	4.00%			100	60°C	D	S	S

Fastness Properties

Light			Washing				Water		Perspiration				Chlori nated water	Rubbing		Hot Pressing		
									ISO-105-E04							ISO-105-X11		
ISO-105-B02			ISO-105-C03		ISO-105-C04		ISO-105-E01		Acidic		Alkaline			ISO-105 -E03	ISO-105-X12		Dry	
																	Effect	
1/25	1/1	2/1	Effect	Stain	Effect	Stain	Effect	Stain	Effect	Stain	Effect	Stain	20 mg/l Cl2	Dry	Wet	Immedi ately	After 4 Hours	
4	5	5	4-5	4-5	4-5	4	4	3-4	4-5	4-5	4-5	4-5	1	5	4-5	4-5	5	
4-5	5	5	4-5	4-5	4-5	4-5	4	4	4-5	4-5	5	4-5	1-2	5	4-5	4-5R	5	
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3	3-4	4	4	4-5	4	3-4	4	4-5	4-5	4-5	4-5	4-5	3-4	4-5R	3-4	4-5R	4-5	



Bodal Chemicals Ltd.®

BODACTIVE C RANGE (VS DYES)

	STD Depth 1/1	2.0%	4.0%	General Properties				
				Solubility g/l	Fixation Temperature (Exhaust Dyeing)	Dischargeability	Suitability For Process	
				30°C			Exhaust	CPB
				Water				
Bodactive Navy NB	3.30%			100	60°C	D	S	S
Bodactive Black CB 133%*	4.00%			100	60°C	D	S	S
Bodactive Black CB 150%*	3.50%			100	60°C	D	S	S
Bodactive Black CF-NC *	3.30%			200	60°C	D	S	S
Bodactive Black CRL*	4.00%			100	60°C	ND	S	S
Bodactive Black NN *	4.00%			150	60°C	D	S	S
Bodactive Black CNN*	3.00%			150	60°C	D	S	S
Bodactive Black CGS *	3.50%			100	60°C	D	S	S
Bodactive Black CJ*	3.20%			150	60°C	D	S	S
Bodactive Black CXL*	2.70%			150	60°C	D	S	S
Bodactive Black CJN *	3.00%			100	60°C	D	S	S
Bodactive Black CGDN *	2.70%			150	60°C	D	S	S
Bodactive Black PGR*	2.50%			150	60°C	D	S	S
Bodactive Black NNX*	3.00%			150	60°C	D	S	S
Bodactive Supra Black BNC *	2.50%			200	60°C	D	S	S
Bodactive Black NG*	2.50%			200	60°C	D	S	S
Bodactive Black NR*	2.50%			200	60°C	D	S	S

*Shades are in 4% & 8%

[illegible]



Bodal Chemicals Ltd.®

BODACTIVE C RANGE
(BR and GB Series)

Bodal Chemicals Ltd.® BODACTIVE C RANGE (BR and GB Series)	STD Depth 1/1	2.0%	4.0%	General Properties				
				Solubility g/l	Fixation Temperature (Exhaust Dyeing)	Dischargeability	Suitability For Process	
				30°C			Exhaust	CPB
				Water				
Bodactive Yellow BR	2.10%			100	60°C	D	S	NS
Bodactive Red BR	2.00%			100	60°C	ND	S	NS
Bodactive Blue BR	2.00%			100	60°C	ND	S	NS
Bodactive Yellow GB	1.60%			100	60°C	ND	S	S
Bodactive Orange GB	1.70%			100	60°C	ND	S	S
Bodactive Red GB	2.00%			100	60°C	ND	S	S
Bodactive Blue GB	1.40%			100	60°C	ND	S	S
Bodactive Grey GB	1.60%			100	60°C	ND	S	S
Bodactive Navy GB	4.00%			100	60°C	D	S	S
Bodactive Deep Black GB	2.50%			100	60°C	D	S	S
Bodactive Yellow CF-RGB	1.50%			100	60°C	ND	S	S
Bodactive Ultra Carmine RGB	1.80%			100	60°C	D	S	S
BODACTIVE C RANGE (BI-FUNCTIONAL DYES)								
Bodactive Yellow C4GL	1.20%			100	60°C	ND	S	NS
Bodactive Yellow C	1.35%			130	60°C	ND	S	S
Bodactive Yellow CF-S3R	1.20%			130	60°C	ND	S	S
Bodactive Yellow CW	0.90%			100	60°C	ND	S	S
Bodactive Yellow CF-3G	0.90%			100	60°C	ND	S	S
Bodactive Orange C2RL	1.55%			40	60°C	ND	S	NS

