

Kayacelon React Colors (98°C~130°C)

Kayacelon React	%o.w.f.	溶解度 g/L Solubility	耐光 Light		汗耐光 Perspiration/Light		皂洗 Washing : ISO (Test 2 : 50°C)			耐氯处理水 Chlorinated Water 10ppm
			ISO	AATCC	JIS	ATTS	Change Shade	Cotton	Silk	
Yellow CN-4G	2.0	70	4-5	4-5	4	4	4-5	4-5	4-5	2
Yellow CN-ML	2.0	20	5	5	4-5	4-5	4-5	4-5	4-5	4
Yellow CN-EX	2.0	100	5	5	4-5	4-5	4-5	4-5	4-5	4-5
Brown CN-AL	2.0	50	3-4	3-4	4	3-4	4-5	4-5	4-5	4
Red CN-3B	2.0	15	4	3-4	4	3	4-5	4-5	4-5	4-5
Blue CN-BL	2.0	20	5	4-5	4	2	4-5	4-5	4-5	2-3
Blue CN-MG	2.0	30	4	3-4	3-4	2	4-5	4-5	4-5	3
Dark Blue CN-R	4.0	35	3-4	3-4	3-4	2-3	4-5	4-5	4-5	4
Turquoise CN-2G	2.0	50	4	3-4	4-5	2-3	4-5	4-5	4-5	1-2

染色条件 Dyeing condition : 高温染色 High-temperature Dyeing
 被染物 Material : 无丝光棉 Non-mercerized Cotton
 浴比 Liquor ratio : 1:15 (15:1)
 染色 pH Dyeing pH : 7.0 (Kayaku Buffer P-7 1g/L)
 芒硝 Glauber's Salt : 染色浓度 Dyeing depth 2%o.w.f. = 30g/L, 4%o.w.f. = 70g/L
 温度时间 Temperature and Time : 130°C×30min. → 水洗 Water rinsing
 后处理 After treatment : 皂洗 Kayatector E 1g/L, 95°C×20min. (Reproducibility improvement agent)

Kayacion CF Colors (60°C)

Kayacion	%o.w.f.	溶解度 g/L Solubility	耐光 Light		汗耐光 Perspiration/Light		皂洗 Washing : ISO (Test 2 : 50°C)			耐氯处理水 Chlorinated Water 10ppm
			ISO	AATCC	JIS	ATTS	Change Shade	Cotton	Silk	
Yellow CF-3R 150	2.0	100	5	5	4-5	4	4-5	4-5	4-5	4
Brown CF-4R 150	2.0	100	3-4	3-4	4	2	4-5	4-5	4-5	3-4
Red CF-3B 150	2.0	100	4	3-4	4	3	4-5	4-5	4-5	4-5
Blue CF-G 150	2.0	90	3-4	3-4	3-4	2	4-5	4-5	4-5	3-4
Blue CF-BR	2.0	100	4-5	4-5	4	3	4-5	4-5	4-5	2-3
Brill. Blue CF-R 150	2.0	90	5↑	5↑	4-5	3-4	4-5	4-5	4-5	2
Navy CF-B	4.0	80	3-4	3-4	4	3	4-5	4-5	4-5	4
Grey CF-2B 150	2.0	100	3-4	3	3-4	1-2	4-5	4-5	4-5	4
Black B 150	4.0	100	4	3-4	4	2-3	4-5	4-5	4-5	4
Black CF-BG	8.0	100	4	3-4	4	3	4-5	4-5	4-5	4
Black CF-R	8.0	100	4	3-4	4	3	4-5	4-5	4-5	4
Yellow CF-3GL	2.0	100	5	4-5	4-5	4	4-5	4-5	4-5	3
Yellow CF-3RL	2.0	100	5	5	4-5	4	4-5	4-5	4-5	4
Red CF-4BL	2.0	100	4	4	4	3-4	4-5	4-5	4-5	3-4
Blue CF-BL	2.0	100	5	4-5	4	3	4-5	4-5	4-5	3
Yellow CF-COM	2.0	100	5	5	4-5	4	4-5	4-5	4-5	4
Red CF-COM	2.0	100	3-4	3-4	3-4	2-3	4-5	4-5	4-5	4
Blue CF-COM	2.0	100	4	3-4	4	2	4-5	4-5	4-5	4
Blue CF-COMJ	2.0	100	5	4	4	2	4-5	4-5	4-5	2-3
Navy CF-COM	4.0	100	3-4	3-4	4	2-3	4-5	4-5	4-5	4
Yellow PL-COM	0.5	100	5	5	4-5	4	4-5	4-5	4-5	4
Red PL-COM	0.5	100	4-5	4-5	4	3	4-5	4-5	4-5	3
Blue PL-COM	0.5	100	4-5	4-5	4	3	4-5	4-5	4-5	2

