

Our Vision. Our Mission.
Leadership by building customer satisfaction through fairness and quick response providing innovative products and services suited to customer needs, remaining driven by technology and eco-responsiveness thereby sustaining our sustainable niche in the market.
To provide quality products that add value to our customers businesses. To consistently strive to develop and deliver innovative solutions that meet and exceed our customers' needs and to accomplish this while meeting or exceeding the Company's financial goals.
Our Company. Our Competence.
DYTEX Industries is a reputed company that is engaged in the manufacture of Reactive Dyes, M, HE, ME, VS, RGB, Ultra RGB, Hot Printing and Special Black Dyes. The Company was established in 2009 and is ISO 9001:2000 certified. It has a solid customer base in over many countries across the world.
Initially set up to produce reactive dyes for textiles, the Company has since grown into a reliable supplier of various dyestuffs, chemicals for the international market.
Advanced technology, strict quality control systems and advanced management systems are today the hallmark of the Company. It has strong capabilities in the areas of technical support and quality control. The Company's R&D centre comprises a first class lab and talented resident technicians. This facility communicates and stays abreast of the latest advances in technology through co-operation with specialty laboratories and scholars.

Our Processes. Our Relationships.
State-of-the-art laboratories, world beating technological knowhow and the dedication to finding new and innovative ways to delight the customer results in consistency, reliability and high performance. Every step of our manufacturing process from sourcing raw materials till dispatching the finished product is carefully monitored to conform to the highest standards of excellence.
DYTEX has integrated its infrastructure and processes seamlessly to create an environment where meeting quality requirements is but the first step, the focus of our efforts is to go further and create new quality benchmarks in every product we manufacture.
Our customers come to depend on us for our astute understanding of their business needs and for our ability to provide superior and cost effective solutions. We take pride in our long standing relationships with customers, many of whom have been with us since our inception. Clear communication, problem solving, custom built solutions and more make us powerful assets to our customers. We are in touch on a daily basis and provide customers with solutions proactively.



Accurate Attention is Our Attitude

Cold pd-batch dyeing

Sodium silicate / Caustic soda

Dyeing depth : PdC Medium, Dark
Dyeing temperature : 20-30°C High pad liquor ratio at 20-25°C
Batching time : 8-16 hours
Liquor pick up : Cotton 60-70%, Viscose rayon 70-80%

Cold pd-batch dyeing

Pad-Dry-Pad-Steam (PDPS)

Pad liquor : Dye X g/l, Wetting agent 1-3 g/l, Reduction protectant 1-3 ml/l, Migration inhibitor 5-10 ml/l
Liquor pick up : To a final moisture content of 30-35%
Drying : Dry at 110-120°C
Chemical liquor pick up : 70-80%
Steaming : 60-90sec. in saturated steam (101-110°C)

g/l	<10	20	30	40	50	60
Sodium silicate (37-40% Na ₂ O)	10	15	20	25	28	30
Caustic soda (50% NaOH)	10	15	20	25	28	30

g/l	<10	10-30	>30
Dye/ultra	1	200	750
Salt	g/l	200	750
Soda ash	g/l	200	750
Caustic soda (50% NaOH)	8	12	15

Notes
• High productivity and colour yield
• Good appearance
• Classic procedure for continuous dyeing of woven fabric
• When using dyes with low reactivity such as Dyte Purple Blue G the amount of caustic soda should be raised by 50%
• If the goods are steamed after dyeing for better fixation, they should be steamed in an oxygen-free medium to protect them from dyeing

Key to Abbreviations
Key: L Low, M Medium, H High, VH Very High. S Satisfactory, F Fair, NS Not Satisfactory.

