



SAVVYFIX & SAVVYZOL REACTIVE DYES

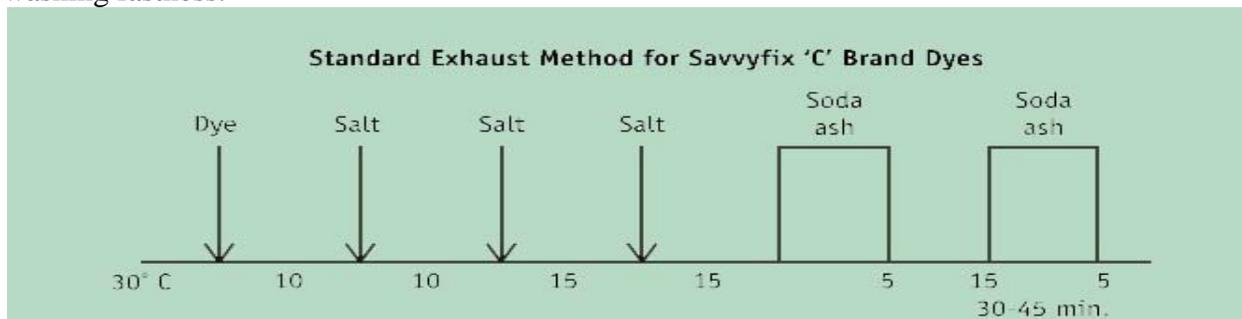
Savvy 'C', 'H' & 'PN' Brand Dyestuffs (Cyanuric Chloride based) are fibre reactive dyes which form a chemical linkage with hydroxyl groups of cellulose and thus give dyeings of very good fastness to wet treatments.

"C" Brands are applicable from cold bath while "H" & "PN" Brands are to be applied at temperature of about 80°C. Both these brands are suitable for dyeing and printing of cotton, viscose, cuprammonium rayon and natural silk.

Savvyzol Dyestuffs (Vinyl Sulphone based reactive dyes) are suitable for padding processes due to their high solubility even in presence of alkali. These dyes can also be used to all conventional exhaustion methods by addition of Glauber's/Common Salt and alkali.

Procedure for Dyeing with 'C' Brand Savvyfix Dyes :-

Receive cold water in the dye-bath (Recommended m/l ratio 1 to 15), add required quantity of common salt or glauber salt. Paste requisite Savvyfix 'C' brand dye with water and dissolve by adding water at 45° C to the same. Add dissolved dye to the dyebath. Enter material, at 30° C run for 15 to 20 minutes, squeeze, wash with water and soap at boil with 2 g/l soap, wash with water and dry. Soaping treatment is highly essential remove unfixed dye to produce dyeings of high washing fastness.