染色条件 Dyeing condition : 浸染 Exhaustion Dyeing
 被染物 Material : 无丝光棉 Non-mercerized Cotton
 浴比 Liquor ratio : 1:15 (15:1)
 芒硝 Glauber's Salt : 染色浓度 Dyeing depth 0.5%o.w.f. = 20g/L, 2.0%o.w.f. = 30g/L, 4.0%o.w.f. = 50g/L, 8.0%o.w.f. = 90g/L
 纯碱 Soda ash : 20g/L
 染色助剂 Dyeing agent : Kayatector E 1g/L. (染色再现性向上剂 Reproducibility improvement agent)
 温度时间 Temperature and Time : 60°C×60min. → 水洗 Water rinsing → 酸中和 Acid neutralization
 后处理 After treatment : 皂洗 Soaping, 95°C×20min.

Kayacion E Colors (80°C)

Kayacion	%o.w.f.	溶解度 g/L Solubility	耐光 Light		汗耐光 Perspiration/Light		皂洗 Washing : ISO (Test 2 : 50°C)			耐氯处理水 Chlorinated Water 10ppm
			ISO	AATCC	JIS	ATTS	Change Shade	Cotton	Silk	
Yellow E-LE conc	2.0	150	5	5	4-5	4	4-5	4-5	4-5	4
Brown E-LE conc	2.0	25	3-4	3-4	4-5	4	4-5	4-5	4-5	4
Magenta E-LE conc	2.0	100	4	4	4-5	4	4-5	4-5	4-5	4-5
Blue E-LE conc	2.0	60	3-4	3-4	4	2-3	4-5	4-5	4-5	3
Marine E-LE conc	2.0	100	3-4	3-4	4	3	4-5	4-5	4-5	4
Black E-LE conc	8.0	100	3-4	3-4	4	3-4	4-5	4-5	4-5	4
Lemon E-CG	2.0	100	5	4-5	4-5	4	4-5	4-5	4-5	3
Turquoise E-CG	2.0	100	4-5	4-5	3-4	2-3	4-5	4	4-5	1-2
Blue E-CG	2.0	100	4-5	4-5	4	2-3	4-5	4-5	4-5	2
Yellow E-SNA	2.0	80	5	5	4-5	4-5	4-5	4-5	4-5	3-4
Yellow E-S4R	2.0	40	5	5	4-5	4-5	4-5	4-5	4-5	4
Red E-S3B	2.0	100	4	4	4-5	4	4-5	4-5	4-5	4-5

染色条件 Dyeing condition : 浸染 Exhaustion Dyeing
 被染物 Material : 无丝光棉 Non-mercerized Cotton
 浴比 Liquor ratio : 1:15 (15:1)
 芒硝 Glauber's Salt : 染色浓度 Dyeing depth 2.0%o.w.f. = 40g/L, 8.0%o.w.f. = 80g/L
 纯碱 Soda ash : 20g/L
 染色助剂 Dyeing agent : Kayatector E 1g/L. (染色再现性向上剂 Reproducibility improvement agent)
 温度时间 Temperature and Time : 80°C×60min. → 水洗 Water rinsing
 后处理 After treatment : 皂洗 Soaping, 95°C×20min.

