MANUFACTURING UNIT

Bhagyalaxmi Estate, Rakanpur, Kalol, Gandhinagar, INDIA

G.I.D.C., Naroda, Ahmedabad, INDIA

G.I.D.C., Vatva, Ahmedabad, INDIA

CORPORATE OFFICE

402, Abhishree Avenue, Nehrunagar Cross Roads,
Opp. Hanuman Temple, Ambawadi, Ahmedabad 380 015. Gujarat, INDIA.
Phone: +91 . 79 . 2640 1417 | Fax: +91 . 79 . 4007 5559
Email : auxitech_industries@yahoo.com
Web : www.auxitech.com

MANUFACTURERS & EXPORTERS OF
DYES & TEXTILE AUXILIARIES

AUXITECH INDUSTRIES

AUXIFIX & Auxizol REACTIVE DYES

AUXIFIX '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.

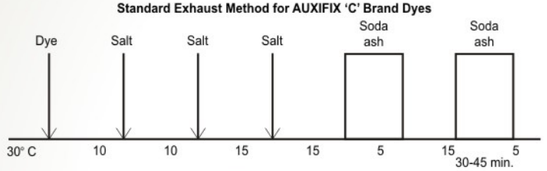
"C" Brands are applicable from cold bath while "H" & "PN" Brands are to be applied at temperature of about 80°C. Both these brands are suitable for dyeing and printing of cotton, viscose, cuprammonium rayon and natural silk.

Auxizol 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 for all conventional exhaustion methods by addition of Glauber's / Common Salt and alkali.

Procedure for Dyeing with 'C' Brand AUXIFIX 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 AUXIFIX '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. Add required amount of soda ash (as solution), run material for 45-60 minutes, squeeze, wash with water and soap at boil with 2 g/l soap, wash with water and dry. Soaping treatment is highly essential to remove unfixed dye to produce dyeings of high washing fastness.

Standard Exhaust Method for AUXIFIX 'C' Brand Dyes



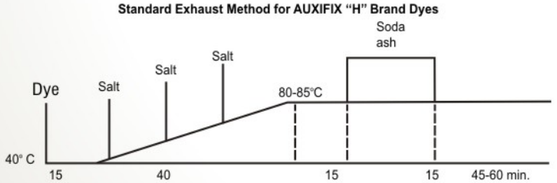
Quantities of Salt & Soda Ash for AUXIFIX 'C' Brand

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 AUXIFIX Dyes

Take requisite quantity of water in dye-bath (recommended m/l ratio 1 to 15 heat to 40ºC, 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 80ºC in 40 minutes run at 80°C for 45 to 60 minutes. Squeeze, wash with water and soap at boil with 2 g/l of soap for 10 minutes, wash and dry. Soaping is highly essential to produce dyeings of high wash fastness.

Standard Exhaust Method for AUXIFIX "H" Brand Dyes



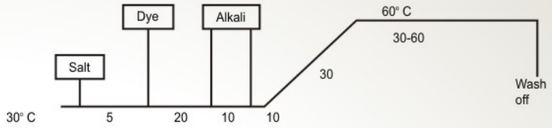
Quantities of Salt and Soda Ash for 'H' & 'PN' Brand

Depth of Shades %	Common Salt/Glauber's Salt g/l (dye liquor)	Soda Ash g/l (dye liquor)
upto 0.5	40	20
0.5 to 2.0	60	20
2.0 to 4.0	80	20
Above 4.0	100	20

Procedure for Dyeing with Auxizol Dyes

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

Standard Dyeing Method



Quantities of Salt and Alkali for Auxizol 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 Auxizol 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 Auxifix 'H' & 'PN' Brand

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

Preparation of Printing Paste with Auxizol Dyes by Steam Process

Auxizol 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 80o to 85o then dyestuff is added, stirred to dissolve. Then resist salt and thickening is added, this is stirred to homogenous paste. Before addition of alkali this is cooled to room temperature.