Fastness Properties

Light			Washing				Water		Perspiration				Chlorinated water	Rubbing		Hot Pressing	
									ISO-105-E04							ISO-105-X11	
ISO-105-B02			ISO-105-C03		ISO-105-C04		ISO-105-E01		Acidic		Alkaline		ISO-105-E03 20 mg/l Cl2	ISO-105-X12		Dry	
																Effect	
1/25	1/1	2/1	Effect	Stain	Effect	Stain	Effect	Stain	Effect	Stain	Effect	Stain		Dry	Wet	Immediately	After 4 Hours
3-4	4	4-5	4-5	4-5	4-5	3-4	4-5	4-5	4-5	4-5	4-5	4-5	3-4	4-5	3-4	4R	4-5
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5	5-6	6	4	3-4	4	3	4	3-4	4	4	4	4	4	4	3-4	4R	4-5
3	3-4	4	4-5	4-5	4	4	4	4	3-4	4	4	4	3-4	4-5	3-4	3R	3-4R



Bodal Chemicals Ltd.

BODACTIVE C RANGE
(BI-FUNCTIONAL DYES)

STD
Depth
1/1

2.0%

4.0%

General Properties

Solubility g/l

30°C

Water

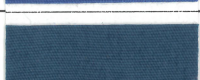
Fixation Temperature
(Exhaust Dyeing)

Dischargeability

Suitability
For
Process

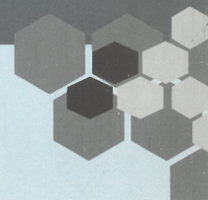
Exhaust

CPB

Bodactive Orange BNC-RL	1.10%			60	60°C	ND	S	S
Bodactive Red C2B	2.40%			50	60°C	ND	S	NS
Bodactive Red C	2.10%			150	60°C	ND	S	S
Bodactive Red C H/C	1.90%			150	60°C	ND	S	S
Bodactive Red CF-6B	1.80%			100	60°C	ND	S	S
Bodactive Red P3BR	1.10%			100	60°C	ND	S	S
Bodactive Red BXL	1.20%			100	60°C	ND	S	S
Bodactive Deep Red CF-2B	0.90%			150	60°C	ND	S	S
Bodactive Red CF-G	0.95%			200	60°C	D	S	S
Bodactive Sea Blue CG	2.40%			200	60°C	ND	S	S
Bodactive Navy Blue C2RL	1.90%			70	60°C	ND	S	NS
Bodactive Navy C	1.65%			100	60°C	ND	S	NS
Bodactive Yellow BB-2D	1.10%			100	60°C	D	S	S
Bodactive Red BB-2D	1.45%			100	60°C	ND	S	NS
Bodactive Navy BB-2D	4.5%			100	60°C	D	S	S
Bodactive Yellow CF-RSFL	1.20%			100	60°C	ND	S	NS
Bodactive Red CF-RSFL	1.60%			150	60°C	ND	S	S
Bodactive Blue CF-RSFL	2.00%			110	60°C	ND	S	S

Fastness Properties

Light			Washing				Water		Perspiration				Chlorinated water	Rubbing		Hot Pressing	
									ISO-105-E04							ISO-105-X11	
ISO-105-B02			ISO-105-C03		ISO-105-C04		ISO-105-E01		Acidic		Alkaline		ISO-105-E03	ISO-105-X12		Dry	
																Effect	
													1/25	1/1	2/1	Effect	Stain
3	4	4	4-5	4-5	4	4	4	4	4	4-5	4	4-5	3R	4-5	4	4R	4-5
3	4	4	4-5	4-5	4	4	4	4	4	4-5	4	4	3-4	4-5	3-4	3-4BL	4-5
3-4	4	4	4	4-5	4	4	4-5	4-5	4	4	4	4-5	4	4-5	3-4	3BL	4-5BL
3-4	4	4	4	4-5	4	4	4-5	4-5	4	4	4	4-5	4	4-5	3-4	3BL	4-5BL
3-4	4	4-5	4	4-5	4	4	4	4	4-5	4-5	4	4	4	4-5	4	3	4-5
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4	5	5	4	4	4	4	4	4	4	4	4	4	3-4	4-5	3-4	4R	4R
3	4	4	4	4	4	3-4	4	4	4	3-4	4	3-4	4	4	3-4	3BL	4-5
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4	4-5	5	4	4	4	3-4	4	4	4	3-4	4	3-4	4	4	3	4	5



- Dyeing at 60°C
- Wide range of shades
- Low energy dyeing range
- Very cost effective range
- Suitable for exhaust dyeing, cold pad batch & printing

Quantity of Glauber's Salt

%Shade	Glauber's Salt Anhyd.(gpl)
Upto 0.10	10
0.11-0.5	20
0.51-1.0	30
1.01-2.0	50
2.01-4.00	60
Above 4.00	70

