



GAMMACOLOR

REACTIVE DYES

COLD REACTIVE DYES: GAMMAZOL LX/CA/E/HB/S-W; SUPERFIX

Gammazol: reactive dyes of Sulphato Ethyl Sulphone class. They turn into Vinyl Sulphone when linked to the cellulosic fiber: great solubility, good levelling power, good yield, very good reproducibility; cost-effectiveness of dyeing process; application versatility in dyeing and printing.

Gammazol LX : They own great levelling properties; they are especially used for pale shades. Suggested dye temperature: 50-60°C

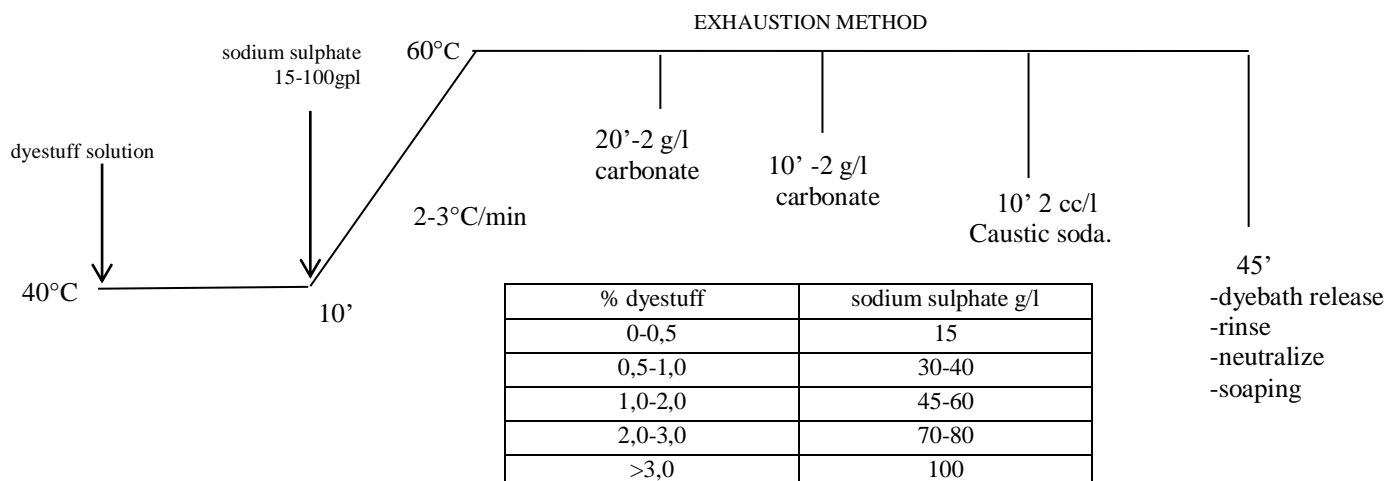
Gammazol E: great reproducibility in pale shades ;high light fastness; good chlorine and perspiration fastness; post-mecerization fastness; Suitable for exhaustion processes, cold pad-batch and continuous processes. Suggested dye temperature: 50-60°C

Gammazol HB: they own great yield due to high fixation % so that less quantities of dyes than conventiona are required= Cost-effectiveness
Less chemicals, time and easier washing off; less dye in effluent; water and energy saving; compatible with other Gammazol dyes series; high reproducibility;good overall fastness. Suggested dye temperature: 50-60°C

Gammazol S-W: it's a new reactive dye series for medium and dark shades. Great build-up properties mean cost-saving; the greatest reproducibility within dark shades; easy washing-off; top quality reactive dyes. Exhaustion application method for fabric and yarn; continuous dyeing and cold-pad-batch for dark shades, knitted and woven fabric.

Superfix: they are bifunctional reactive dyes; chemically they own both Monochlorotriazinic and vinylsulphonic link. They have good reactivity and can be applied ,with exhaustion method, both at 60°C with soda ash and caustic soda or at 80°C with only soda ash .Cold-pad-batch is possible.