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

AUXIFIX HE DYES : AUXIFIX 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 dyeing polyester/cellulosic blends where liquor to goods ratio is quite high. Due to higher fixation of AUXIFIX HE dyes, the drained and wash liquors after dyeing, contain much less quantity of unfixed dyes in comparison to conventional Reactive dyes. This facilitates quicker wash off and efficient soaping. The improved stability of AUXIFIX HE dyes gives improved batch to batch consistency. Exhaustion of AUXIFIX 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.

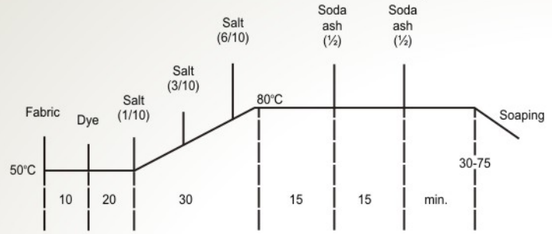
4 Very good compatibility gives extensive range of shades based on few dyes and excellent reproducibility, consistent high yeilds and freedom from "listing" and "ending".

5 Though AUXIFIX 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.

DYEING : Temperature 50-85°C

Standard Exhaust Method for AUXIFIX 'HE' Brand Dyes



Quantity of Salt and Soda Ash for AUXIFIX "HE" Brand Dyes

Depth of Shades (o.w.f.)	Soda (g/l)	Soda (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

AUXIFIX 'ME, LD, RR' DYES :

i AUXIFIX ME dyes are low temperature high exhaust reactive dyes suitable for dyeing, padding and printing of all types of cellulosic material.

ii They are applied by exhaust dyeing methods at temperature 60-65° C.

iii They offer high grade of all round fastness properties.

iv They have an advantage of high degree of exhaustion and fixation rates.

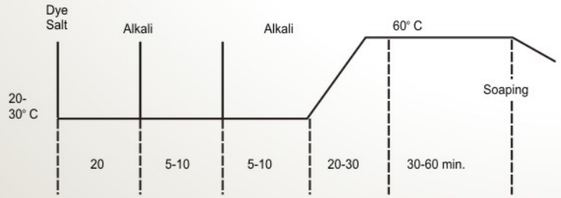
v They offer excellent levelling properties and excellent alkali stability.

vi They give highly reproducible dyeings because of better alkali stability and low sensitivity to temperature.

Procedure for Dyeing with AUXIFIX "ME, LD, RR" Brand Dyes

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

Standard Dyeing method with AUXIFIX "ME, LD, RR" Brand Dyes :-



Quantity of Salt and Soda Ash for AUXIFIX "ME, LD, RR" Brand Dyes

Depth of Shades (o.w.f.)	Soda (g/l)	Soda (g/l)
0 to 0.5	20	10
0.5 to 1.0	35	15
2.0 to 4.0	60	20
Above 4.0	80	20

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 AUXIFIX "ME" Brand Dyes

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

1 Print-dry-steam (AUXIFIX ME + Alkali)

2 Print-dry-thermofix (AUXIFIX ME + Alkali)

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 AUXIFIX 'C' Dyes : Dyed by exhaust dyeing at room temp. at 1:10 M.L.R.

2 AUXIFIX 'H' / 'PN' Dyes : Dyed by cold batch (Caustic Soda) process.

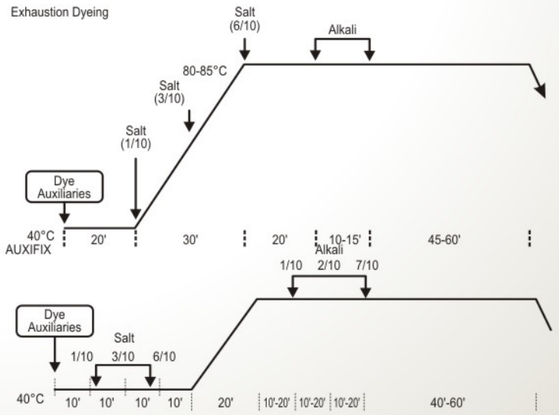
3 Auxizol & AUXIFIX 'ME, LD, RR' Dyes : Dyed by exhaust dyeing at 60°C at 1:20 M.L.R.