Cold Brand Series

Name of Products	General Properties	Fastness Properties	Suitability
Shade of Products	Affinity	Substantivity at 30°C	Dischargeability
Dytx M	Dischargeability	Day Light 1/11 & 1/16	Washing 10/4
1.0%	Alkaline	Acidic	Hypochlorite Bleach
Yellow MBG Yellow 86	M 80	G 5	5 4 4 2
Yellow M4G Yellow 22	H 50	G 4	5 5 4 4
Yellow MGR Yellow 7	H 30	P 5	6 4 5 4
Golden Yellow MR Yellow 44	H 80	P 5	5 4 5 3
Yellow M3R Orange 86	H 80	F 6	5 2 3 3
Yellow M4R Orange 14	H 100	P 4	5 4 4 3
Orange M2R Orange 4	H 100	P 4	5 4 4 3
Red M5B Red 2	H 100	F 3	4 4 5 1
Red M8B Red 11	H 70	P 3	4 4 5 4
Magenta MB Violet 13	H 80	F 3	4 4 4 3
Violet C4R Violet 12	H 60	P 4	5 4 5 3
Blue M2R Blue 81	H 80	P 4	5 4 5 3
N Blue M3R Blue 9	H 80	P 4	5 4 5 3
Blue MR Blue 4	H 80	P 6	5 3 5 3

High Exhaust Series

Name of Products	General Properties	Fastness Properties	Suitability
Shade of Products	Affinity	Substantivity at 30°C	Dischargeability
Dytx HE	Dischargeability	Day Light 1/11 & 1/16	Washing 10/4
1.0%	Alkaline	Acidic	Hypochlorite Bleach
Yellow HE3G Yellow 135	H 70	G 4	5 4 4 5
Yellow HE3G Yellow 105	H 80	F 5	5 4 4 4
Yellow HE4G Yellow 81	H 70	G 4	5 4 4 5
G, Yellow HE4R Yellow 84	H 80	F 5	5 4 4 4
Orange HE4R Orange 84	H 60	P 3	4 5 4 3
Red HE3B Red 120	H 80	P 4	5 4 5 4
Red HE7B Red 141	H 80	P 3	4 4 5 4
Red HE8B Red 152	H 80	P 3	4 4 4 5
Navy Blue HER Blue 171	H 80	F 4	4 5 5 4
Navy Blue HE2R Blue 172	H 80	F 4	4 5 5 4
Blue HERD Blue 160	H 80	F 5	5 5 1 4
Blue HE4N Blue 188	M 50	P 4	5 4 4 3
Green HE4BD Green 19 A	H 80	F 4	3 4 4 2
Black HEBL	H 80	F 4	4 5 4 3