Gammazol FL: trichromy of reactive dyes with extremely high light fastness. Suitable both for exhaustion and continuous application method.



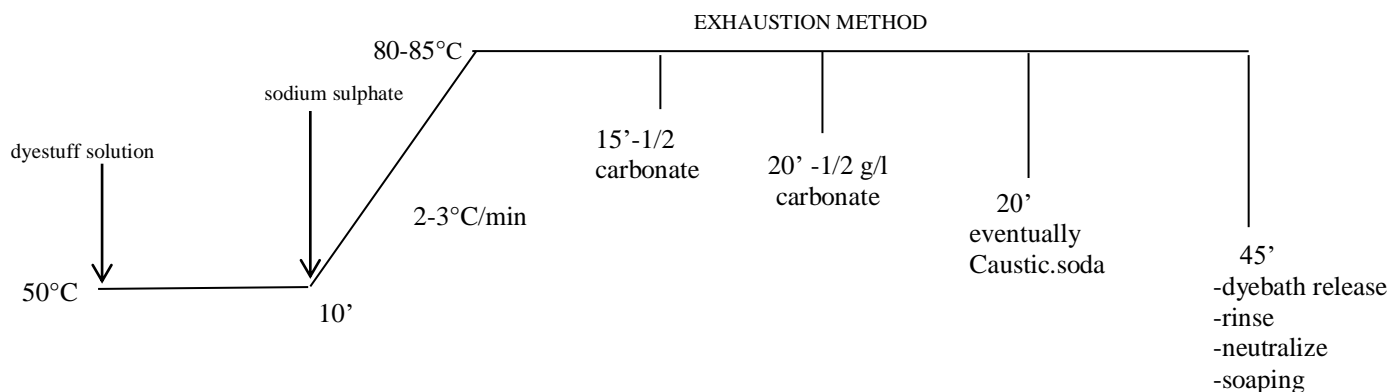
HOT REACTIVE DYES: GAMMAFIX; GAMMAFIX HEXL

Gammacolor Gammafix reactive dyes are suitable for cellulosic fibers dyeing.

These dyes own great exhausting and fixation power; this feature facilitate subsequent operation like washing and soaping.

Gammafix main features:

- excellent repeatability with different liquor ratio.
- great cheapness due to good fixation.
- suitable for polyester/cellulose blends



% dye	Sodium sulphate (g/l)		Alkali (g/l)			Fixation time (min)
	Non mercerized cotton	Mercerized cotton or viscose	If only soda ash	Mixed alkali:		
				Soda ash	Caustic soda 100%	
Up to 0,10	10	5	10	5	0,2	30
0,11-0,30	20	10	10	5	0,2	30
0,31-0,50	30	20	10	5	0,2	45
0,51-1,00	45	30	15	5	0,2	45
1,01-2,00	60	40	15	5	0,5	45
2,01-4,00	70	55	20	5	0,5	60
Above 4,00	90	65	20	5	0,5	60

Note: two dye percentage values are reported for each dye. The top one is a reference for the fastness values indicated, the bottom one refers to the attached dyed fabric.

N.b: the fastness values reported are indicative and do not constitute a guarantee.

Gammazol LX	%	name	CI	Xeno test	Water (severe)	Washing 60°C	Acidic perspirat	Alkaline perspirat.	Chlorinat. water						
										solubility		rubbing		dischargeability	
										20°C	80°C	dry	wet	Neutral	alkaline
		Giallo LX	176	6	5	5	6	5-6	4-5						
			90	100	4-5										
		Rosso LX	223	4-5	5	5	5	5	3						
			100	100	5	4	4-5	1							
		Blu LX	mix	5-6	4	4-5	5	5	2-3						
			160	180	4	4	1	1							

Chlorinated water (20ppm); all the values refer to Staining on cotton.
Light fastness ISO 105 B02 (blue scale up to grade 8)

Gammazol H (dyeing @ 80°C)	%	name	CI	Xeno test	Water (severe)	Washing 60°C	Acidic perspirat	Alkaline perspirat.	Chlorinat. water						
										solubility		rubbing		dischargeability	
										20°C	80°C	dry	wet	Neutral	alkaline
	1	Giallo HRN		4	5	4-5	5	4-5							
			80	100	5	5									
	1	Rosso HF		5	5	4-5	4-5	4-5							
			80	100	4-5	4-5									
	1	Rosso H-B 150%		5	5	4-5	4-5	4-5							
			80	100	4-5	4-5									
	3	BLU HRN		4-5	4	4-5	4-5	4-5							
			100	100	4-5	4									

Chlorinated water (20ppm); all the values refer to Staining on cotton.