4 Auxizol Dyes : Dyed by cold pad 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



Auxicion 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

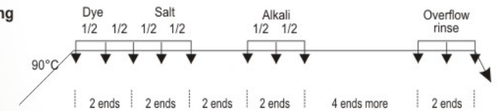
AUXIFIX

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 4.00	60<	50<	20	3 / 2

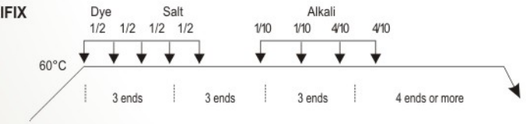
Auxizol

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

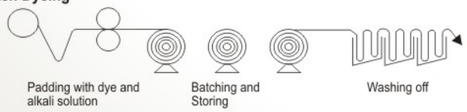
Jig Dyeing



AUXIFIX

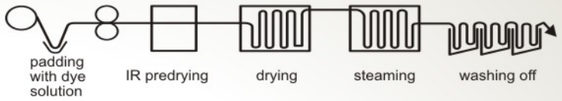


Cold Pad-batch Dyeing



AUXIFIX	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



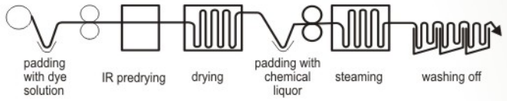
Padding Solution

AUXIFIX	X g/l
Urea	0-50 g/l
Reduction ionhibitor	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

AUXIFIX	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

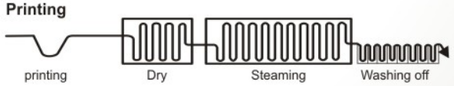
Alkali padding solution (Alkali bath compositon)

Glauber's salt anhydrous or common salt	100-250 g/l
Caustic soda (38°Be)	10-20 ml/l
Soda ash	0-20 g/l
Reduction inhibitor	10 g/l

Alkali Padding

Temperature	20°C
Pick up	80 %
Drying	102-105°C, 45-90 Sec.

Printing



	Normal Steaming	HT Steaming	Baking
AUXIFIX	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.

AUXITECH

AUXIFIX 'C' DYES
ON COTTON

		GENERAL PROPERTIES				FASTNESS PROPERTIES							
		Solubility gms / l at 30°C Straight	DYEING PROPERTIES		Fixation Temp. Exhaust Dyg.	Day Light 1:1 ISO - 105 - BO2	WASHING ISO - 104 X CO4		BLEACHING			PERSPIRATION ISO - 104 x EO4	
			Subs-tantivity	Reactivity			Alteration	Stain	Hypo-chlorite	Hydrogen Peroxide Alteration	Hydrogen Peroxide Stain	Alkaline	Acidic
	Yellow M8G *Yellow 86	70	L	M	30°C.	6-7	5	5	1	4-5	4	4-5	5
	Yellow M4G *Yellow 22	40	M	M	30°C.	6	5	5	1	3-4	5	4-5	5
	Yellow MGR *Yellow 7	30	H	M	30°C.	6	5	5	4-5	4-5	5	5	4
	Golden Yellow MR *Yellow 44	160	H	H	30°C.	6	5	5	2-3	4-5	5	4-5	4
	Yellow M4R *Orange 14	80	M	M	30°C.	5	5	5	1	3-4	5	4	4
	Orange M2R *Orange 4	180	M	M	30°C.	4	5	5	4	4	5	4-5	4
	Red M5B *Red 2	80	H	H	30°C.	4-5	5	4-5	1	2	4-5	5	3
	Red M8B *Red 11	50	H	M	30°C.	4-5	5	5	4	4-5	4	4-5	2
	Pink MB *Red 74	80	H	M	30°C.	4-5	4	4-5	2	3	3	4-5	5

