



Bodal Chemicals Ltd.

BNC A NEW DEFINITION OF COLOUR

**BODACTIVE BNC & BNC SPECIAL RANGE
REACTIVE DYES**



Bodal Chemicals Ltd.

Plot No. 123-124, Phase - 1, G.I.D.C.,
Vatva, Ahmedabad- 382 445. Gujarat, India.
Tel : +91-79-2583 5437, 2583 4223, 2583 1684
Fax : +91-79-2583 5245, 2583 6052

E-mail : Dyestuff Division : bodal@bodal.com
Dye Intermediates Division : export@bodal.com
Other Chemicals Division : ankitpatel@bodal.com
Technical Support : techbodal@bodal.com

Dyestuff Division

Nainan Mehta Hardik Shah
Mobile : +91 99254 55544 Mobile : +91 99254 88688

Dipak Shah
Mobile : +91 98250 35271

www.bodal.com

EXCELLENT STRENGTH AND ECONOMICAL

BODACTIVE BNC RANGE					General Properties								
					Solubility g/l			Fixation Temperature (Exhaust Dyeing)					
					30°C		60°C						
					Water	Water	50 g/l Salt						
Exhaust Dyeing		Pad-Batch											
0.5 %		2 %		4 %		20 g/l							
Bodactive Yellow BNC-GL					NS	100	120	50	60°C				
Bodactive Yellow BNC-G						100	100	80	60°C				
Bodactive Yellow BNC-GR						100	100	80	60°C				
Bodactive Yellow BNC-RN						100	100	50	60°C				
Bodactive Yellow BNC						180	200	100	60°C				
Bodactive Orange BNC-RL					NS	60	60	20	60°C				
Bodactive Orange BNC-3R						100	120	50	60°C				
Bodactive Crimson BNC						100	100	50	60°C				
Bodactive Red BNC-RB						100	100	60	60°C				
Bodactive Red BNC						200	200	100	60°C				
Bodactive Red BNC-BS						200	200	100	60°C				

NANO TECHNOLOGY

															Fastness Properties										
Effect of metals		Suitability for process		Dischargeability	Light				Washing				Perspiration		Chlorinated Water	Rubbing		Mercerising		Hot Pressing					
					ISO BO2			CO3	CO4		C4A		EO4			20 mg/l Cl ₂ EO3	Dry	Wet	Effect	Stain	Immediately	After 4 hours			
					1/25	1/1	2/1		Effect	Stain	Effect	Stain	Effect	Stain									Acidic	Alkaline	
Copper	Iron	Exhaust	CPB																						
4-5	4-5	S	NS	ND	4-5	5	5-6	4-5	4-5	4-5	4-5	4-5	4	4-5	4	4-5	3	4-5	4	4R	4-5	4-5	4-5		
4-5 RD	4-5 G	MS	S	D	4	5	5	4-5	4-5	4-5	4	4-5	4-5	4-5	4-5	4-5	1	5	4-5	1 GW	4	4-5	5		
4-5 GD	4-5 R	S	S	D	4-5	5	5	4-5	4-5	4-5	4-5	4-5	4-5	4-5	4-5	5	4-5	1-2	5	4-5	4 G	3-4	4-5 R	5	
4 R	4 R	NS	S	D	4-5	5	5-6	5	5	4	4-5	4-5	4-5	5	4-5	5	4-5	2-3	4-5	4-5	4	3-4	4-5	4-5	
4 BLD	4-5	S	S	ND	5-6	6	6-7	4-5	4-5	4	4	4-5	4-5	4-5	4-5	4-5	4-5	4-5	4-5	4-5	4-5	4-5	4-5	4-5	
4	4	S	NS	ND	3	4-5	4-5	4-5	4-5	4	4	4	4	3-4	4	4	4-5	3-4	4-5	3-4	4-5	3 R	3-4 R		
4-5	4-5	S	S	D	5	5-6	5-6	4-5	4-5	4	4	4	4	4-5	4-5	4-5	4-5	4	4	4	3-4	4	3-4 G	4-5	
4	4	S	S	ND	3-4	4-5	4-5	4-5	4-5	4	4	4	4	3-4	4	4	4-5	4	4-5	3-4	4-5	3 R	3-4 R		
4-5 B	4 B	S	S	ND	4	4-5	4-5	5	5	5	4-5	4-5	4-5	4-5	4-5	4-5	4-5	2-3	4-5	4	4	4	4	4-5	4-5
2-3 BL	4-5	S	S	ND	3-4	4	4	4	4-5	4	4	4-5	4-5	3-4	4	4	4-5	4	4-5	3-4	4-5	3-4	3 BLD	4-5 BL	
2-3	4	S	S	ND	3-4	4	4	4	4-5	4	4	4-5	4-5	4	4	4	4-5	3-4	4	3-4	4	3-4	3 BL	4 BL	