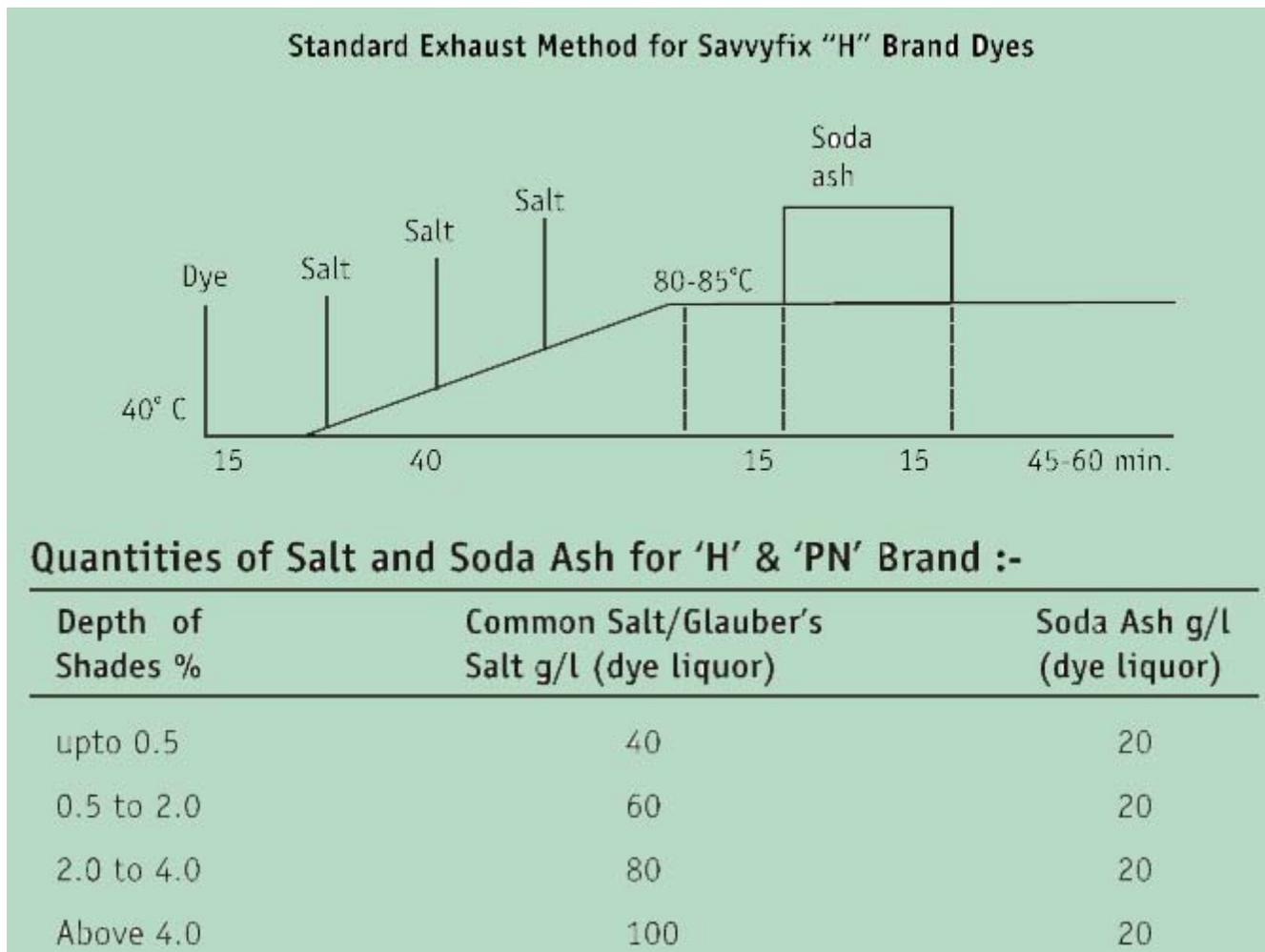


Quantities of Salt & Soda Ash for Savvyfix 'C' Brand :-

Depth of Shades %	Common Salt/Glauber's Salt g/l (dye liquor)	Soda Ash g/l (dye liquor)
upto 0.5	30	3
0.5 to 2.0	40	4
2.0 to 4.0	50	7
Above 4.0	60	10

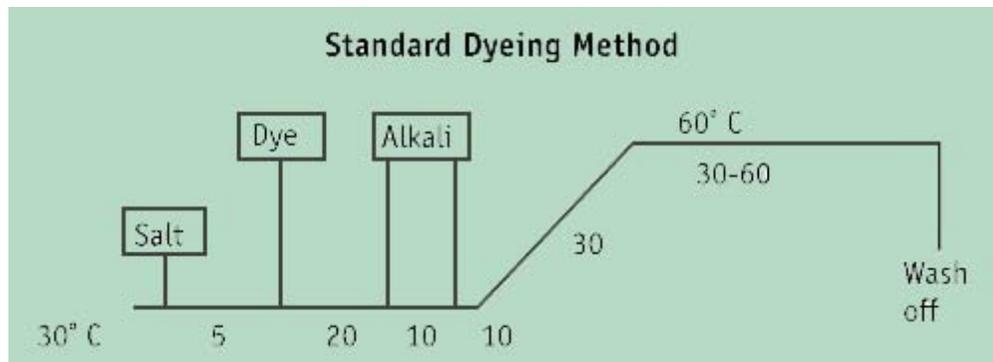
Procedure for Dyeing with 'H' & 'PN' Brand Savvyfix Dyes :-

Take requisite quantity of water in dye-bath (recommended m/l ratio 1 to 15) heat to 40°C, add common salt or Glauber's salt, soda ash and 1 g/l of resist salt. Paste 'H' & 'PN' brand colour with water and dissolve by adding water at 80°C. Add dissolved dye to dye-bath. Enter material, run at 40°C for 15 minutes. Raise temperature slowly to 80°C in 40 minutes run at 80°C for 45 to 60 minutes. Squeeze, wash with water and soap at boil 2 g/l of soap for 10 minutes, wash and dry. Soaping is highly essential to produce dyeings of high wash fastness.