1% 4% * C. I. Reactive

AUXITECH

AUXIFIX 'C' DYES
ON COTTON

		GENERAL PROPERTIES				FASTNESS PROPERTIES							
		Solubility gms / l at 30°C Straight	DYEING PROPERTIES		Fixation Temp. Exhaust Dyg.	Day Light 1:1 ISO - 105 - BO2	WASHING ISO - 104 X CO4		BLEACHING			PERSPIRATION ISO - 104 x EO4	
			Subs-tantivity	Reactivity			Alteration	Stain	Hypo-chlorite	Hydrogen Peroxide Alteration	Hydrogen Peroxide Stain	Alkaline	Acidic
	Magenta MB *Violet 13	20	H	H	30°C.	3-4	5	5	1	3	3	4-5	4-5
	Violet C4R *Violet 12	60	L	H	30°C.	5	5	4-5	3	3	3	4	4
	Turq. Blue MGN *Blue 140	130	H	H	30°C.	6	4-5	3-4	2-3	2-3	2	4	4
	Brill Blue M4GD *Blue 168	130	H	H	30°C.	6	4-5	4	2-3	2	2	4	4
	Navy Blue M3R *Blue 9	70	H	H	30°C.	5	5	4	3	1	3-4	4-5	3
	Blue M2R *Blue 81	100	H	H	30°C.	4	4	4	2	2	3	4	4
	Blue MR *Blue 4	80	L	H	30°C.	6	5	5	2	3-4	4-5	4-5	5
	Brill Blue MX7R *Blue 161	80	H	H	30°C.	3	4-5	4-5	---	---	---	---	---

1% 4% * C. I. Reactive

AUXITECH

AUXIFIX 'H' DYES
ON COTTON

		GENERAL PROPERTIES				FASTNESS PROPERTIES							
		Solubility gms / l at 30°C Straight	DYEING PROPERTIES		Fixation Temp. Exhaust Dyg.	Day Light 1:1 ISO - 105 - BO2	WASHING ISO - 104 X CO4		BLEACHING			PERSPIRATION ISO - 104 x EO4	
			Subs-tantivity	Reactivity			Alteration	Stain	Hypo-chlorite	Hydrogen Peroxide Alteration	Hydrogen Peroxide Stain	Alkaline	Acidic
	Yellow H6G *Yellow 95	80	H	M	80°C.	5-6	5	5	1	3	4	4-5	4-5
	Yellow H7GL *Yellow 57A	80	H	M	80°C.	5-6	5	5	1	3	4	4-5	4-5
	Brill Yellow H8G *Yellow 185	70	H	M	80°C.	6	5	5	1	3	4	4-5	4-5
	Yellow H4G *Yellow 18	130	L	M	80°C.	6-7	5	5	1	4	5	4-5	4-5
	Golden Yellow HR *Orange 12	110	M	M	80°C.	6	5	5	3	4-5	5	4	5
	Orange H2R *Orange 13	150	M	M	80°C.	4-5	5	5	4	4	4-5	5	4-5
	Red 6BX *Red 76	80	L	H	80°C.	6	5	5	2	3-4	4-5	4-5	5
	Red H8B *Red 31	80	H	M	80°C.	4-5	4-5	5	3-4	4	4-5	4	3-4
	Magenta HB *Violet 26	100	M	H	80°C.	4	4-5	4-5	1	3	4	4	4