BODACTIVE BNC RANGE					General Properties			
					Solubility g/l			Fixation Temperature (Exhaust Dyeing)
					30°C	60°C	50 g/l Salt	
					Water	Water		Water
Exhaust Dyeing		Pad-Batch						
0.5 %	2 %	4 %	20 g/l					
Bodactive Turquoise BNC					100	100	80	60°C 80°C
Bodactive Brilliant Blue BNC-R Special					200	200	60	60°C
Bodactive Brilliant Blue BNC-R					100	100	50	60°C
Bodactive Blue BNC					100	100	50	60°C
Bodactive Blue BNC-LF					100	120	50	60°C
Bodactive Navy Blue BNC-2G					100	125	100	60°C
Bodactive Navy Blue BNC-GB					200	200	100	60°C
Bodactive Navy BNC					200	200	150	60°C
Bodactive Black BNC					200	200	100	60°C
Bodactive Deep Black BNC					100	100	50	60°C

NS

NANO TECHNOLOGY

Black shades are in 2.0 %, 4.0 %, 8.0 % & CPB in 50 gm/lit.

Fastness Properties																								
Effect of metals		Suitability for process		Dischargeability	Light			Washing				Perspiration				Chlorinated Water 20 mg/l Cl ₂ EO3	Rubbing		Mercersing		Hot Pressing			
Copper	Iron	Exhaust	CPB		ISO B02			CO3		CO4		C4A		EO4			Dry	Wet	Effect	Stain	Immediately	After 4 hours		
					1/25	1/1	2/1	Effect	Stain	Effect	Stain	Effect	Stain	Effect	Stain								Acidic	Alkaline
4 R	4 G	S	S	ND	4-5	5	6	4-5	4	4	3	4-5	3	4-5	4-5	4-5	4-5	4	4	3-4	1 G	3	4-5 Y	4-5
4-5	4-5	S	S	D	6	6-7	7	5	5	4	3-4	4	4	4-5	4-5	4-5	4-5	4	4-5	4	3 R	3	3-4 R	4
4-5	4-5	S	NS	D	6	6-7	7	5	5	4	3-4	4	4	4-5	4-5	4-5	4-5	4	4-5	4	3 R	3	3-4 R	4
4-5	4-5	S	S	D	5	5-6	6	4-5	5	4-5	4-5	4-5	4-5	3-4 G	5	4-5	5	4-5	4-5	4	4 R	4-5	4-5	4-5
4 G	4 G	S	S	ND	4-6	5-6	6	4-5	3	4	3	4-5	2-3	4-5	4-5	4-5	4-5	3	4-5	4	3 R	4	4-5	4-5
2 R	4	S	S	D	4	4-5	4-5	5	4-5	4-5	4	4-5	4-5	4-5	4	5	4	3-4 G	4	3-4	3-4	3-4	4-5	4-5
1 R	4-5	S	S	D	3	3-4	4	4	4-5	4	3-4	4-5	4-5	4-5	4-5	4-5	4-5	3-4	4-5 R	3-4	4-5 R	3-4	4-5 R	4-5
1-2 WG	4-5 G	S	S	ND	3-4	3-4	4	4-5	4-5	4	4-5	4-5	4-5	4	4	4	4	4	4-5	4	4 R	4-5	4-5 R	4-5
3 R	4	S	S	D	-	3-4	5	4-5	5	4	4-5	4-5	4-5	5	4	4-5	4	2-3	4-5	3-4	4 R	2-3	4 R	5
3-4	4	S	S	D	-	3-4	5	4-5	5	4	4-5	4-5	4-5	4-5	4	4-5	4	2-3	4-5	3-4	4	3	4	4-5

BODACTIVE BNC SPECIAL

Bodactive BNC Special is a range of excellent high strength with different chromophore of Reactive dyes. Special range for all types of shades, compatible with Bodactive BNC range.