Procedure for Dyeing with Savvyzol Dyes :-

Take requisite quantity of dyes and salt in the dye bath at 30°C an alkalie are added afr 15-20 minutes. The bath is then heated to recommended dyeing temperature withi 20-30 minutes and goods are dyed for 60-90 minutes, depending upon the dyeing temperature.



Quantities of Salt and Alkali for Savvyzol dyes :-

Depth of Shades %	Glauber's Salt	Caustic Soda 72° Tw gms/l.	Soda Ash g/l
2	50	1	5
4	80	--	5-10

For Savvyzol Yellow FG and Black B the dyeing temperature is 40-60°C whereas for Turq. Blue G it is 80°C

Preparation of Printing Paste with Savvyflox 'H' & 'PN' Brand :-

Savvyflox 'H' & 'PN' Brand Dyestuff	10-50	Parts
Urea	100-150	Parts
Resist Salt	10	Parts
Water	400-365	Parts
Bicarbonate	20-25	Parts

Preparation of Printing Paste with Savvyzol Dyes by Steam Process :-

Savvyzol Dyestuff	10-40	Parts
Urea	4-10	Parts
Hot Water	100-200	Parts
Resist Salt	10	Parts
Sodium Bicarbonate	10-25	Parts

Finally made to 1000 parts with alginate thickening or emulsion thickening.

First, urea is dissolved in water at 80° to 85° then dyestuff is added, stirred to dissolve. Then resist salt and thickening is added, this is stirred to homogenous pasted. Before addition of alkali this is cooled to room temperature.

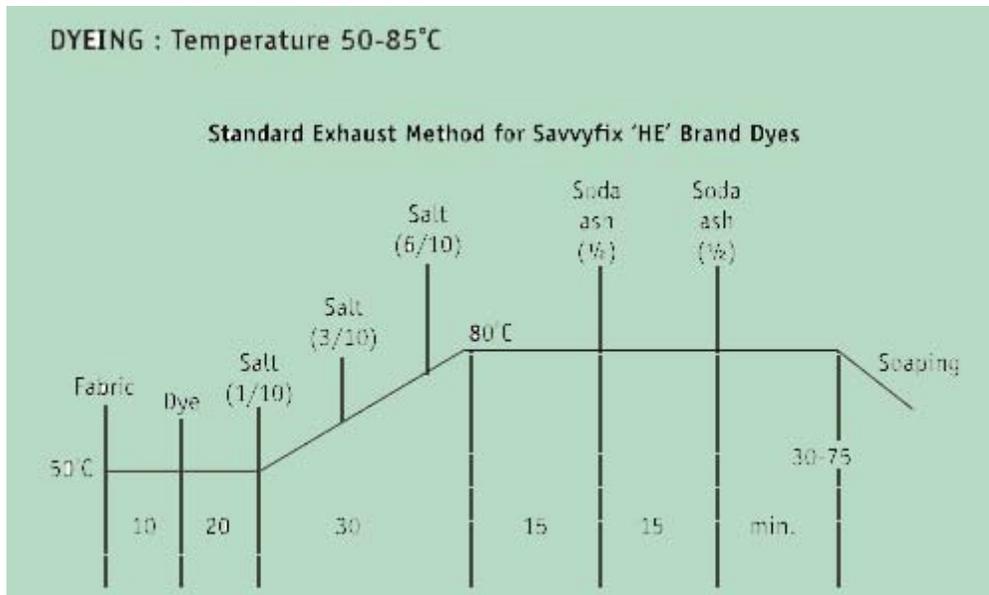
After printing good are dried, steamed for 15-20 minutes, washed, soaped at boil, washed and dried.

SAVVYFIX HE DYES :SAVVYFIX HE dyes are suitable for dyeing cotton and other cellulosic materials. These dyes possess significantly higher exhaustion and fixation efficiency which results in appreciable cost reduction, in comparison to conventional Reactive dyes. The high fixation and good build up are of particular importance when higher fixation of Savvyfix HE dyes, the dyes in comparison to conventional Reactive dyes. This facilitates quicker wash off and efficient soaping.