Kayacion P Colors (印花 Printing dyeing)

Kayacion	%o.w.p.	溶解度 g/L Solubility	耐光 Light		汗耐光 Perspiration/Light		皂洗 Washing : ISO (Test 2 : 50°C)			耐氯处理水 Chlorinated Water 10ppm
			ISO	AATCC	JIS	ATTS	Change Shade	Cotton	Silk	
Yellow P-5G	3.0	150	5↑	5↑	4-5	4-5	4-5	4-5	4-5	1 ^D
Yellow P-N3R	3.0	80	5↑	5↑	4-5	4-5	4-5	4-5	4-5	4
Orange P-G	3.0	100	5	5	4-5	4-5	4-5	4-5	4-5	3
Brown P-N4R	3.0	100	5↑	5↑	4-5	4	4-5	4-5	4-5	4-5
Scarlet P-NA	3.0	120	5	5	4-5	4	4-5	4-5	4-5	4
Red P-4BN	3.0	200	5	5	4-5	4	4-5	4-5	4-5	4-5
Blue P-3R	3.0	120	5↑	5	4-5	4-5	4-5	4-5	4-5	2-3 ^D
Blue P-NFB 150	3.0	250	5↑	4-5	4-5	4	4-5	4-5	4-5	3
Navy P-N2R	3.0	130	3-4	3-4	4-5	3-4	4-5	4-5	4-5	4
Black P-GS	6.0	90	5↑	5	4-5	4-5	4-5	4-5	4-5	4

染色条件 Dyeing condition : 常压汽蒸法 Steaming
 被染物 Material : 丝光棉 Mercerized Cotton
 色浆 Color paste recipe : X
 Kayacion P : 100
 尿素 Urea : Y
 温水 Hot water : 500
 海藻酸钠 Sodium alginate 8%paste : 10
 还原防止剂 Reduction inhibitor : 20
 小苏打 Sodium bicarbonate : 1000
 工程 Process : 印花 printing → 中间干燥 Drying 100°C×3min. → 汽蒸 100~103°C×5~10min.
 → 水洗 Water rinsing
 后处理 After treatment : 皂洗 Soaping, 95°C×20min.

牢度条件 Fastness condition

耐晒 Light : ISO 105-B02 (Xenon-arc Black panel : 53°C) & AATCC 16-3(xenon-arc Black panel : 63°C)
 汗耐光 Perspiration/Light : JIS (Xenon-arc) & ATTS(Xenon-arc)
 耐氯处理水 Chlorinated Water : JIS 0884 10ppm