BODACTIVE BNC SPECIAL RANGE					General Properties							
					Solubility g/l			Fixation Temperature (Exhaust Dyeing)				
					30°C		60°C					
					Water	Water	50 g/l Salt					
Exhaust Dyeing		Pad-Batch										
0.5 %		2 %		4 %		20 g/l						
Bodactive Yellow BNC-R Special					150	200	100	60°C				
Bodactive Yellow Brown BNC Special					100	100	50g	60°C	NS			
Bodactive Scarlet BNC Special					80	80	40	60°C				
Bodactive Deep Red BNC Special					200	200	100	60°C				
Bodactive Carmine BNC Special					100	200	100	60°C				
Bodactive Marine BNC Special					80	80	50	60°C				
Bodactive Dark Blue BNC Special					200	200	100	60°C				
Bodactive Navy Blue BNC Special					200	200	100	60°C				
Bodactive Super Black BNC-Special					200	200	100	60°C				
Bodactive Jet Black BNC-Special					200	200	100	60°C				

Black shades are in 2.0 %, 4.0 %, 8.0 % & CPB in 50 gm/lit.

NANO TECHNOLOGY DIFFERENT CHROMOPHORE

Fastness Properties																											
Effect of metals		Suitability for process		Dischargeability	Light			Washing				Perspiration				Chlorinated Water 20 mg/l Cl ₂ EO3	Rubbing		Mercerising		Hot Pressing						
Copper	Iron	Exhaust	CPB		ISO BO2			CO3	CO4	C4A	EO4				Dry		Wet	Effect	Stain	Immediately	After 4 hours						
					1/25	1/1	2/1				Effect	Stain	Effect	Stain								Effect	Stain	Acidic	Alkaline		
4 BLD	4-5	S	S	ND	5	5-6	6	4-5	4-5	4	4-5	4	4-5	4-5	4-5	4-5	4	4-5	4-5	4	3-4	4	4	R	R		
4	4	S	S	D	3-4	4	4-5	4	4-5	4	4	4	4	4	4	4	4	4	4-5	3-4	4	3-4	3-4	4	4	R	R
4	4	S	LS	ND	3-4	4-5	4-5	4-5	4-5	4	4	4	4	3-4	4	4	4-5	4	4-5	4	3-4	3-4	4-5	3	3-4	R	R
2-3 BL	4-5 BL	S	S	ND	3-4	4	4-5	4	4-5	4	4	4-5	4-5	3-4	4	4	4-5	4	4-5	4	3-4	4	4	3	3-4	BL	4-5
3 BL	4-5	S	S	ND	3-4	4	4-5	4	4-5	4	4	4-5	4-5	3-4	4	4	4-5	4	4-5	4	4	4	4	4	4	4	4
4-5	4-5	S	S	ND	5	5-6	6	4-5	4-5	4-5	4-5	4-5	4-5	3-4	4-5	4-5	4-5	4	4-5	4	4	4	4	4-5	4-5	4-5	4-5
1-2 W	4 G	S	S	ND	-	4	4-5	4-5	4-5	4	4-5	4-5	4-5	4	4-5	4	4-5	4	4-5	3-4	4	4	4	4-5	4-5	4-5	4-5
3	4	S	S	D	-	3-4	5	4-5	5	4	4-5	4-5	4-5	5	4	4-5	4	2-3	4-5	3-4	3-4	2-3	4	3	4	4-5	
3-4	4	S	S	D	-	3-4	4-5	4	4-5	4-5	4-5	4-5	4-5	4-5	4-5	4-5	4-5	2-3	4	3-4	4	3	4	4	5		
3-4	4	S	S	D	-	3-4	4-5	4	4-5	4-5	4-5	4-5	4-5	4-5	4-5	4-5	4-5	2-3	4	3-4	4	3	4	4	5		