AUXITECH

AUXIFIX 'H' DYES
ON COTTON

		GENERAL PROPERTIES				FASTNESS PROPERTIES							
		Solubility gms / l at 30°C Straight	DYEING PROPERTIES		Fixation Temp. Exhaust Dyg.	Day Light 1:1 ISO - 105 - BO2	WASHING ISO - 104 X CO4		BLEACHING			PERSPIRATION ISO - 104 x EO4	
			Subs-tantivity	Reactivity			Alteration	Stain	Hypo-chlorite	Hydrogen Peroxide Alteration	Hydrogen Peroxide Stain	Alkaline	Acidic
	Purple H3R *Violet 1	130	M	M	80°C.	4	5	5	4	2-3	5	2-3	4
	Turq. Blue H5G *Blue 25	120	H	H	80°C.	5-6	5	4	3-4	2	3	4-5	3
	Turq Blue HA *Blue 71	90	H	M	80°C.	6	4	4	2-3	5	4-5	4	4
	Blue H3RP *Blue 49	100	L	M	80°C.	5	3-4	5	3	3-4	5	3	3-4
	Blue H5R *Blue 13	120	M	M	80°C.	6	5	5	1	1	5	4-5	4
	Navy Blue RX *Blue 59	100	M	H	80°C.	3-4	4	4	1	2	2	4	4
	Red Brown H4R *Brown 9	90	L	M	80°C.	4-5	5	4-5	4-5	5	4-5	4-5	3-4
	Black HN *Black 8	40	L	M	80°C.	6	5	5	4	3	5	4-5	3

1% 4% * C. I. Reactive

AUXITECH

AUXIFIX 'HE' DYES
ON COTTON

		GENERAL PROPERTIES				FASTNESS PROPERTIES							
		Solubility gms / l at 30°C Straight	DYEING PROPERTIES		Fixation Temp. Exhaust Dyg.	Day Light 1:1 ISO - 105 - BO2	WASHING ISO - 104 X CO4		BLEACHING			PERSPIRATION ISO - 104 x EO4	
			Subs-tantivity	Reactivity			Alteration	Stain	Hypo-chlorite	Hydrogen Peroxide Alteration	Hydrogen Peroxide Stain	Alkaline	Acidic
	Yellow HE6G *Yellow 135	150	H	H	80°C.	4-5	5	5	1-2	4	4	3	4
	Yellow HE4G *Yellow 105	100	H	H	80°C.	5-6	5	5	1-2	4-5	4-5	4-5	4-5
	Yellow HE4R *Yellow 84A	70	H	H	80°C.	5-6	5	5	2-3	4-5	5	4-5	4-5
	Golden Yellow HER *Yellow 84	80	H	H	80°C.	5	5	4-5	3-4	4-5	4	4-5	4
	Orange HE2R *Orange 84	35	H	H	80°C.	3-4	4	5	4-5	4	4-5	4	4
	Red HE3B *Red 120	150	H	H	80°C.	4-5	5	4	2-3	3-4	4-5	5	4-5
	Red HE7B *Red 141	150	H	H	80°C.	4-5	5	5	3	4-5	4-5	5	4-5
	Red HE8B *Red 152	160	H	H	80°C.	4-5	5	3	3-4	4-5	4-5	5	4-5
	Blue HERD *Blue 160	60	H	H	---	4	5	3	2	2	2-3	3-4	4

AUXITECH

AUXIFIX 'HE' DYES
ON COTTON

		GENERAL PROPERTIES				FASTNESS PROPERTIES							
		Solubility gms / l at 30°C Straight	DYEING PROPERTIES		Fixation Temp. Exhaust Dyg.	Day Light 1:1 ISO - 105 - BO2	WASHING ISO - 104 X CO4		BLEACHING			PERSPIRATION ISO - 104 x EO4	
			Subs-tantivity	Reactivity			Alteration	Stain	Hypo-chlorite	Hydrogen Peroxide Alteration	Hydrogen Peroxide Stain	Alkaline	Acidic
	Blue HEGN *-	60	H	H	80°C.	4	5	3	2	2	2-3	3-4	4
	Navy Blue HER *Blue 171	60	H	H	80°C.	4	5	4-5	1-2	4	4-5	4	4-5
	Navy Blue HE2R *Blue 172	70	H	H	80°C.	4	4-5	3	2	3	3	4	5
	Green HE4BD *Green 19	120	H	H	80°C.	4	5	4-5	1	2-3	4-5	4-5	4
	Black HEBL *-	100	H	H	80°C.	4	5	5	3	4	4	4	4