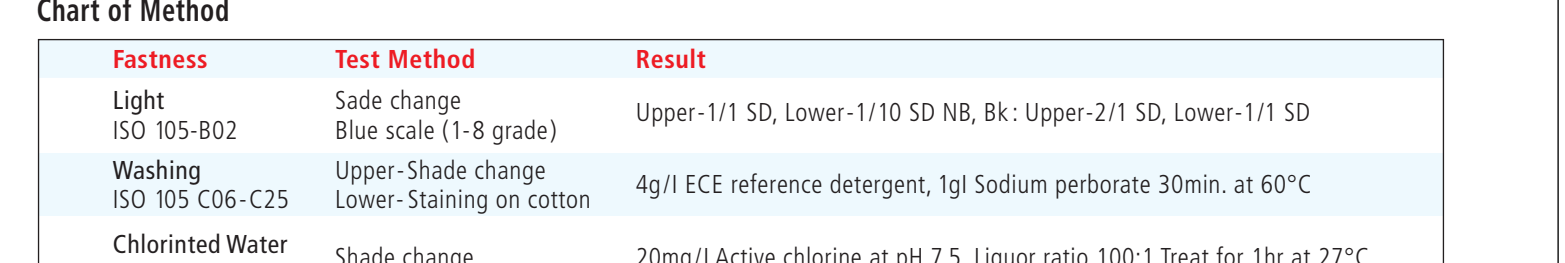
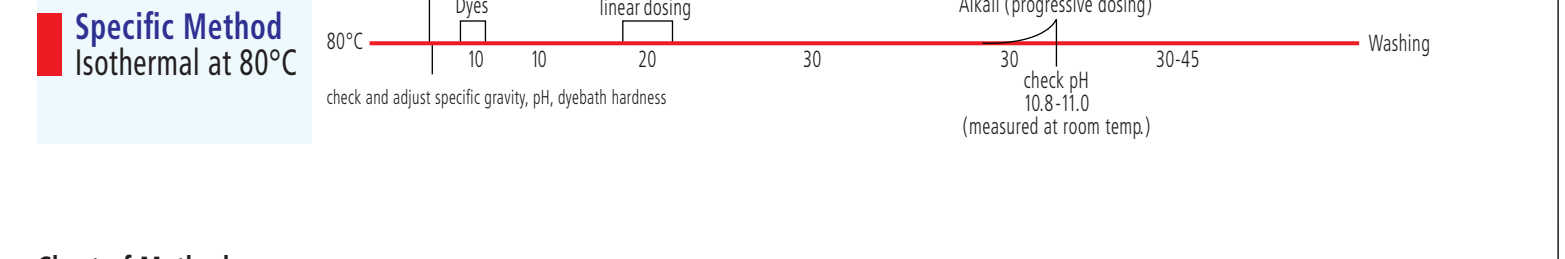
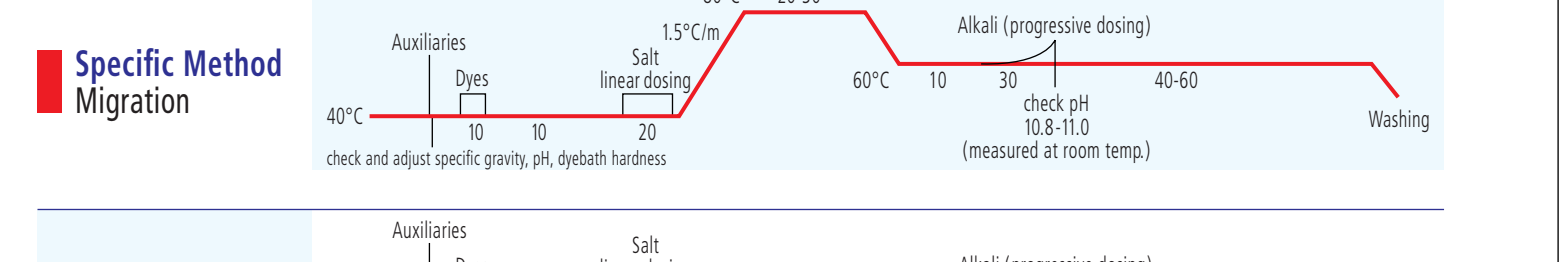
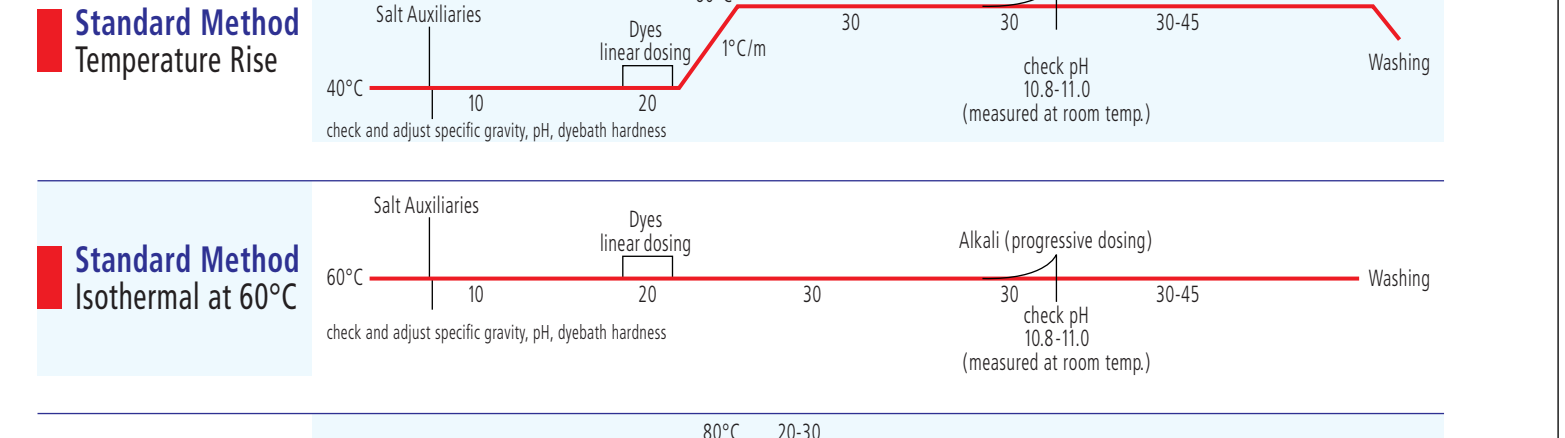