Dyes recommended for different application

BNC Range

LIGHT SHADE EXHAUST DYEING

BODACTIVE YELLOW BNC
 BODACTIVE ORANGE BNC-3R
 BODACTIVE RED BNC
 BODACTIVE BLUE BNC
 BODACTIVE NAVY BNC
 BODACTIVE BLUE BNC-LF

LIGHT SHADE PAD-BATCH

BODACTIVE YELLOW BNC-RN
 BODACTIVE ORANGE BNC-3R
 BODACTIVE RED BNC-RB
 BODACTIVE BLUE BNC
 BODACTIVE NAVY BNC

MEDIUM TO DARK SHADE EXHAUST DYEING

BODACTIVE YELLOW BNC
 BODACTIVE RED BNC
 BODACTIVE RED BNC-BS
 BODACTIVE NAVY BLUE BNC-GB
 BODACTIVE BLACK BNC

MEDIUM TO DARK SHADE PAD BATCH

BODACTIVE YELLOW BNC-RN
 BODACTIVE RED BNC
 BODACTIVE RED BNC-BS
 BODACTIVE BLUE BNC-2G
 BODACTIVE NAVY BLUE BNC-GB

LIGHT SHADES WITH HIGH LIGHT FASTNESS

BODACTIVE YELLOW BNC
 BODACTIVE YELLOW BNC-RN
 BODACTIVE ORANGE BNC-3R
 BODACTIVE RED BNC
 BODACTIVE BLUE BNC
 BODACTIVE CRIMSON BNC
 BODACTIVE BLUE BNC-LF

BNC Special Range

LIGHT SHADE

BODACTIVE YELLOW BNC-R SPECIAL
 BODACTIVE SCARLET BNC SPECIAL
 BODACTIVE MARINE BNC SPECIAL

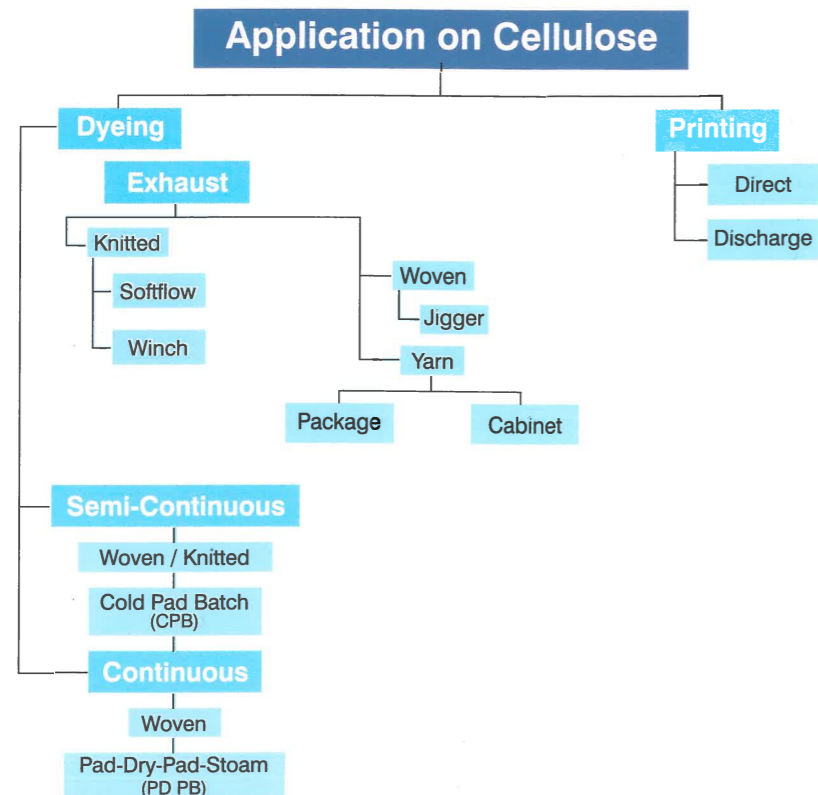
MEDIUM TO DARK SHADE

BODACTIVE YELLOW BROWN BNC SPECIAL
 BODACTIVE CARMINE BNC SPECIAL
 BODACTIVE NAVY BLUE BNC SPECIAL
 BODACTIVE DARK BLUE BNC SPECIAL