The improved stability of Savvyfix HE dyes give improved batch to batch consistency. Exhaustion of Savvyfix HE dyes can be controlled by salt addition and temperature to give level dyeing before alkali addition.

Advantage :

1. Excellent build up in high as well as low liquor ratios.
2. Not affected by wide variation in liquor ratios in dyeing yarn, loose stock, piece and hank, in package and beam dyeing machines, knitted and woven goods in the winch and woven piece goods on the jig.
3. High fixation and high tinctorial values hence economical in use.
4. Very good compatibility gives extensive range of shades based on few dyes and excellent reproducibility, consistent high yields and freedom and "listing" and "ending".
5. Though Savvyfix H/PN Brand dyes do not have the same exhaust and fixation properties as HE dyes, they can be used in mixtures with HE series.
6. Extremely suitable for dyeing single bath 2 step method, cellulosic part of polyester/cotton and polyester/viscose blends.



Quantity of Salt and Soda Ash for Savvyfix "HE" Brand Dyes :

Depth of Shades (o.w.f.)	Soda (g/l)	Soda Ash g/l
0 to 0.5	30	10
0.5 to 1.0	45	15
2.0 to 4.0	70	20
Above 4.0	90	20

Soaping after Exhaust Dyeing

1. Rinse cold water (10 - 20 min.)
2. Soaping at the boil (15 - 30 min.)
3. Rinse warm water (10 min.)

Printing :

450 gm Sodium Alginate thickening 50 : 1000

320 gm Water

200 gm Urea

10 gm Resist Salt

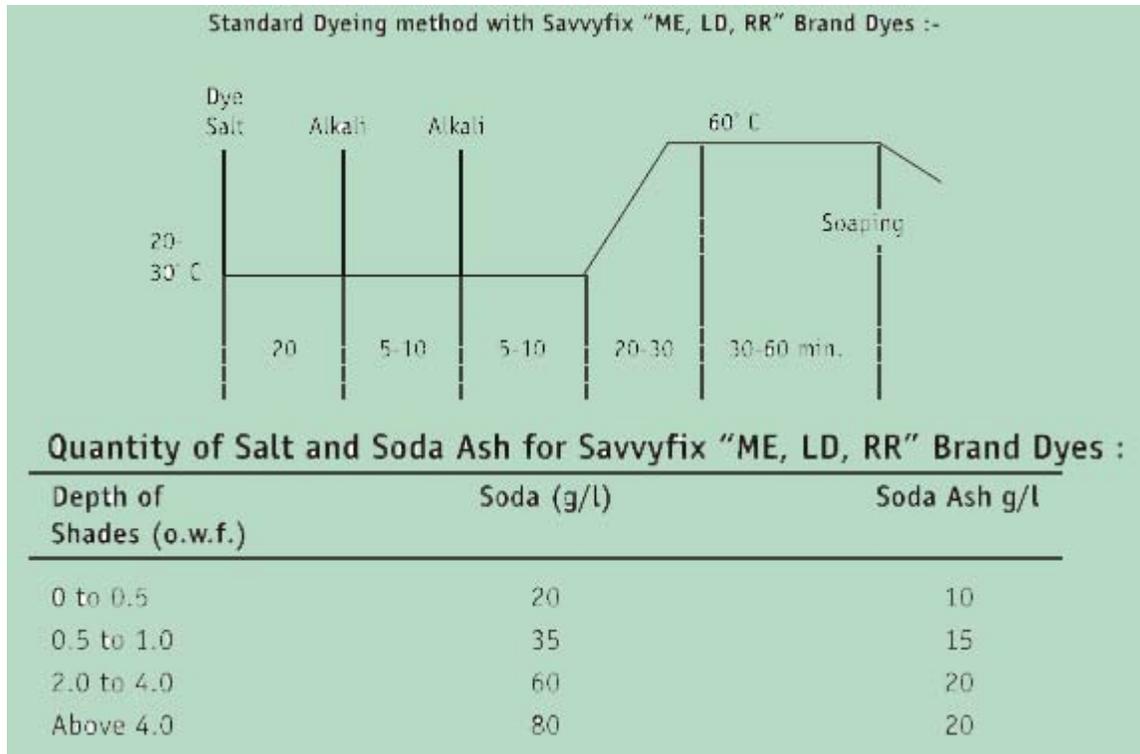
20 gm Sodium Bicarbonate

SAVVYFIX'ME, LD, RR' DYES:

1. Savvyfix ME dyes are low temperature high exhaust reactive dyes suitable for dyeing, padding and printing of all types of cellulosic material.
2. They are applied by exhaust dyeing methods at temperature 60-65° C.
3. They offer high grade of all round fastness properties.
4. They have an advantage of high degree of exhaustion and fixation rates.
5. They offer excellent levelling properties and excellent alkali stability.
6. They give highly reproducible dyeings because of better alkali stability and low sensitivity to temperature.

Procedure for Dyeing with Savvyfix "ME, LD, RR" Brand Dyes :-

Exhaust dyeing is carried out at low temperature 60-65° C. Savvyfix "ME,LD,RR" Dyes are easily soluble into water by pasting the dyestuff with cold water and thereafter dissolving it in (60°C) hot water constant stirring:



Washing

After dyeing, the unfixed dyes to be completely removed by cold rinsing, hot rinsing and soaping at boil with 1-2 g/L anionic surfactant.

Padding Method :

- a) Silicate pad - bath - wash.
- b) Alkali pad - dry - thermofix.

Printing with Savvyfix "ME" Brand Dyes:

Savvyfix "ME" Dyes can be used for printing. These dyes can be applied in printing by any of the following methods.

1. Print-dry-steam(Savvyfix ME + Alkali)
2. Print-dry-thermofix
3. Print-dry-nip padding in sodium silicate bath - 10 hours.

Shade Illustrations:

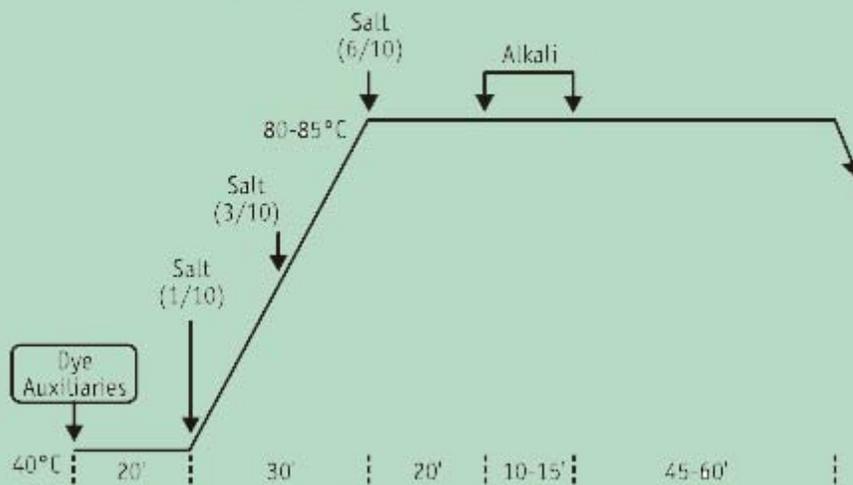
All the shades illustrated are on bleached mercerised cotton poplin by following dyeing methods:

1. **Savvyfix 'C' Dyes:** Dyed by exhaust dyeing at room temp. at 1:10 M.L.R.
2. **Savvyfix 'H'/'PN' Dyes:** Dyed by cold batch (Caustic Soda) process.
3. Savvyzol & Savvyfix 'ME, LD, RR' Dyes : Dyed by exhaust dyeing at 60°C at 1:20 M.L.R.
4. **Savvyzol Dyes :** Dyed by cold batch (Sodium Silicate) Process.

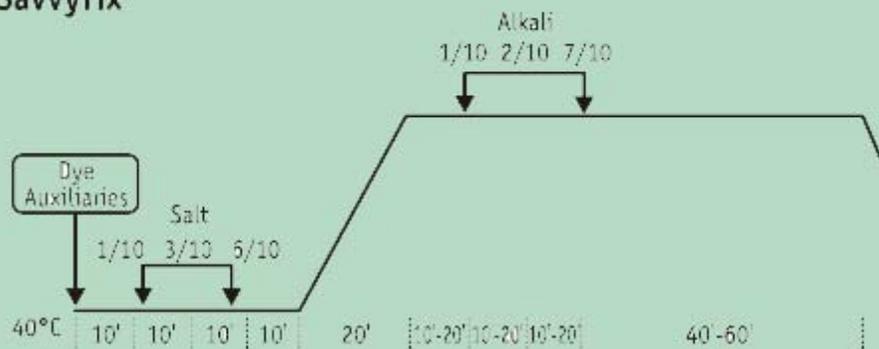
Key to Abbreviations :