一般分散染料 (For regular polyester fibers)						
	色样	%o. w. f.	耐晒 Light ISO	耐皂洗 Washing ISO Tset 2		升华 Sublimation
				PET	Ny	
Kayalon Polyester						
Yellow 3G 200		1.0	7	4-5	4-5	3
Yellow 4GN		1.0	7	4-5	4-5	4-5
Yellow YL-SE		1.0	7↑	4-5	4-5	4
Yellow BRL-S 200 *		1.0	7	4-5	4-5	4-5
Orange R-SF 200		1.0	6	4-5	4-5	4-5
Light Orange 4RL		2.0	7↑	4-5	4-5	3
Y. Brown 2RL-S conc		1.2	7	4-5	4-5	4
Y. Brown 3RL(EG) 143		1.4	7	4-5	4-5	3-4
Brown A-S(EG) 143		1.4	6	4-5	4-5	4
L. Scarlet G-S 200		1.0	5-6	4-5	4-5	4
Scarlet 2R-E(N)		2.0	6	4-5	4-5	3
Scarlet RL-SF		2.0	6-7	4-5	4-5	4-5
L. Red B-S 200		1.0	6	4-5	4-5	4
Red BR-S		2.0	6	4-5	4-5	4-5
Red AN-SE		1.0	6	4-5	4-5	3-4
Red TL-SF		2.0	7↑	4-5	4-5	4-5
Brill. Red FBN-S		1.0	5-6	4-5	4-5	4-5
Red 3BL-S 200		1.0	6	4-5	4-5	4-5
Rubine 3GL-S 150		1.3	6-7	4-5	4-5	4-5
Rubine 2G		1.3	6-7	4-5	4-5	4-5
Rubine GL-SE 200		1.0	6-7	4-5	4-5	3
Rubine BL-S 200		1.0	6-7	4-5	4-5	4-5
Red Violet FBL conc		1.0	6	4-5	4-5	3-4
Blue CR-E 200		1.0	6	4-5	4-5	3
Blue AN-SE		1.0	5-6	4-5	4-5	3-4
Blue T-S new		2.0	5-6	4-5	4	4-5
Blue TN-S 200		1.0	5-6	4-5	4	4-5
Blue BGN		1.0	5-6	4-5	4	4
Blue GL-SF 200		0.4	5-6	4-5	4-5	4-5
Blue BD-S conc		2.0	5	4-5	4-5	4-5
T. Blue GL-S(C) 200		1.0	7↑	4-5	4-5	4

一般分散染料 (For regular polyester fibers)						
	色样	%o. w. f.	耐晒 Light ISO	耐皂洗 Washing ISO Tset 2		升华 Sublimation
				PET	Ny	
Kayalon Polyester						
N. Blue TKN-SF 200		2.0	5-6	4-5	4-5	4-5
N. Blue ECX 300		1.3	5	4-5	4-5	3-4
N. Blue ECXN 350		1.1	5	4-5	4-5	3-4
N. Blue RV-SF 200		2.0	5-6	4-5	4-5	4
Grey 3B-SF		2.0	5	4-5	4-5	4-5
Black BRN-SF 200 *		3.5	6	4-5	4-5	4
Black ECX 300		2.3	5-6	4-5	4-5	3-4
Black ECXN 300		2.3	5-6	4-5	4-5	3-4
Black RV-SF 300 *		2.3	6-7	4-5	4-5	4

涤/氨混纺用 (For polyester/polyurethane blend)						
Kayalon Polyester						
	色样	%o. w. f.	耐晒 Light ISO	PET	Ny	升华 Sublimation
Yellow UT-YA		1.0	6↑	4-5	4-5	4-5
Red UT-2B		1.5	6	4-5	4-5	4-5
Red UT-YA		1.5	6	4-5	4-5	4-5
Blue UT-YA		2.0	5-6	4-5	4-5	4-5
Black UT-RN		8.0	6	4-5	4-5	4

超细纤维用 (For Micro polyester)						
KayalonMicroester						
	色样	%o. w. f.	耐晒 Light ISO	PET	Ny	升华 Sublimation
Yellow AQ-LE		0.5	7	4-5	4-5	3-4
Red AQ-LE		0.5	7	4-5	4-5	3
Blue AQ-LE		0.5	6	4-5	4-5	3-4
Yellow C-LS(N)		1.8	7	4-5	4-5	4-5
Red C-LS(EG) conc		1.0	6-7	4-5	4-5	4-5
Blue C-LS conc		1.0	5-6	4-5	4-5	4
Yellow 6L-SF		1.0	7	4-5	4-5	4
Red TL-SF		1.0	7	4-5	4-5	4-5
Blue 6L-SF		1.0	6-7	4-5	4-5	4

涤混纺品用 (For polyester/cellulose blend)						
Kayacelon						
	色样	%o. w. f.	耐晒 Light ISO	PET	Ny	升华 Sublimation
Yellow E-BRL conc*		1.0	7	4-5	4-5	4-5
Red E-GL		2.0	6-7	4-5	4-5	4-5
Blue E-TB(N)		1.0	5	4-5	4-5	3-4
Blue E-5G		1.0	5	4-5	4-5	3-4