Light fastness ISO 105 B02 (blue scale up to grade 8)

Chlorinated water (20ppm); all the values refer to Staining on cotton.

Light fastness ISO 105 B02 (blue scale up to grade 8)

Gammazol E	%	name	CI	Xeno test	Water (severe)	Washing 60°C	Acidic perspirat	Alkaline perspirat.	Chlorinat. water
			solubility		rubbing		dischargeability		
			20°C	80°C	dry	wet	Neutral	alkaline	
	1	Rosso ERN	242	3-4	5	4-5	5	5	4-5
			80	100	3	4-5	1	1	
	1	Rosso E4BA	158	4	5	4	5	5	4-5
			50	100	3	4-5	discharg eable.	discharg eable	
	1	Scarlatt o E2GA	mix	3-4	4-5	4-5	5	5	3-4
			50	100	3	4-5	1	1	
	1	Blu EBNA	225	4	4-5	4-5	4-5	4-5	3
			90	100	3	4-5	3	3	

Aq Chlorinated water (20ppm); all the values refer to Staining on cotton.
Light fastness ISO 105 B02 (blue scale up to grade 8)

Gammazol E	%	name	CI	Xeno test	Water (severe)	Washing 60°C	Acidic perspirat	Alkaline perspirat.	Chlorinat. water
			solubility		rubbing		dischargeability		
			20°C	80°C	dry	wet	Neutral	alkaline	
	2,5	Royal EFR	224	5	4-5	4-5	4-5	4-5	3-4
			200	200	4-5	4-5	Non disch.	Non disch.	
	3	Blu EFFN	181	4	4-5	4	4-5	4-5	1-2
			100	100	4-5	3	Non disch.	Non disch.	
	1	Rosso E6BA	159	2	4-5	4-5	4-5	4-5	4
			150	150	4-5	3	Disch.	Disch.	
	1	Rubino EXF							

Chlorinated water (20ppm); all the values refer to Staining on cotton.
Light fastness ISO 105 B02 (blue scale up to grade 8)

Gammazol E	%	name	CI	Xeno test	Water (severe)	Washing 60°C	Acidic perspirat	Alkaline perspirat.	Chlorinat. water						
										solubility		rubbing		dischargeability	
										20°C	80°C	dry	wet	Neutral	alkaline
	1	ARANCIO E3GA	64	1-2	4-5	4-5	4-5	4-5	3-4						
			100	100	4-5	3	Non disch.	Non disch.							
	1	GIALLO BR. EF													

Chlorinated water (20ppm); all the values refer to Staining on cotton.
Light fastness ISO 105 B02 (blue scale up to grade 8)

Gammazol HB	%	name	CI	Xeno test	Water (severe)	Washing 60°C	Acidic perspirat	Alkaline perspirat.	Chlorinat. water						
										solubility		rubbing		dischargeability	
										20°C	80°C	dry	wet	Neutral	alkaline
	3	Giallo HB-4G	186	>6	5	5	4-5	4-5	3						
			100	100	5	3-4	3-4	4-5							
	3	Giallo HB	mix	>6	5	4-5	4-5	4-5	2						
			100	100	5	3-4	4	3							
	1	Giallo HB R		4	5	4-5	4-5	4-5							
			100	100	5	5									
	3	Arancio HB	mix	6	5	4-5	4-5	4-5	2-3						
			100	100	5	3-4	4-5	5							