Chart of Method

Fastness	Test Method	Result
Light	ISO 105-80/2	Upper-1/1 SD, Lower-1/10 SD NB, BK, Upper-2/1 SD, Lower-1/1 SD
Washing	ISO 105-40/2	4% ECI reference detergent, 1g/50m Sodium perborate 30min. at 60°C
Chlorinated Water	ISO 105-60/3	Shade change 20mg/l Active chlorine at pH 7.5, Liquor ratio 100:1 Treat for 1hr at 27°C
Perspiration	ISO 105-04	Upper-Shade change Lower-Staining on cotton Acid solution 0.5g/l L-histidine, 5g/NaCl 2.2g/l NaH2PO4.H2O, pH 5.5, 4hrs at 37°C
Perspiration Light	ISO 105-80/7	Upper-Acid perspiration Lower-Alkali perspiration Acid solution 0.5g/l L-histidine, 5g/NaCl 2.2g/l NaH2PO4.H2O, pH 6.0, 4hrs at 37°C
Bleaching	ISO 105-40/2	Shade change 0.5g/l Active chlorine, pH 11.0 by adding 1g Sodium silicate, Liquor ratio 50:1 5.0m/l H2O2 (30%), 5m/l Sodium carbonate, pH 10.5, 1hr at 90°C
Rubbing	ISO 105-41/2	Staining on cotton Upper-Dry Lower-Wet

Exhaustion Dyeing

Salt
The same amount of common salt (NaCl) or Glauber's salt (Na2SO4.10H2O) can be used. If Glauber's salt crystal (Na2SO4.10H2O) is used, the amount of salt must be doubled.
Alkali
Caustic soda, soda ash are used to fix the dyes. The type and amount of alkali required is stated as the below table.

Dyeing Temperature	Final pH (30°C)
50°C	Approx 11.0
60°C	Approx 10.5
80°C	Approx 9.5

Auxiliaries

Sequestering Agents
Sequestering agents are used to soften water and remove heavy metal ions. Sequestering agents that do not bond with the metals from reactive metal complex dyes should be used, as otherwise the shade can change and fastness properties can be impaired. Therefore EDTA-based products are not suitable.
Anti-foams
Foam can impair the running of the goods in bath and thus reduce levelness. Extremely dilute solutions should be dosed into the liquor slowly. Silicone-free anti-foams should be used wherever possible.
Lubricant
Lubricant agent prevents crack marks and creases. It should have no adverse effect on dye liquor stability.

Alkali and Salt Recommendation

Dyeing Depth (%)	Salt (g/L)	Soda Ash (g/L)	Caustic Soda (g/L)	Soda Ash (g/L)	Soda Ash (g/L)	Soda Ash (g/L)	Soda Ash (g/L)
10	5	10	5	0.7	8	5	5
20	10	20	10	1.4	16	10	10
30	15	30	15	2.1	24	15	15
40	20	40	20	2.8	32	20	20
50	25	50	25	3.5	40	25	25
60	30	60	30	4.2	48	30	30
70	35	70	35	4.9	56	35	35
80	40	80	40	5.6	64	40	40
90	45	90	45	6.3	72	45	45
100	50	100	50	7.0	80	50	50