LS	=	Less Suitable
S	=	Suitable
L	=	Low)
M	=	Medium) Reactivity
H	=	High)
light	=	1 to 8 in increasing order
Washing & other	=	1 to 5 in increasing order
Dischargeability	=	G - Good; F-Fair; P-Poor
Stain	=	Staining on adjacent white fabric

Exhaustion Dyeing



Savvyfix



Savvycon H-E/EL

Dyeing Depth (% o.w.f)	Salt (g/l)		Soda Ash (g/l)	Mixed Alkali (g/l)
	Normal	Mercerised		Soda Ash / NaOH
up to 0.01	10	5	10	5 / 0.7
0.30	20	10	10	5 / 0.7
0.50	30	20	10	5 / 0.7
1.00	45	30	15	5 / 1.0
2.00	60	40	15	5 / 1.0
3.00	70	50	20	5 / 1.5
4.00	80	60	20	5 / 1.5
above 4.00	90	65	20	5 / 1.5

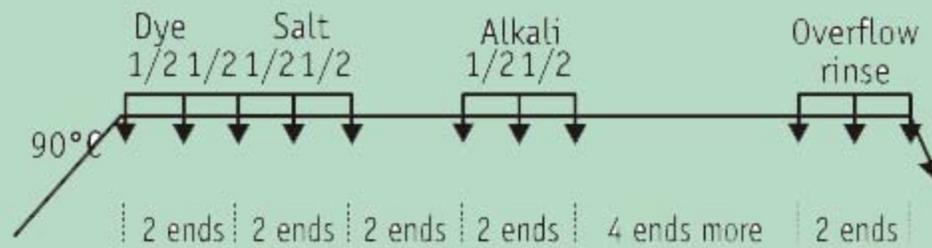
Savvyfix

Dyeing Depth (% o.w.f)	Salt (g/l)		Soda Ash (g/l)	Mixed Alkali (g/l)
	Normal	Mercerised		Soda Ash / NaOH
up to 0.01	3-8	2-5	5	3 / 0.2
0.30	10-15	3-8	8	3 / 0.3
0.50	15-25	5-10	10	3 / 0.5
1.00	25-35	15-25	15	3 / 0.8
2.00	40-50	35-45	15	3 / 1.0
3.00	50	40-50	20	3 / 1.5
4.00	60	50	20	3 / 1.7
above 5.00	60<	50<	20	3 / 2

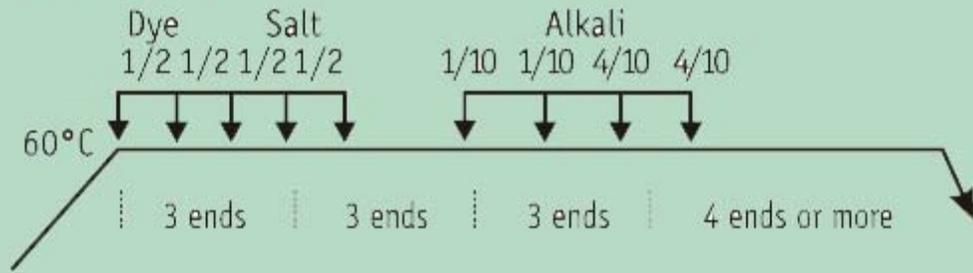
Savvyzol

Dyeing Depth (% o.w.f)	Salt (g/l)		Soda Ash (g/l)	Mixed Alkali (g/l)
	Normal	Mercerised		Soda Ash / NaOH
up to 0.01	15	7	7	5 / 0.0
0.30	20	10	10	5 / 0.3
0.50	25	15	12	5 / 0.5
1.00	35	25	15	5 / 0.8
2.00	40	30	20	5 / 1.0
3.00	50	40	20	5 / 1.5
4.00	60	50	20	5 / 1.5
above 4.00	60-80	50-70	20	5 / 1.8