Chlorinated water (20ppm); all the values refer to Staining on cotton.
Light fastness ISO 105 B02 (blue scale up to grade 8)

Gammazol HB	%	name	CI	Xeno test	Water (severe)	Washing 60°C	Acidic perspirat	Alkaline perspirat.	Chlorinat. water	
										solubility
				20°C	80°C	dry	wet	Neutral	alkaline	
	3	Rosso HB-2B	mix	5	4-5	4-5	4-5	4-5	4-5	3
			100	100	5	2-3	2-3	1-2		
	3	Rosso HB-3B	mix	5	4-5	4-5	4-5	4-5	4-5	4
			100	100	5	3	2-3	1-2		
	1	Rosso HB-7B	mix	5	5	4-5	5	5	5	1
			100	100	4-5	4-5	2-3	3		
	3	Rosso HB	mix	4-5	4-5	4-5	4-5	4-5	4-5	3-4
			100	100	5	3	2-3	1-2		

Chlorinated water (20ppm); all the values refer to Staining on cotton.
Light fastness ISO 105 B02 (blue scale up to grade 8)

Gammazol HB	%	name	CI	Xeno test	Water (severe)	Washing 60°C	Acidic perspirat	Alkaline perspirat.	Chlorinat. water
			solubility		rubbing		dischargeability		
			20°C	80°C	dry	wet	Neutral	alkaline	
	10 gpl	Rosso prof.HB							
	3	Blu HB	mix	5	4-5	4-5	4-5	4-5	4
			100	100	4-5	2-3	2	2	
	2	Blu HB-G							
	2	Marino HB	mix	4-5	4-5	4-5	4-5	4-5	3-4
			100	100	4-5	2-3	3-4	3-4	

Chlorinated water (20ppm); all the values refer to Staining on cotton.
Light fastness ISO 105 B02 (blue scale up to grade 8)

Gammazol HB	%	name	CI	Xeno test	Water (severe)	Washing 60°C	Acidic perspirat	Alkaline perspirat.	Chlorinat. water	
										solubility
			20°C	80°C	dry	wet	Neutral	alkaline		
	6	Nero HB	mix	5-6	4-5	4-5	4-5	4-5	4-5	
			100	100	4-5	2-3	4	4-5		
	6	Nero HBG	mix	6	4-5	4-5	4-5	4-5	3-4	
			100	100	4-5	2-3	3-4	4		
	6	Nero HBR	mix	5-6	4-5	4-5	4-5	4-5	4-5	4-5
			100	100	5	2-3	4	4		
	3	Royal HB	mix	4-5	4-5	4-5	4-5	4-5	1	
			100	100	5	3-4	1	1		

Chlorinated water (20ppm); all the values refer to Staining on cotton.
Light fastness ISO 105 B02 (blue scale up to grade 8)

Gammazol	%	name	CI	Xeno test	Water (severe)	Washing 60°C	Acidic perspirat	Alkaline perspirat.	Chlorinat. water
			solubility		rubbing		dischargeability		
			20°C	80°C	dry	wet	Neutral	alkaline	
	1	Giallo Brill. 4GL 200%	160	6	5	5	5	5	2
			100	100			3	3	
	1	Giallo Brill. 2GL 150%	37	6-7	5	5	4-5	4-5	2-3
			100	100			2-3	2-3	
	1	Giallo LS-4G	mix	6	4	4	4-5	4-5	4
			160	120	4-5	4	Dischar.	Dischar.	

Chlorinated water (20ppm); all the values refer to Staining on cotton.
Light fastness ISO 105 B02 (blue scale up to grade 8)

Gammazol	%	name	CI	Xeno test	Water (severe)	Washing 60°C	Acidic perspirat	Alkaline perspirat.	Chlorinat. water
			solubility		rubbing		dischargeability		
			20°C	80°C	dry	wet	Neutral	alkaline	
	1	Giallo GR 150%	15	6	5	5	5	5	1
			100	100			3-4	3-4	
	1	Giallo RI	mix	5-6	5	5	4-5	4-5	1
			100	100			3-4	3-4	
	1	Giallo Oro RNL 150%	107	5	4-5	5	4-5	5	2-3
			90	90			4	4	

