Reactive Cold Dyes

These are called “M”-Cold Dyes. These dyes are having very good reactivity fastness properties. These dyes require milder alkaline conditions for applications & fixation at the optimum temperature of 25-35 deg c.

Reactive Cold Dyes	Fastness Properties				
	Light	Washing	Perspiration	Hypochlorite	Dischargeability
Reactive Yellow MGR Reactive Yellow 7	6	5	4-5	4-5	P
Reactive Yellow M4R Reactive Orange 14	5	4-5	4	1	P
Reactive Yellow M4G Reactive Yellow 22	6	4	5	1	G
Reactive Yellow M3R Reactive Yellow 36	6	5	4	2	G
Reactive Gol. Yellow MR Reactive Yellow 44	5	4-5	4	1	P
Reactive Yellow MR EX H/C Reactive Yellow 44	5	4-5	4	1	P
Reactive Yellow M8G Reactive Yellow 86	6	4-5	4-5	1	G
Reactive Orange M2RJ	3-4	4	4	4-5	P
Reactive Orange M2R Reactive Orange 4	5	5	4	4	P
Reactive Red M5B Reactive Red 2	4-5	4-5	3-4	1	P
Reactive Red M8B Reactive Red 11	4-5	4-5	2	4	P
Reactive Violet C4R Reactive Violet 12	4	3	4	1	P
Reactive Magenta MB Reactive Violet 13	4-5	5	4-5	1	F
Reactive Violet C2R Reactive Violet 14	3-4	3	4	1	P

	Reactive Blue MR Reactive Blue 4	6	5	5	2	P
	Reactive Navy Blue M3R Reactive Blue 9	5	4-5	3	3	P
	Reactive Tur. Blue HA5G Reactive Blue 71	6	3-4	4-5	3-4	P
	Reactive Blue M2R Reactive Blue 81	6	5	4-5	1	P
	Reactive Blue M2R H/C Reactive Blue 81	6	5	4-5	1	P
	Reactive Tur. Blue MGN Reactive Blue 140	6	4	4	2-3	P
	Reactive Blue M4GD H/C Reactive Blue 168	6	5	3-4	2	P

Reactive HE Dyes

'HE' Dyes are reactive dyes for dyeing cotton and other cellulosic materials. They have good fixation and tinting properties, making them economical in use, plus excellent reproducibility and compatibility.

Advantages :

- Dyeing Temperature is 80°C
- Suitable for single bath 2 step dyeing of polyester/cotton and polyester/viscose blends with high exhaust levels
- Solubility Range from 45 to 80 Gms/Ltr

Reactive 'HE' Dyes		**Fastness Properties**				
		Light	Washing	Perspiration	Hypochlorite	Dischargeability
	Reactive Yellow HE4R Reactive Yellow 81	5-6	5	4-5	1-2	G
	Reactive G. Yellow HE4R Reactive Yellow 81-A	5	5	4-5	3-4	P
	Reactive Orange HER Reactive Orange 84	3-4	4	4	4-5	P
	Reactive Orange HE2R Reactive Orange 84A	3-4	4	4	4-5	P
	Reactive Yellow HE6G Reactive Yellow 135	4-5	4	4	1	G

	Reactive Red HE5B	4-5	5	5	3	P
	Reactive Red HE3B Reactive Red 120	5	5	4-5	1	P
	Reactive Red HE7B Reactive Red 141	4-5	5	5	3	P
	Reactive Red HE8B Reactive Red 152	4-5	5	5	3-4	P
	Reactive Blue HERD Reactive Blue 160	6	5	4	3	F
	Reactive Navy Blue HER Reactive Blue 171	4	5	4	1-2	F
	Reactive Navy Blue HE2R Reactive Blue 172	4	4-5	4	2	F
	Reactive Navy Blue HEGN Reactive Blue 198	4-5	4-5	3-4	3	F
	Reactive Green HE 4B Reactive Green 19	4	4-5	4-5	1	F
	Reactive Green HE 4BD Reactive Green 19A	4	5	4-5	1	F
	Reactive Black HEBL	4	5	4	3	P

Reactive Hot Dyes

Class: - Monochlorotriazine class (Hot Dyes)
These dyes are having very low reactive and low substantively, hence require more severe conditions for fixation. these dyes are soluble in water at 80-85° C temperature.

Application Suitability:
Printing can be used in exhaust & continuous dyeing process with limited suitability. Positive factor of "Hot Brand Dyes":

- Product range having much chromatic - bright - colors
- Good Tinctorial value obtained in printing
- Very low reactive, so bleeding of color on white fabric is less
- Suitable for application on all popular printing dyeing machines
- Very good shelf life of products.