1% 4% * C. I. Reactive

AUXITECH

Auxizol
ON COTTON

		GENERAL PROPERTIES				FASTNESS PROPERTIES						
		Solubility gms / l at 30°C Straight	DYEING PROPERTIES		Fixation Temp. Exhaust Dyg.	Day Light 1:1 ISO - 105 - BO2	WASHING ISO - 104 X CO4		Hypochlorite Nacol		PERSPIRATION ISO - 104 x EO4	
			Subs-tantivity	Reactivity			Alteration	Stain	Alteration	Stain	Alkaline	Acidic
	Yellow GL *Yellow 37	200	S	M	60°C.	6	3-4	5	1	4	4	5
	Brill Yellow 7GL *Yellow 100	100	S	M	60°C.	6	3-4	5	1	4	4	5
	Yellow GR *Yellow 15	100	S	H	60°C.	5	4-5	5	1	4	5	4-5
	Yellow FG *Yellow 42	100	LS	L	60°C.	6-7	4	5	5	3-4	3-5	4-5
	Golden Yellow RNL *Orange 107	100	S	H	60°C.	7	4	5	3-4	5	5	4-5
	Golden Yellow R *-	100	S	M	60°C.	6	4	5	3-4	5	4	3-4
	Orange 2R *Orange 7	100	S	M	60°C.	5	3-4	5	3-4	5	3	3-4
	Orange 3R *Orange 16	80	S	L	60°C.	6	4-5	4-5	3-4	5	5	4-5
	Red 5B *Red 35	100	LS	M	60°C.	6	4-5	5	1	5	4	5

1% 4% * C. I. Reactive

AUXITECH

Auxizol
ON COTTON

		GENERAL PROPERTIES				FASTNESS PROPERTIES						
		Solubility gms / l at 30°C Straight	DYEING PROPERTIES		Fixation Temp. Exhaust Dyg.	Day Light 1:1 ISO - 105 - BO2	WASHING ISO - 104 X CO4		Hypochlorite Nacol		PERSPIRATION ISO - 104 x EO4	
			Subs-tantivity	Reactivity			Alteration	Stain	Alteration	Stain	Alkaline	Acidic
	Red RB *Red 198	100	LS	S	60°C.	6	3-4	5	1	4	4	5
	Violet 5R *Violet 5	100	S	S	60°C.	6-7	4	5	5	3-4	4-5	4-5
	Blue 3R *Blue 28	100	S	S	60°C.	7	4	5	3-4	5	5	4-5
	Blue R *Blue 19	100	S	S	60°C.	6	4	5	3-4	5	4	3-4
	Blue 203	100	S	H	60°C.	5	4-5	5	1	5	5	4-5
	Blue 220	100	S	S	60°C.	5	4	4-5	3-4	5	5	4-5
	Blue 221	100	S	S	60°C.	4-5	4	4	3-4	5	5	3-4
	Blue 222	150	S	S	60°C.	4-5	4-5	4-5	3-4	4	4	5
	Brown GR *Brown 18	100	S	S	60°C.	6	4-5	5	1	5	4	5

1% 4% * C. I. Reactive

AUXITECH

Auxizol
ON COTTON

		GENERAL PROPERTIES				FASTNESS PROPERTIES						
		Solubility gms / l at 30°C Straight	DYEING PROPERTIES		Fixation Temp. Exhaust Dyg.	Day Light 1:1 ISO - 105 - BO2	WASHING ISO - 104 X CO4		Hypochlorite Nacol		PERSPIRATION ISO - 104 x EO4	
			Subs-tantivity	Reactivity			Alteration	Stain	Alteration	Stain	Alkaline	Acidic
	Turq. Blue G *Blue 21	100	S	M	60°C.	6	4-5	4-5	3-4	5	5	4-5
	Turq. Blue H2GP *Blue 21/A	100	S	M	60°C.	6	4-5	4-5	3-4	5	5	4-5
	Black B *Black 5	100	S	H	60°C.	5	4-5	5	1	5	5	4
	Black TMS	100	S	H	60°C.	7	4-5	5	3-4	5	5	4
	Black HFGR *-	120	S	H	60°C.	5-6	5	4-5	2	5	5	4-5
	Deep Black N-150 *-	100	S	H	60°C.	5	4-5	5	1	5	5	4
	Deep Black WNN *-	100	S	H	60°C.	5	4-5	5	1	5	4-5	5
	Super Black R *-	100	S	H	60°C.	5	4-5	5	1	5	4-5	5
	Super Black G *-	100	S	H	60°C.	5	4-5	5	1	5	4-5	5