Chlorinated water (20ppm); all the values refer to Staining on cotton.
Light fastness ISO 105 B02 (blue scale up to grade 8)

Gammazol	%	name	CI	Xeno test	Water (severe)	Washing 60°C	Acidic perspirat	Alkaline perspirat.	Chlorinat. water
			solubility		rubbing		dischargeability		
			20°C	80°C	dry	wet	Neutral	alkaline	
	1	Arancio Brill. 3R	16	5-6	5	5	5	5	2
			80	80			3	3	
	1	Rosso RBL 133%	198	3-4 4 5	4-5	4-5	4-5	4-5	2-3
			100	-	4-5	4	Partial	partial	
	2	Rosso F3B 100%	180	3 3-4 4-5	5	5	4-5	4-5	4-5
						4-5	3	good	good
	1,5	Rosso Brill BB 150%	21	4-5	5	5	4-5	4-5	2
			100	100	5	3-4	4-5	4-5	

Chlorinated water (20ppm); all the values refer to Staining on cotton.
 Light fastness ISO 105 B02 (blue scale up to grade 8)
 .when 3 values reported: 2/1,1/1, 1/12 of the shade

Gammazol	%	name	CI	Xeno test	Water (severe)	Washing 60°C	Acidic perspirat	Alkaline perspirat.	Chlorinat. water
			solubility		rubbing		dischargeability		
			20°C	80°C	dry	wet	Neutral	alkaline	
	1	Rosso Brill 3B	23	4	4-5	5	5	5	3-4
			70	100	3-4	3-4	2	2	
	2	Rubino GR	170	7	4-5	5	4-5	4-5	4-5
			100	100			3-4	3-4	
	1,5	Violetto Brill. 5R 150%	5	6-7	5	3-4	4	4	3-4
			100	100			3	3	
	1	Turchese G 150%	21	5	5	4-5	5	5	3-4
			100	100	4-5	3	2	2	

Chlorinated water (20ppm); all the values refer to Staining on cotton.
Light fastness ISO 105 B02 (blue scale up to grade 8)

Gammazol FL	%	name	CI	Xeno test	Water (severe)	Washing 60°C	Acidic perspirat	Alkaline perspirat.	Chlorinat. water
			solubility		rubbing		dischargeability		
			20°C	80°C	dry	wet	Neutral	alkaline	
	1,8	Giallo FL-2R	Nd	6* 5*	4-5	4-5	4-5	4-5	4-5
			150	nd	4-5	4	Dischar.	Dischar.	
	4	Rosso FL-2BL	Nd	6+* 3-4*	4-5	4-5	4-5	4-5	4
			95	nd	4-5	3	Dischar..	Dischar.	
	3,8	Blu FL-R	nd	6* 4*	4-5	3-4	3-4	3-4	4
			110	nd	4-5	3	Non Dischar.	Non Dischar.	

Chlorinated water (20ppm); all the values refer to Staining on cotton.

Light fastness ISO 105 B02 (blue scale up to grade 8)

*Only for the term FL: xenotest till maximum value scale =6

When 2 values reported: 1/1, 1/10 of the shade

Gammazol	%	name	CI	Xeno test	Water (severe)	Washing 60°C	Acidic perspirat	Alkaline perspirat.	Chlorinat. water
			solubility		rubbing		dischargeability		
			20°C	80°C	dry	wet	Neutral	alkaline	
	1	Sky Blue G		6		4-5	4-5	5	3
			200	200			Non Dischar.	Non Dischar.	
	1	Verde Brill. 6B	38	6	5	4	4	4	2
			100	100	4-5	2-3	2	2	
	1	Blu Brill. R special	19	7	5	5	4-5	4-5	3-4
			100	100			2	2	
	1,5	Blu Brill FG2B	220	6-7	5	4-5	4-5	4-5	4
			100	100			3	3	