Medium Exhaust Series

Name of Products	General Properties	Fastness Properties	Suitability
Shade of Products	Substantivity	Dischargeability	Dischargeability
Dytx ME	Dischargeability	Day Light 1/11 & 1/16	Washing 10/4
1.0%	Alkaline	Acidic	Hypochlorite Bleach
Yellow ME4GL Yellow 104A	M 100	F 6	4 4 5 4
G, Yellow MERL Yellow 145	M 100	P 5	3 4 4 4
Orange ME2RL Orange 122	H 75	P 5	4 5 4 5
Red 222 Scarlet 2GF	M 130	G 4	4 5 4 4
Red ME3BL Red 194	H 100	P 5	4 5 4 5
Red ME4BL Red 195	H 150	P 5	4 5 5 1
Red ME6BL Red 196/25Q	H 80	P 5	4 5 5 1
Red MERBL Red 198 A	H 100	P 5	4 5 5 1
Red ME3GL Red 223	M 100	F 4	4 5 4 5
Magenta MEB	H 80	F 5	4 5 4 5
Nl Blue ME4GL Blue 194	H 100	F 6	5 5 1 3
Nl Blue DRF Blue 221	H 100	P 5	4 4 5 2
Blue BF Blue 222	H 100	G 3	4 5 5 1
Blue ME2RL Blue 248	H 100	P 4	5 5 5 1

Vinyl Sulfone Series

Name of Products	General Properties	Fastness Properties	Suitability
Shade of Products	Substantivity	Dischargeability	Dischargeability
Dytx VS	Dischargeability	Day Light 1/11 & 1/16	Washing 10/4
1.0%	Alkaline	Acidic	Hypochlorite Bleach
Yellow FG Yellow 42	L 100	G 4	5 5 5 5
Yellow GL Yellow 37	H 80	G 6	4 5 5 2
Yellow H7GL Yellow 57	H 200	G 5	5 5 5 5
Yellow GR Yellow 15	H 100	G 4	5 5 5 1
G, Yellow RNL Orange 107	M 100	G 4	5 4 5 5
G, Yellow R Yellow 77	H 150	G 4	4 5 4 4
Orange 2R Orange 16	H 150	G 4	4 5 4 4
Orange 3R Orange 16A	H 80	G 5	4 5 4 5
Red 23 Red 23	M 150	G 4	4 5 4 5
Red 106 Red 106	L 80	G 3	4 4 5 1
Red 9R Red 98	M 100	F 5	4 5 4 4
Red 5B Red 35	L 80	G 3	4 4 5 5
Red BB Red 21	M 100	P 5	4 5 4 4

RGB Series

Name of Products	General Properties	Fastness Properties	Suitability
Shade of Products	Light	Washing 10/4	Perspiration
Dytx RGB	Dischargeability	Day Light 1/11 & 1/16	Hypochlorite Bleach
4.0%	Alkaline	Acidic	Hypochlorite Bleach
Yellow RGB	4.5	4.5	5 4 5 2
Orange RGB	4.5	4.5	4 4 4 4
Red RGB	4.5	4.5	4 4 4 4
Deep Red RGB	4.5	4.4	4 4 4 4
Navy RGB	5	5	5 3 3 3
Deep Black RGB	4	4	4 4 4 4

Ultra RGB Series
Ultra Yellow RGB, Ultra Orange RGB, Ultra Red RGB, Ultra Carmine RGB. Multifunctional Warm Exhaust and Pad Dyeing economical for Dark shades.