Reactive Hot Dyes	**Fastness Properties**				
	Light	Washing	Perspiration	Hypochlorite	Dischargeability

	Reactive Gol. Yellow HR Reactive Yellow 12	6	5	5	3	F
	Reactive Yellow H4G Reactive Yellow 18	6	5	5	1	G
	Reactive Yellow H7GL Reactive Yellow 57	6	5	5	2	G
	Reactive Orange H2R Reactive Orange 13	4	5	4	4	P
	Reactive Red H8B Reactive Red 31	4	4	4	3	P
	Reactive Red 6BX Reactive Red 76	4	4	5	2	P
	Reactive Purple H3R Reactive Violate 1	6	4	5	4	P
	Reactive Magenta HB Reactive Violet 13	4	4	4	1	F
	Reactive Blue H2R	4	4	4	2	P
	Reactive Blue H5R Reactive Blue 13	5	5	5	1	P
	Reactive Tur. Blue H5G Reactive Blue 25	5-6	4-5	3	3-4	P
	Reactive Blue H3RP Reactive Blue 49	4	5	4	2	P
	Reactive Navy Blue RX Reactive Blue 59	3	3-4	4-5	1	P
	Reactive Black HN Reactive Black 8	5	4	5	4	P
	Reactive Red Brown H4R Reactive Brown 9	4	5	4	5	P

Reactive ME Dyes

We introduced a new range of bifunctional reactive 'ME' Dyes for our customers who are too conscious of energy consumption. In 'ME' Dyes one molecule is fused with two reactive group vinyl sulphones as well as monochlorotriazine.

The required fixation temperature of 'ME' series dyes is 60 deg C. These dyes have advantage of high exhaustion, high fixation, high alkali stability, very good levelling property, excellent all-around fastness properties like light, washing, and perspiration, rubbing chlorine peroxide bleach.

Reactive ME Dyes		Fastness Properties				
		Light	Washing	Perspiration	Hypochlorite	Dischargeability
	Reactive Yellow ME3RL	6	4-5	4-5	1	F
	Reactive G. Yellow MERL Reactive Yellow 145	5	5	4	4	F
	Reactive Yellow ME4GL Reactive Yellow 160/186	6	4-5	4-5	1	F
	Reactive Orange ME2RL Reactive Orange 122	5	5	4	2	P
	Reactive Red ME3BL Reactive Red 180	5-6	5	5	1	P
	Reactive Red ME4BL Reactive Red 195	6	4-5	4-5	3	P
	Reactive Red ME6BL Reactive Red 196/250	5	4-5	4	3-4	F
	Reactive Blue ME2RL Reactive Blue 158	4	5	4	1	F
	Reactive Navy Blue ME2GL Reactive Blue 194	4-5	4-5	4	1	F
	Reactive Copper Blue BF Reactive Blue 221	6-7	4	4	2	G
	Reactive Blue BF Reactive Blue 222	4-5	4	4	2	G
	Reactive Green ME4GL	4-5	4-5	4	1	F
	Reactive Jet Black HFGR	5-6	5	5	2	F
	Reactive Black HFGR	4	5	4	3	G

Reactive Vinyl Sulphone Base Dyes

Class: - Beta sulphatoethyl sulfone class. These dyes are having moderate reactive.

Application Suitability: - Exhaust dyeing, printing, cold-pad - batch dyeing.

Positive Factors of - V.S. Based Dyes: -

- Very wide products range
- Economical dyes
- Less energy requires for application, so economical for end users
- Suitable for various type of applications
- All round good fastness values.
- Very good self-life of products
- Suitable for application on all popular dyeing machines
- Only dyestuff which are suitable for excellent discharge printing.

Reactive Vinyl Sulphone Base Dyes	**Fastness Properties**				
	Light	Washing	Perspiration	Hypochlorite	Dischargeability
Reactive Yellow GR Reactive Yellow 15	6	5	5	1	G
Reactive G. Yellow R Reactive Yellow 20	5	4-5	5	1	G
Reactive Yellow RTN Reactive Yellow 24	6-7	4	4	2	F
Reactive Yellow GL Reactive Yellow 37	6-7	4-5	5	1	G
Reactive Yellow FG Reactive Yellow 42	5	5	5	1	G
Reactive Yellow R Reactive Yellow 77	4-5	5	5	1	G
Reactive G. Yellow RNL Reactive G. Yellow 107	5	4-5	4-5	1	G
Reactive Orange 2R Reactive Orange 7	4-5	4-5	5	1-2	G
Reactive Orange 3R Reactive Orange 16	5-6	5	5	1	G
Reactive Red 4B Reactive Red 24	6	3-4	5	1	G
Reactive Red 5B Reactive Red 35	6	3-4	5	1	G