Chlorinated water (20ppm); all the values refer to Staining on cotton.
Light fastness ISO 105 B02 (blue scale up to grade 8)

Gammazol	%	name	CI	Xeno test	Water (severe)	Washing 60°C	Acidic perspirat	Alkaline perspirat.	Chlorinat. water						
										solubility		rubbing		dischargeability	
										20°C	80°C	dry	wet	Neutral	alkaline
	1	Blu FNR	235	6 7 7	5	5	5	4-5	4						
			100	100	4-5	3									
	1	Blu FNG	Mix	5 6-7 6-7	5	5	5	4-5	3						
			100	100	4-5	3									
	1	Blu Scuro SLT	Mix	5-6 6-7	5	4	4-5	3-4	3-4						
			200	200			3	3							
	1	Blu TS-3G													

Chlorinated water (20ppm); all the values refer to Staining on cotton.

Light fastness ISO 105 B02 (blue scale up to grade 8)

When 3 values reported: 2/1,1/1, 1/12 of the shade; when 2 values reported: 1/1, 1/10 of the shade.

Gammazol	%	name	CI	Xeno test	Water (severe)	Washing 60°C	Acidic perspirat	Alkaline perspirat.	Chlorinat. water						
										solubility		rubbing		dischargeability	
										20°C	80°C	dry	wet	Neutral	alkaline
	2	Blu RGG	mix	4-5	4-5	4-5	4-5	4-5	2-3						
			100	100			3	3							
	2	Blu 3R	28	6-7	5	4-5	4-5	4-5	3						
			100	100			3	3							
	2	Blu HR	89	5	4-5	4-5	4-5	4-5	2						
			100	100			4-5	4-5							
	3	Blu marino GG	203	5	4-5	5	4-5	4-5	2-3						
			100	100			3	3							

Chlorinated water (20ppm); all the values refer to Staining on cotton.
Light fastness ISO 105 B02 (blue scale up to grade 8)

Gammazol	%	name	CI	Xeno test	Water (severe)	Washing 60°C	Acidic perspirat	Alkaline perspirat.	Chlorinat. water
			solubility		rubbing		dischargeability		
			20°C	80°C	dry	wet	Neutral	alkaline	
	1	Grigio 106E	Mix	6 7	5	4-5	5	5	2
			80	80			3	3	
	6	Nero RL 150%	31	7	5	4-5	5	5	2
			80	80			3	3	
	3	Nero B 150%	5	4	5	4-5	4-5	4-5	2
			100	100			4-5	4-5	

Chlorinated water (20ppm); all the values refer to Staining on cotton.
 Light fastness ISO 105 B02 (blue scale up to grade 8)
 Whe 2 values reported: 1/1, 1/10 of the shade

Gammazol	%	name	CI	Xeno test	Water (severe)	Washing 60°C	Acidic perspirat	Alkaline perspirat.	Chlorinat. water
			solubility		rubbing		dischargeability		
			20°C	80°C	dry	wet	Neutral	alkaline	
	5	Nero N 150%	Mix	4-5	4-5	4-5	4-5	4-5	1
			100	100			4-5	4-5	
	4	Nero VNN	mix	5	4-5	4-5	4-5	4-5	1-2
			150	150			Dischar.	Dischar.	

Chlorinated water (20ppm); all the values refer to Staining on cotton.
Light fastness ISO 105 B02 (blue scale up to grade 8)

Gammafix HEXL	%	name	CI	Xeno test	Water (severe)	Washing 60°C	Acidic perspirat	Alkaline perspirat.	Chlorinat. water						
										solubility		rubbing		dischargeability	
										20°C	80°C	dry	wet	Neutral	alkaline
	1	Giallo HEXL		5 5		5			4						
				50				Non Dischar.							
	1	Arancio brill. HEXL		3-4 3-4		4-5			4						
				75				Non Dischar.							
	1	Rosso prof. HEXL		4 3-4		4-5			3-4						
				100				Non Dischar.							