JET BLACK

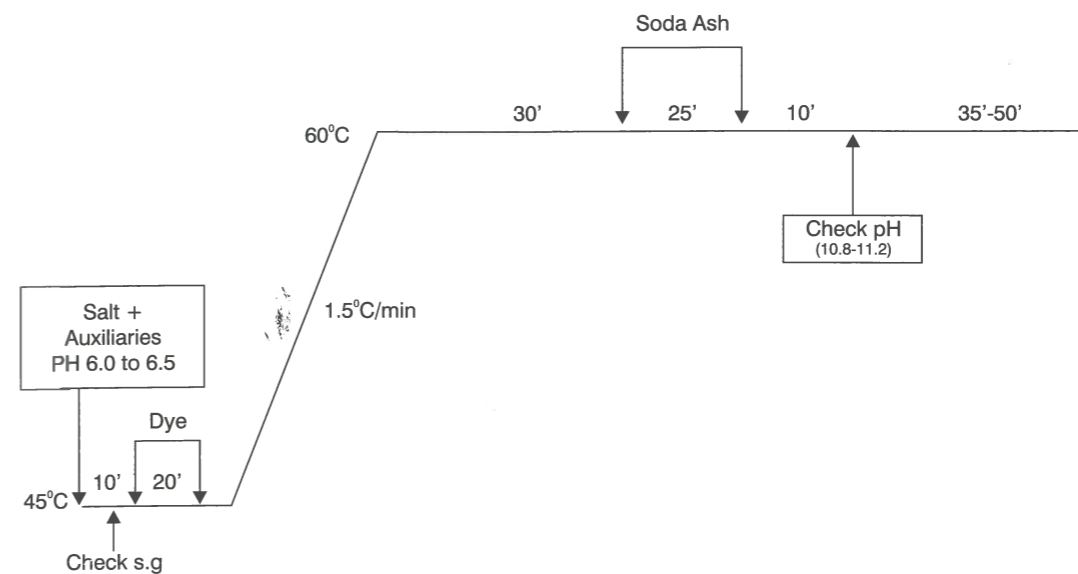
BODACTIVE SUPRA BLACK BNC SPECIAL
 BODACTIVE JET BLACK BNC SPECIAL

Bodactive BNC & BNC Special

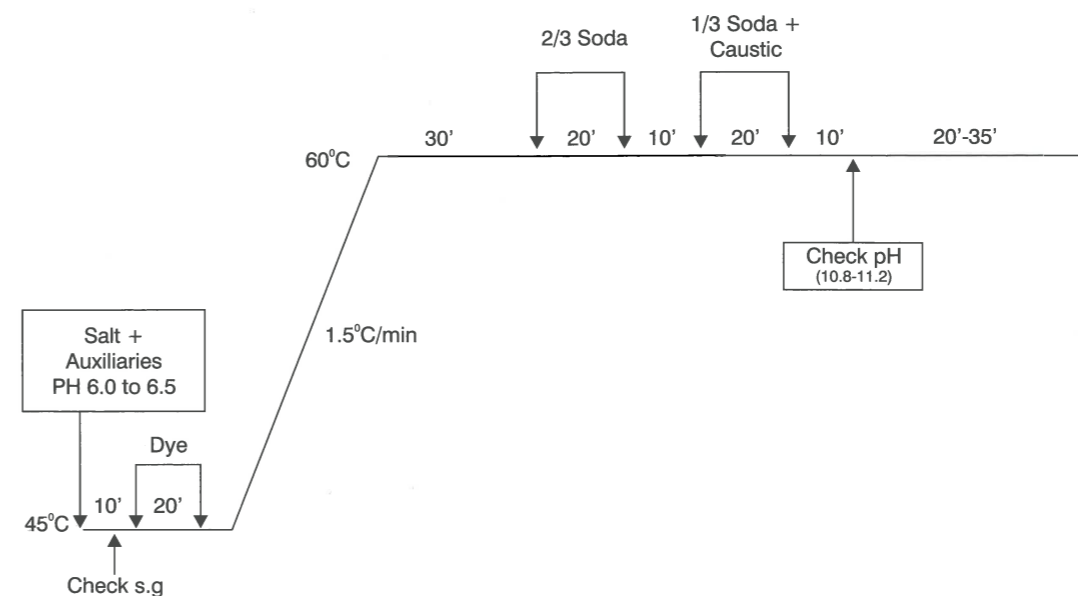


Exhaust Dyeing

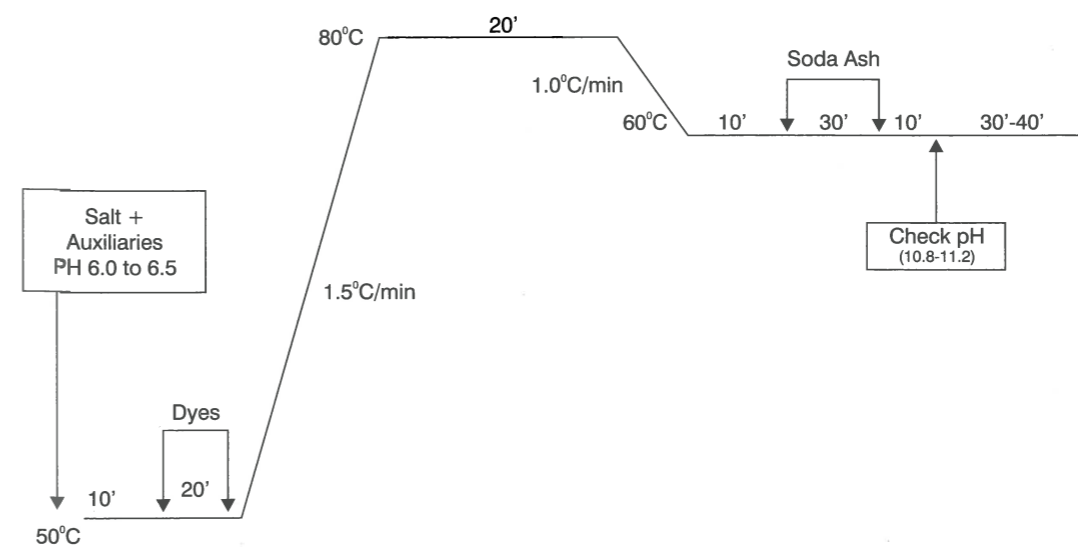
Salt at Start Standard Method-Isothermal



Salt at Start Standard Method-Isothermal



Salt at Start Standard Method-Migration



Features

BODACTIVE BNC & BODACTIVE BNC Special are range of novel nano technology of Reactive Dyestuffs developed to meet demands of high production with economy recipes. BODACTIVE BNC stands for high strength dyes with all types of hue. BODACTIVE BNC Special is our own development with special hue. Recommended for all type of shades including light shades and especially for medium to dark shades for cellulose fibers & fabrics for exhaust & semi continues dyeing. Compatible with BNC Dyes.

Excellent Range	Exhaust dyeing. Semi continuous Dyeing
High Productivity	Low energy consumption. Shorter dyeing cycle. High tentorial value. Excellent fixation profile. New chromosphere with high strength complete range. Very high solubility. Stable to acid hydrolysis.
Excellent Reproducibility	High exhaustion profile. Robust to process variables exhaust & semi continuos dyeing.
Excellent Level Dyeing	Low rate of strike. Superior migration properties.
Eco friendly	High fixation leaves less color residue in effluent. Easy wash off saves valuable water. Warm dyeing at 60°C consumes less energy.
Excellent Compatibility	Excellent compatibles with Bodactive BNC range and Bodactive BNC Special range. Uniform reproducibility & reliable fastness. Excellent for exhaust dyeing with versatile dyeing process. Very good for semi continues pad-batch method.