Quantity of Alkali

%Shade System	Soda Ash (gpl)	Mixed Alkali System	
		Caustic (70°Tw) ml/l	Soda Ash (gpl)
<0.5	10.0	0.2	5.0
0.5-1.0	15.0	0.5-1.0	5.0
1.0-3.0	20.0	1.0-1.50	5.0
3.0-5.0	20.0	1.50-2.0	5.0
>5.00	20.0	2.0	5.0

Recommended Bodax Auxiliaries

Dyebath Auxiliaries in Exhaust Method

Name of products	Product description	Dosage
Bodax PFE	Dyebath conditioner and iron chelator	0.25 to 0.5 gpl
Bodax VDBC	Specially high temperature stable conditioner cum sequestrant	0.25 to 0.5 gpl
Bodax DRDL	Economical Levelling agent	0.5 to 0.75 gpl
Wash-off Agent		
Bodax DXCW	Universal after soaping agent for the removal of hydrolysed Reactive dyes or unfixed Direct dyes	0.5 - 1.0 gpl
Dye fixing Agent		
Bodax DNF	Economical non-formaldehyde dye fixing agent	0.5 to 1.0 gpl
CPB method		
Wetting Agent		
Bodax VNF	Wetting cum deaerating agent for continuous and semi-continuous process	0.25 to 0.5 gpl

Key to Abbreviations

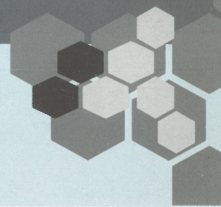
The following abbreviations have been used:

BL = bluer	W = weaker
D = duller	D = dischargeable
Y = yellower	ND = non dischargeable
G = greener	S = suitable
R = redder	NS = not suitable

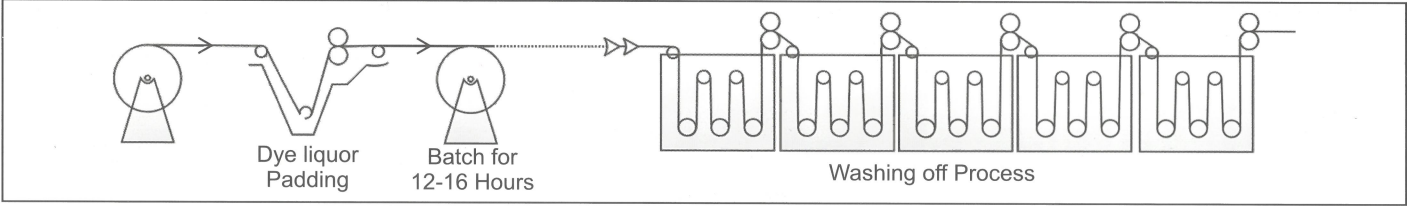
Lab to Bulk Reproducibility

Lab check points

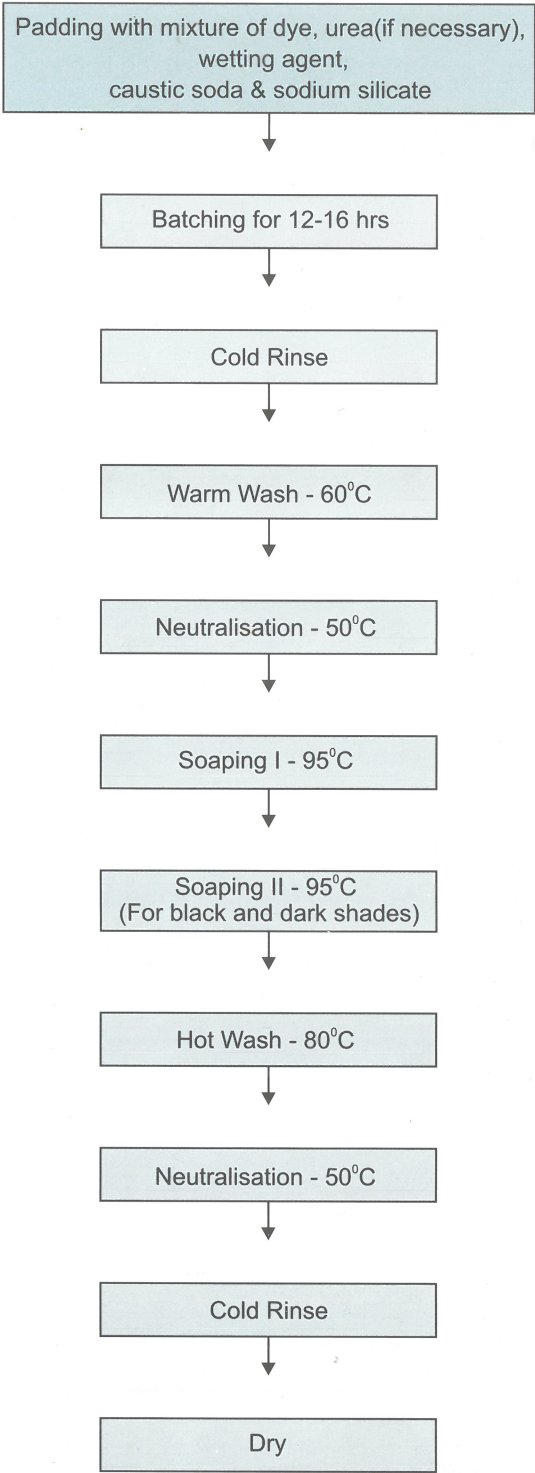
- Fabric quality used in lab should be same as that used in bulk.
- Dye solution to be prepared as per standard method. Use dilute solution for pastel shades.
- Weight fabric with least error (± 0.005).
- Quality of salt & soda should be same as used in bulk.
- Preferable to use salt & soda in solution form.
- Check pH of water, fabric & pH during fixation. fabric pH should be around 6-6.5. water should be soft & pH of water should be around 6.5-7.0. pH after adding soda ash should be within 10.8-11.2.
- Consider scouring loss & water uptake of fabric during wetting.
- Wash off in lab to be correlated to bulk. the better the results if hot wash given initially after dyeing.
- For coloured solution upper meniscus of pipette to be considered & for transparent solution lower meniscus to be considered while pipetting.
- Dyeing method should be nearly same as that followed in bulk.