1% 4% * C. I. Reactive

AUXITECH

AUXIFIX
BIFUNCTIONAL ON COTTON

		GENERAL PROPERTIES			FASTNESS PROPERTIES						
		Solubility gms / l at 30°C Straight	DYEING PROPERTIES		Day Light 1:1 ISO - 105 - BO2	WASHING ISO - 104 X CO4		Hypochlorite Nacol		PERSPIRATION ISO - 104 x EO4	
			Subs-tantivity	Reactivity		Alteration	Stain	Alteration	Stain	Alkaline	Acidic
	Yellow 4GL *Yellow 160	120	S	H	6	4-5	4-5	1	5	4-5	4-5
	Golden Yellow 3RS *Yellow 145	100	S	H	5	5	5	4	4	3-4	3-4
	Orange 2RL *Orange 122	55	S	H	5	5	5	2	5	4	4
	Red 3BS *Red 195	100	S	H	5	4-5	4-5	3	3	4	4
	Red 3BL *Red 194	100	S	H	5	4-5	4-5	4	3	4	3
	Red 6BL *Red 250	80	S	H	5	4-5	4-5	3-4	3-4	4	4
	Blue 2RL *Red 248	100	S	H	4	5	5	1	5	4	4
	Navy Blue 2GL *Blue 194	120	S	H	4-5	4-5	4-5	1	4	3	3
	Magenta BL	120	S	H	5	4-5	4	4	4-5	4	3

1% 4% * C. I. Reactive

AUXITECH

AUXIFIX 'P' DYES ON COTTON

		GENERAL PROPERTIES				FASTNESS PROPERTIES						
		Solubility gms / l at 30°C Straight	DYEING PROPERTIES		Fixation Temp. Exhaust Dyg.	Day Light 1:1 ISO - 105 - BO2	WASHING ISO - 104 X CO4		Hypochlorite Nacol		PERSPIRATION ISO - 104 x EO4	
			Subs-tantivity	Reactivity			Alteration	Stain	Alteration	Stain	Alkaline	Acidic
	Yellow P6GS *Yellow 95	200	S	M	80°C	5	5	4	4	4-5	5	4-5
	Golden Yellow PR	180	S	M	80°C	5	5	3	4-5	5	4	5
	Brill. Orange P2R	200	S	M	80°C	5	5	4	4	4-5	5	4-5
	Brill. Red P4B *Red 245	180	S	M	80°C	5	4-5	4	4	3	4	3
	Brill. Red P3B *Red 45	180	S	M	80°C	4-5	5	4-5	4	4	4	4-5
	Brill. Red PB *Red 24	210	S	M	80°C	6	4-5	4-5	4	4	4	4-5
	Magenta PB	200	S	M	80°C	4-5	4-5	1	3	4	4	4
	Navy Blue P2R	200	S	M	80°C	4-5	4	3	4	3	3	4
	Brill. Blue P3R	200	S	M	80°C	3-4	5	3	3-4	5	3	3-4