Chlorinated water (20ppm); all the values refer to Staining on cotton.
Light fastness ISO 105 B02 (blue scale up to grade 8)
When 2 values reported : 1/1, 1/10 of the shade

Gammafix HEXL	%	name	CI	Xeno test	Water (severe)	Washing 60°C	Acidic perspirat	Alkaline perspirat.	Chlorinat. water	
				solubility		rubbing		dischargeability		
				20°C	80°C	dry	wet	Neutral	alkaline	
	1	Cremisi HEXL		4 3-4		4-5			4-5	
				100				Non Dischar.		
	1	Royal HEXL		4 3-4		4			2	
				100				Dischar.		
	1	Marino HEXL		4 3-4		4-5			3-4	
				100				Dischar.		
	1	Blu scuro HEXL		5 5		4-5			3-4	
				60				Non Dischar.		

Chlorinated water (20ppm); all the values refer to Staining on cotton.
 Light fastness ISO 105 B02 (blue scale up to grade 8)
 When 2 values reported : 1/1, 1/10 of the shade

Gammazol	%	name	CI	Xeno test	Water (severe)	Washing 60°C	Acidic perspirat	Alkaline perspirat.	Chlorinat. water
			20°C	80°C	dry	wet	Neutral	alkaline	
		Golden Yellow RB (S3R)		4-5	5	5	5	5	3
			100	100			partial	partial	
		Orange R3R (W3R)		4	5	5	4-5	4-5	3RD
			100	100			Dischar.	Dischar.	
		Deep Orange R4R (S4R)		3-4	5	4-5	4-5	5	4
			100	100			Dischar.	Dischar.	
		Deep red RF (SB)		4	5	4-5	4	4	2-3
			100	100			Non Dischar.	Non Dischar.	

Chlorinated water (20ppm); all the values refer to Staining on cotton.
Light fastness ISO 105 B02 (blue scale up to grade 8)

Gammazol	%	name	CI	Xeno test	Water (severe)	Washing 60°C	Acidic perspirat	Alkaline perspirat.	Chlorinat. water
			solubility		rubbing		dischargeability		
			20°C	80°C	dry	wet	Neutral	alkaline	
	3	Red WB		4	4-5	4-5	4	4	2-3
	0,5		100	100					
		Dark Blue W -R		5	5	4-5	5	5	2
			100	100			Non Dischar.	Non Dischar.	
	3	Navy WB		3-4	5	4-5	5	5	1
	2		100	100			Dischar.	Dischar..	

Chlorinated water (20ppm); all the values refer to Staining on cotton.
Light fastness ISO 105 B02 (blue scale up to grade 8)

Gammazol	%	name	CI	Xeno test	Water (severe)	Washing 60°C	Acidic perspirat	Alkaline perspirat.	Chlorinat. water
			solubility		rubbing		dischargeability		
			20°C	80°C	dry	wet	Neutral	alkaline	
	10	Black HBG		5-6	4-5	4-5	4-5	4-5	4-5
			100	100					
	10	Black HBR		5-6	4-5	4-5	4-5	4-5	4-5
	2		100	100					
	1	Deep Cherry R-D (S-D)		4-5	5	4-5	5	5	4-5
	0,5		100	100			Non Dischar.	Non Dischar.	
	2	Ruby R3B (S3B)		5	5	4-5	5	5	4-5
			100	100			Non Dischar.	Non Dischar.	

Chlorinated water (20ppm); all the values refer to Staining on cotton.
Light fastness ISO 105 B02 (blue scale up to grade 8)

Superfix	%	name	CI	Xeno test	Water (severe)	Washing 60°C	Acidic perspirat	Alkaline perspirat.	Chlorinat. water
			20°C	80°C	dry	wet	Neutral	alkaline	
	1	GIALLO BRILL. 4GL	186	5	5	4-5	3-4	3-4	2
		200% (superfix)		100					
	1	GIALLO 3RF	145	6	5	4-5	4-5	4-5	4-5
		150% (superfix)		100					
	1	ARANCIO 2RL	122	5	4-5	4-5	4-5	4-5	2
		(superfix)		80					