	Reactive Red C2G Reactive Red 106	4	4-5	5	1	G
	Reactive Red RB Reactive Red 198	5-6	4-5	4	1	F
	Reactive Violet 5R Reactive Violet 5	6-7	4	3-4	5	P
	Reactive Tur. Blue H2GP	6	4	5	3-4	P
	Reactive Blue R Reactive Blue 19	6-7	4-5	4-5	3-4	F
	Reactive Tur. Blue G Reactive Blue 21	6	4-5	5	3-4	P
	Reactive Blue 3R Reactive Blue 28	7	4	5	3-4	G
	Reactive Dark Blue HR Reactive Blue 89	5-6	3-4	5	1	F
	Reactive Navy Blue GG Reactive Blue 203	4-5	3-4	5	1	F
	Reactive Blue BB Reactive Blue 220	6-7	4	5	1	G
	Reactive Blue RGB Reactive Blue 250	4-5	3-4	4	1	G
	Reactive Black WNN	5	4-5	5	1	G
	Reactive Black B Reactive Black 5	5	4-5	5	1	G
	Reactive Black RL Reactive Black 31	7	4-5	5	3-4	F
	Reactive Brown GR Reactive Brown 18	6	4-5	4	1	G

Reactive Printing Dyes

Printing dyes or Hot dyes. These Reactive Dyestuffs are used for Printing on Cellulose textiles.

Properties

- They are very significant economical.
- Their simplicity and reliability in application.
- The low-cost production of a wide range of shades with good all-round fastness.
- Temperature: 60°C
- Solubility: Categorized into cold, warm, and hot dyes based on the anchor groups
- Steaming is used to fix the dye at 100-150°C
- Reactive Printing dyes react with cellulosic fibre in the presence of alkali and under the influence of heat.

Reactive Printing Dyes	Suitability				Solubility	Fasness Properties			
	Dischargebility	Hypochlorite Bleach	Reactivities	Printing (Steam/Silicate)	With at 50℃ Plain Water	Light (0.25%/3.0%)	Rubbing (Dry/ Wet)	Washing (Shaded-Change/Stain)	Prespiration (Alkaline/Acidic)
Reactive Yellow P4G Reactive Yellow 18	Good	1	L	+ +	80	5-6 6-7	5 4	5 5	(4-5 / 5)
Reactive Yellow H6G Reactive yellow 95	Good	1	L	+ +	70	4-5 5-6	5 4-5	4-5 5	(4-5/5) / (4-5/5)
Reactive g. Yellow PR Reactive orange 12	fair	3	H	+ +	100	5 6	5 4	5 5	(5 / 5)
Reactive orange P2R	fair	4	H	+ +	80	3-4 4-5	5 4	5 5	(5 / 4)

	Reactive orange 13									
	Reactive red P2B Reactive red 24	poor	1	L	+ +	80	4-5 5	4-5 3-4	4-5 4-5	(4/5) / (4-5/4)
	Reactive red P8B Reactive red 31	poor	3-4	H	+ +	100	3-4	5 4	5 5	(4 / 4)
	Reactive red P3B Reactive red 45	poor	1	L	+ +	100	4-5 5-6	4-5 3-4	4-5 4-5	(4-5/4-5) / (4-5/4-5)
	Reactive Red H6B Reactive red 76	fair	2	M	+ +	70	3 3-4	3 2-3	3-4 3	(4 / 4)
	Reactive red P6B Reactive red 218	poor	1	L	+ +	70	4 4-5	4 3	5-4 4	(4-5/4-5) / (4-5/4-5)
	Reactive red P4B Reactive red 245	poor	1	L	+ +	90	4-5 5	4-5 3-4	4-5 4-5	(4/4-5) / (4-5/4-5)
	Reactive	poor	4	M	+ +	100	5-6 6-7	5 5	5 5	(3 / 3)

	Purple H3R Reactive violet 1									
	Reactive megenta PB Reactive violate 46	poor	1-2	H	+ +	80	3-4 4-5	5 4	5 4-5	(4 / 4)
	Reactive Blue H5R Reactive blue 13	poor	1-2	L	+ +	80	5 6	5 4	5 5	(4-5 / 5)
	Reactive T. Blue H5G Reactive blue 25	fair	3	H	+ +	80	4 5	4 4	4 4	(4 / 4)
	Reactive blue P3R Reactive blue 49	poor	2	H	+ +	100	3 4	4 3	4 4-5	(4 / 4)
	Reactive Navy Blue	poor	1-2	H	+ +	100	3 4	4 3	3 3-4	(4 / 4)

	RX Reactive blue 59									
	Reactive t.blue PGR Reactive blue 72	poor	1	L	+ +	72	4 5	4 3-4	4 3-4	(4/3) / (4-5/4)
	Reactive Black HN Reactive black 8	poor	3-4	l	+ +	60	4-5 5	4-5 4-5	5 4-5	(4-5/ 4-5)
	Reactive red P4R Reactive Brown 9	fair	4	L	+ +	80	4 5	4 4	4 4	(4 / 4)