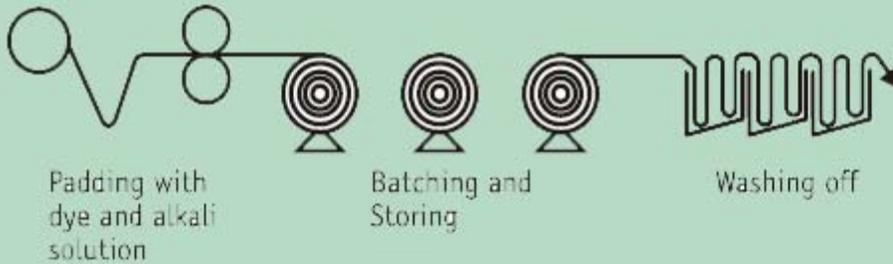
Jig Dyeing



Savvyfix



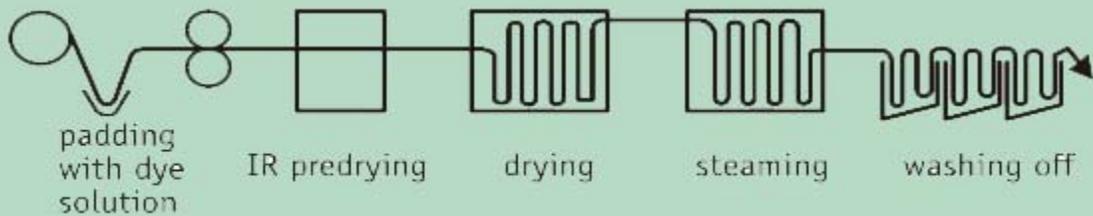
Cold Pad-batch Dyeing



Savvyfix	X g/l
Penetrating agent	1-2 g/l
Caustic Soda (38° Be)	5-35 g/l
Sodium silicate (40° Be)	40-100 g/l
Batching Time	6-24 hrs.

Continuous Dyeing

Pad-Dry-Steam



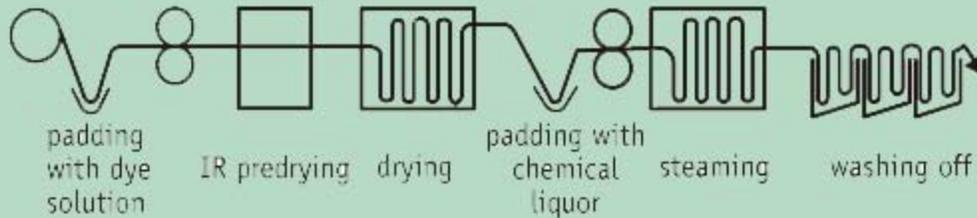
Padding Solution

Savvyfix	X g/l
Urea	0-50 g/l
Reduction inhibitor	10 g/l
Migratin inhibitor	1g/l
Sodium bicarbonate	10-20 g/l

Padding

Temperature	20-25°C
Pick up	60-80%
Drying	110-120°C
Steaming	102-105°C, 60-90 sec.

Pad-Dry-Pad-Steam



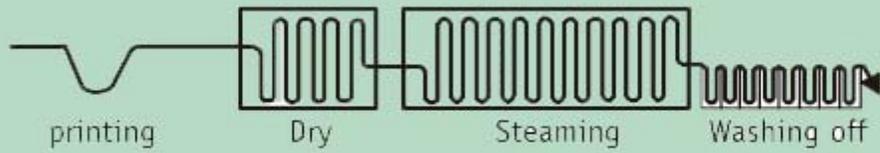
Padding Solution

Savvyfix	X g/l
Migration inhibitor	1 g/l
Urea	0-50 g/l
Penetrating agent	0-2 g/l
Monosodium phosphate	1 g/l

Padding

Temperature	20-25°C
Pick up	60-50%
Drying	110-120°C

Printing



	Normal Steaming	HT Steaming	Baking
Suncion	X	X	X
Urea	50-10	100-200	100-200
water	Y	Y	Y
Stock Paste (4-12)	400-600	400-600	400-600
Reduction inhibitor	10-20	10-20	10-20
Alkali	10-30	10-20	10-20
Total		1000	
Fixing Temperature	102°C	130°C	150°C
Fixing Time	5-10 min.	3-5 min.	2-3 min.