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	0.5	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
>5.0	20.0	2.0	5.0

Key to Abbreviations

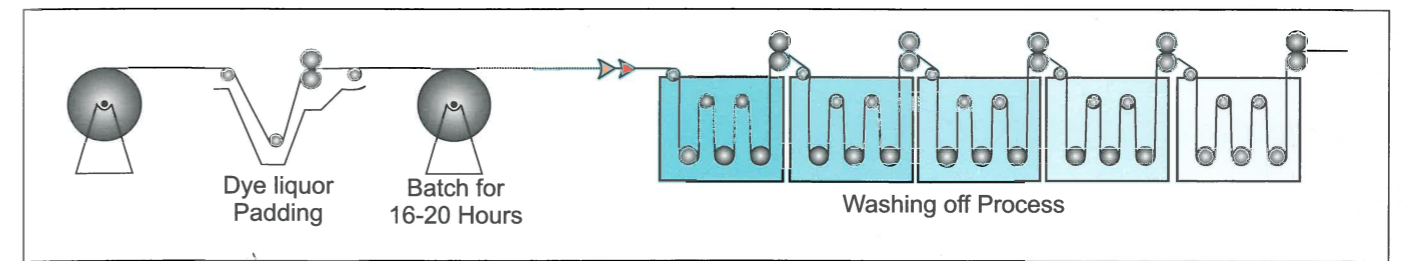
The following abbreviations have been used:

BL = bluer	D = dis-chargable
D = duller	ND = not dis-chargable
G = greener	S = suitable
R = redder	LS = less suitable
W = weaker	NS = not suitable

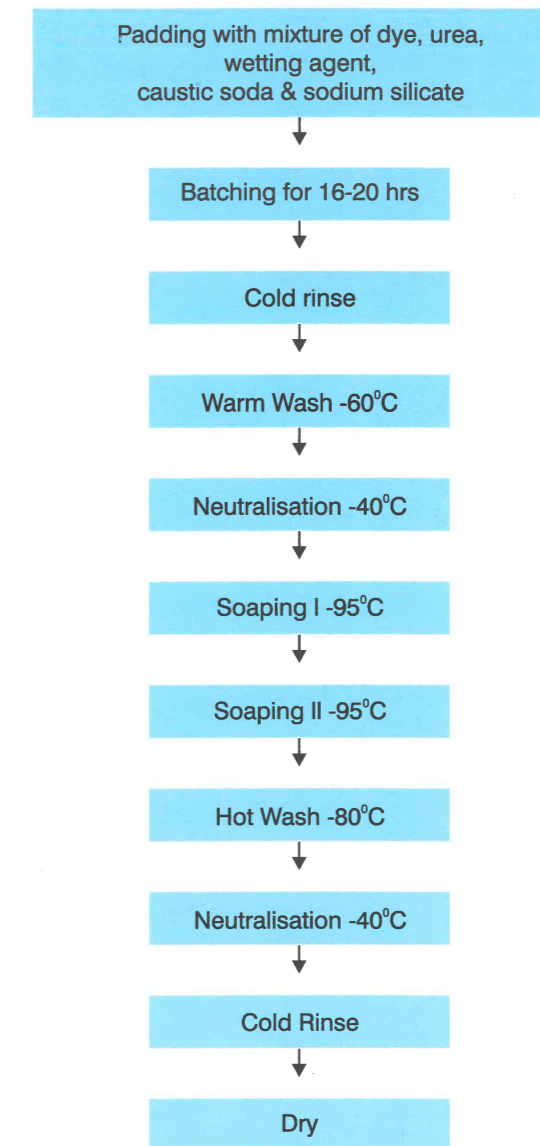
(The information in this shade card is given in good faith but without warranty. Freedom patent rights must not be assumed.)

Semi-continuous dyeing

Cold pad batch dyeing process



Process Sequence



Sodium Silicate, Alkali & 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	50	50	50
Caustic soda (32.5%) ml/lit/72° T.W	15	20	20	25	25	30
Sodium silicate (100-106° T.W) cc/lit.	65	65	65	65	65	65