1% 4% * C. I. Reactive

AUXITECH

AUXIFIX 'P' DYES ON COTTON

		GENERAL PROPERTIES				FASTNESS PROPERTIES						
		Solubility gms / l at 30°C Straight	DYEING PROPERTIES		Fixation Temp. Exhaust Dyg.	Day Light 1:1 ISO - 105 - BO2	WASHING ISO - 104 X CO4		Hypochlorite Nacol		PERSPIRATION ISO - 104 x EO4	
			Subs-tantivity	Reactivity			Alteration	Stain	Alteration	Stain	Alkaline	Acidic
	Blue P5R	100	S	M	80°C	5	5	1	1	5	4-5	4
	Blue P6B	100	S	M	80°C	3-4	5	4	3-4	4	4	3-4
	Turq. Blue PGR	200	S	M	80°C	4-5	4-5	3-4	5	5	4	4-5
	Black PN	180	S	M	80°C	5	5	4	3	4-5	4	3
	Brill Black PGR	180	S	M	80°C	4	4-5	4	5	4-5	4	4-5
	Black PRL	100	S	M	80°C	4	4-5	4	5	4-5	4	4-5
	Blue HGR *Blue 5	120	M	M	80°C.	6	5	5	1	1	5	4-5

1% 4% * C. I. Reactive

AUXITECH

AUXIFIX 'K' DYES ON COTTON

		GENERAL PROPERTIES				FASTNESS PROPERTIES						
		Solubility gms / l at 30°C Straight	DYEING PROPERTIES		Fixation Temp. Exhaust Dyg.	Day Light 1:1 ISO - 105 - BO2	WASHING ISO - 104 X CO4		Hypochlorite Nacol		PERSPIRATION ISO - 104 x EO4	
			Subs-tantivity	Reactivity			Alteration	Stain	Alteration	Stain	Alkaline	Acidic
	Yellow K *-	120	S	S	60°C.	5	3-4	3-4	4	4	3-4	3-4
	Red K *Red 106:1	150	S	S	60°C.	5	4	4	3	3	4	4
	Blue K *Blue 122	100	S	S	60°C.	4-5	3	3	1	4	3	3
	Maroon K *-	80	S	S	60°C.	2-3	3	1	1	3	3-4	3
AUXIFIX 'RGB' DYES ON COTTON												
	Yellow RGB	120	S	S	60°C.	5	3-4	3-4	4	4	3-4	3-4
	Red RGB	150	S	S	60°C.	5	3-4	4	3-4	3	3-4	4
	Blue RGB	100	S	S	60°C.	4-5	3-4	3	1-2	4	3-4	3
	Carbon Black RGB	150	S	S	60°C.	4-5	5	4	2	4	4-5	5

1% 4% * C. I. Reactive

AUXITECH

100% cotton fabric % of shade		Yellow LD		Red LD		Blue LD	
		0.5%	1%	0.5%	1%	0.5%	1%
Solubility (G/L)@ 50c temp plain water		>150		>150		>150	
Light Fastness ISO-105-BO2	1 / 1 SD	4		4		4	
	1 / 6 SD	4		4		4	
WASHING ISO-105-CO6-C2S 60Ctemp.	Effect	4		4		4	
	Stain (Co)	4		4		4	
ISO-105-CO6-E2S 95Ctemp.	Effect	4		4		4	
	Stain (Co)	3 - 4		3 - 4		3 - 4	
ISO-105-CO8 95Ctemp.	Effect	4 - 5		4 - 5		4 - 5	
	Stain (Co)	4		4		4	
Dry Cleaning ISO-10-D01		4 - 5		4 - 5		4 - 5	
RubbingSatness	Dry	4 - 5		4 - 5		4 - 5	
	Wet	4		4		4	
Chlorinated Water ISO-105-EO3 (20ppm CL)		4		4		4	
Perspiration (Alk) ISO-105-EO4	Effect	4		4		4	
	Stain (Co)	4		4		4	
Perspiration (Acid) ISO-105-EO4	Effect	4		4		4	
	Stain (Co)	4		4		4	
SUITABILITY IN APPLICATION							
Exhaust Dyeing	60c temp.	+		+		+	
Cold Pad Batch with Silicate	8 - 12 hrs.	o		o		o	
Two Phase Steaming	90 sec.	-		-		-	
Thermofix	125c temp.	o		o		o	