Black Series

Name of Products	General Properties	Fastness Properties	Suitability
Shade of Products	Light	Washing 10/4	Perspiration
Dytx Black	Dischargeability	Day Light 1/11 & 1/16	Hypochlorite Bleach
4.0%	Alkaline	Acidic	Hypochlorite Bleach
Black WNN	4.5	5	5 5 5 4
Black DN	4.5	5	5 5 5 4
Black SJ	4	5	5 5 5 4
Black GSP	4	4	4 5 4 4
Black G	4	5	4 5 4 4

RR Series

Name of Products	General Properties	Fastness Properties	Suitability
Shade of Products	Light	Washing 10/4	Perspiration
Dytx RR	Dischargeability	Day Light 1/11 & 1/16	Hypochlorite Bleach
4.0%	Alkaline	Acidic	Hypochlorite Bleach
Yellow RR	4	4.5	4 4 4 4
Orange RR	4.5	4.5	4 4 4 4
Red RR	4	4	4 4 4 4
Blue RR	4.5	4.5	4 4 4 4

Vinyl Sulfone Series

Name of Products	General Properties	Fastness Properties	Suitability
Shade of Products	Substantivity	Dischargeability	Dischargeability
Dytx VS	Dischargeability	Day Light 1/11 & 1/16	Washing 10/4
1.0%	Alkaline	Acidic	Hypochlorite Bleach
Red 385A Red 239	L 100	G 4	5 5 5 5
Red BS Red 111	H 150	P 6	5 5 5 4
Red F3B Red 180	H 200	P 5	4 5 4 4
Red 180 Red 180	H 100	P 5	4 5 4 4
Violet 5R Violet 5	M 100	P 5	4 5 4 4
Blue 3R Blue 38	H 80	G 6	4 5 4 5
Blue 2R Blue 22	M 100	G 4	5 5 4 4
Nl Blue RGB Blue 25D	M 100	F 4	5 4 5 4
Nl Blue H2GLN Blue 203	H 100	G 4	4 5 4 4
Brown GR Brown 18	M 80	G 5	4 5 5 1
Blue R Blue 19	L 150	F 4	5 4 5 4
Blue FNG	H 100	F 4	4 4 4 4
T. Blue G Blue 21	H 80	P 6	4 5 4 5
Black RL Black 31	H 100	F 6	5 5 5 1
Black B Black 5	VH 150	G 4	5 5 5 1

Printing Series

Name of Products	General Properties	Fastness Properties	Suitability
Shade of Products	Affinity/Substantivity	Dischargeability	Dischargeability
Dytx Hot Printing Series	Dischargeability	Day Light 1/11 & 1/16	Washing 10/4
1.0%	Alkaline	Acidic	Hypochlorite Bleach
Yellow P6G Yellow 95	H 80	M 5	4 5 4 5
Yellow P7G Yellow 57	M 80	M 6	4 5 4 5
Yellow H4G Yellow 18	L 120	G 5	4 5 5 5
G, Yellow HR Orange 12	H 100	F 5	5 5 5 5
Orange H2R Orange 13	H 100	M 3	4 5 5 5
Red P8 Red 24	H 80	P 4	4 5 4 5
Red P3B Red 45	H 80	M 3	5 4 4 5
Red P4B Red 245	H 100	P 4	4 4 4 5
Red P6B Red 218	H 100	P 4	4 4 4 5
Red H1B Red 81	H 70	P 5	4 5 2 5
Magenta HB Magenta 26	M 100	P 3	4 4 4 1
Navy P2R Black 39	M 100	P 3	4 4 4 1
Purple H3R Violet 1	M 80	P 5	4 4 4 4
Blue H5R Blue 13	L 80	P 3	4 4 5 5

Printing Series

Name of Products	General Properties	Fastness Properties	Suitability
Shade of Products	Affinity/Substantivity	Dischargeability	Dischargeability
Dytx Hot Printing Series	Dischargeability	Day Light 1/11 & 1/16	Washing 10/4
1.0%	Alkaline	Acidic	Hypochlorite Bleach
Supra Blue H3R Blue 49	H 80	P 4	4 4 4 2
Tuna Blue H5G Blue 25	H 80	P 4	4 4 4 3
Red Brown H4R Brown 9	H 80	P 4	4 4 4 4
Black HN Black 8	L 80	P 4	4 5 4 5
Black PGR	M 100	P 4	4 4 4 5