Cold Pad Batch Dyeing Process



Process Sequence

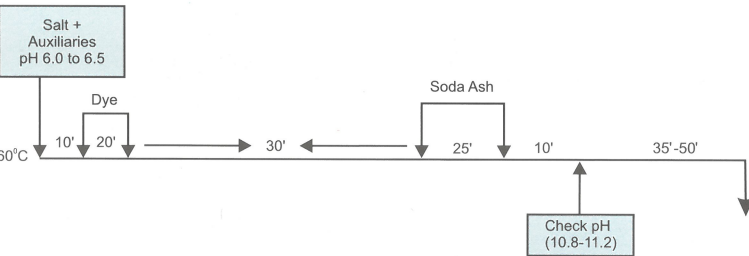


Sodium Silicate, Caustic Soda & Urea Requirement

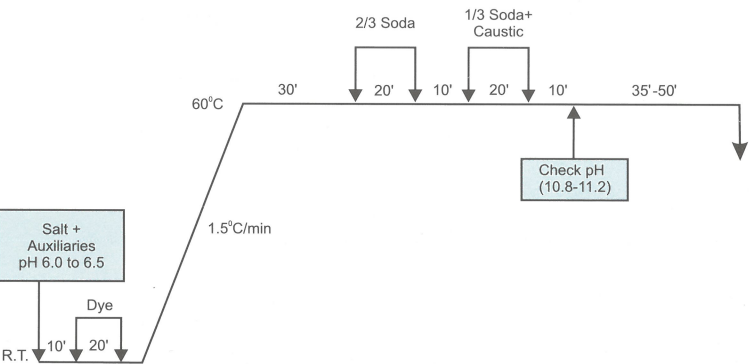
Dye g/l	Upto 20 g/l	Upto 30 g/l	Upto 40 g/l	Upto 50 g/l	Upto 60 g/l	Upto 70-100 g/l
Urea g/l	-	-	-	50	50	50
Caustic Soda (ml/l) (32.5% / 72°Tw)	15	20	20	25	25	30
Sodium Silicate (ml/l) (100-106°Tw)	65	65	65	65	65	65

Exhaust Dyeing

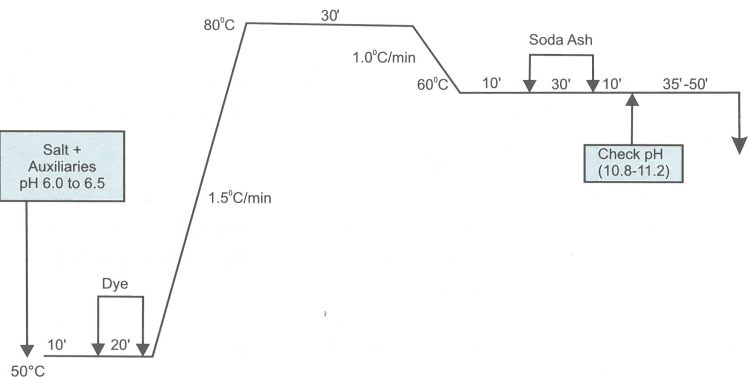
Salt at Start Standard Method-Isothermal.



Salt at Start Standard Method-Temperature Rise



Salt at Start Standard Method-Migration Method





Bodal Chemicals Ltd.

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