Chlorinated water (20ppm); all the values refer to Staining on cotton.
Light fastness ISO 105 B02 (blue scale up to grade 8)

Superfix	%	name	CI	Xeno test	Water (severe)	Washing 60°C	Acidic perspirat	Alkaline perspirat.	Chlorinat. water	
				solubility		rubbing		dischargeability		
				20°C	80°C	dry	wet	Neutral	alkaline	
	1	SCARLATTO 2GF	Mix	4	4-5	4-5	4	4	3	
					100					
	2	ROSSO GF 150%	223	5-6	5	4-5	4-5	4-5	4-5	
					100					
	1	ROSSO 3BF 150%	195	5	5	4-5	4	4	5	
					100					
	1	BLU BRILL. BRF 150%	221	5-6	4-5	4-5	4	4	3-4	
					100					

Chlorinated water (20ppm); all the values refer to Staining on cotton.
Light fastness ISO 105 B02 (blue scale up to grade 8)

Superfix	%	name	CI	Xeno test	Water (severe)	Washing 60°C	Acidic perspirat	Alkaline perspirat.	Chlorinat. water						
										solubility		rubbing		dischargeability	
										20°C	80°C	dry	wet	Neutral	alkaline
	2	BLU 2GF	194	4-5	4-5	4-5	3-4	3-4	4						
				100											
	2	BLU MARINO BF	222	5	4-5	5	4	4	4-5						
				100											

Chlorinated water (20ppm); all the values refer to Staining on cotton.
Light fastness ISO 105 B02 (blue scale up to grade 8)

Gammafix (dyeing @ 80°C)	%	name	CI	Xeno test	Water (severe)	Washing 60°C	Acidic perspirat	Alkaline perspirat.	Chlorinat. water
			solubility 30°C		rubbing		dischargeability		
					dry	wet			
	3	Verde H4BD	19	4	3-4	4	2-3	3	2
				60		5	2-3	low	
	2	Giallo Brill. H-6G	135	4-5	4-5	5	4-5	4-5	3
				80		5	3-4	4	
	1	Giallo H 3G	81- 105	5-6	5	5	4-5	4-5	1-2
				60		5	3-4	4	
	1	Giallo Oro H 4R	84	5	4-5	5	4-5	4-5	4
				80		3-4	3	low	

Chlorinated water (20ppm); all the values refer to Staining on cotton.
Light fastness ISO 105 B02 (blue scale up to grade 8)

Gammafix (dyeing @ 80°C)	%	name	CI	Xeno test	Water (severe)	Washing 60°C	Acidic perspirat	Alkaline perspirat.	Chlorinat. water
			solubility 30°C		rubbing		dischargeability		
					dry	wet			
	1	Arancio HR	84	4-5	4-5	5	4	3-4	3
				70		3-4	2-3	low	
	1	Scarlatto H 3G	43	5	4-5	4	4	3-4	2-3
				100		4	3	low	
	1	Rosso H 3B	120	5	5	5	4-5	4-5	3
				140		4	3	low	
	1	Rosso H 7B	141	4-5	5	4-5	4-5	4-5	3-4
				80		4	3	low	

Chlorinated water (20ppm); all the values refer to Staining on cotton.
Light fastness ISO 105 B02 (blue scale up to grade 8)

Gammafix (dyeing @ 80°C)	%	name	CI	Xeno test	Water (severe)	Washing 60°C	Acidic perspirat	Alkaline perspirat.	Chlorinat. water
			solubility 30°C		rubbing		dischargeability		
					dry	wet			
	1	Blu HRD	160	5-6	5	4-5	4	4-5	3-4
			90		4	4	low		
	3	Blu Marino HR 150%	171	5	5	4-5	4-5	4-5	3
			90		3-4	3-4	partial		
	2	Blu HGN 125%	198	5-6	4-5	4-5	4	4	3
			150		4	3	low		
	1	Turchese HA	71	5	4-5	4-5	4-5	4-5	3-4
			110		4-5	4	low		

Chlorinated water (20ppm); all the values refer to Staining on cotton.
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