*有LD产品 LD Product

超耐光用 (For automobiles)						
	色样	%o. w. f.	超耐晒 SuperLight Fastness	耐晒 Light ISO 105 B02	升华 Sublimation	摩擦碱 Rubbing NaOH
Yellow FAL		1.0	4-5	7↑	4	4
Red FAL		1.0	4	7↑	4	4-5
Blue FAL		1.0	4	7↑	4	4
Yellow KFL		1.0	4-5	7↑	4-5	4
Red KFL		1.0	4-5	7↑	4	4-5
Blue KFL		1.0	4	7↑	4	4
Yellow AL(S)*		1.5	4-5	7↑	3-4	4
Red AL(W)		2.0	3-4	7↑	4	4-5
Red AL		2.0	3-4	7↑	4	4-5
Blue AL(N)		2.0	4	7↑	3-4	4-5
Red AWL(N)		1.0	4	7↑	4	4-5
Blue AWL		0.8	4	7↑	4	4-5
Navy Blue FAL		4.0	4-5	7↑	3	4-5
Black AL 167		4.4	4	7↑	3-4	4
Black MPL conc		4.0	4	7↑	2-3	3-4
Black FAL 167(S)*		5.0	4-5	7↑	3	4
Black AWL(J)		8.6	4-5	7↑	3	4

一般分散染料 (For regular polyester fibers)
 涤/氨混纺用 (For polyester/polyurethane blend)
 超细纤维用 (For Micro polyester)
 涤混纺品用 (For polyester/cellulose blend)

染色条件 Dyeing Method : High-temperature dyeing
 浴比 Liquor ratio : 1:20(20:1)
 染色 pH Dye-bath pH : 4.5
 匀染剂 Levelling agent : 0.5%o. w. f.
 温度/时间 Temperature/Time : 130°C×60min.

超耐光用 (For automobiles)

染色条件 Dyeing Method : High-temperature dyeing
 浴比 Liquor ratio : 1:20(20:1)
 染色 pH Dye-bath pH : 4.5
 紫外线吸收剂 UV absorb : 2.0%o. w. f.
 匀染剂 Levelling agent : 0.5%o. w. f.
 温度/时间 Temperature/Time : 130°C×60min.

超耐光用 (For automobiles)						
	色样	%o. w. f.	超耐晒 SuperLight Fastness	耐晒 Light ISO 105 B02	升华 Sublimation	摩擦碱 Rubbing NaOH
Red FR-709		1.0	4-5	7↑	4	4
Blue KA-77		1.0	4	7↑	4	4
Yellow ST		1.0	4-5	7↑	4	4
Red ST		1.0	3-4	7↑	3-4	4
Blue ST		1.0	3-4	7↑	4	4
Yellow HBS		1.0	4-5	7↑	4	4
Red HBS		1.0	4	7↑	4	4
Blue HBS		1.0	4	7↑	4	4
Yellow ML-3		1.0	4	7↑	4	4
Yellow ML-6		1.0	4	7↑	4	4
Red ML-4 (M)		1.0	3	7	4	4
Blue ML-8		1.0	4	7↑	4	4-5
Black ML-8		4.5	4	7↑	2-3	4
Black ML-10		4.5	3-4	7↑	3	4
Black ML-W		4.0	4	7↑	2-3	4
Black STN		4.8	4	7↑	3-4	4-5

牢度条件 Fastness condition

升华 Sublimation: ISO 105-P01180°C×30sec.
 涤纶污染 Staining on polyester

耐皂洗 Washing: ISO105 C-10Tset2
 涤纶污染 Staining on polyester
 尼龙污染 Staining on Nylon

摩擦 Rubbing : NaOH4g/L

耐晒 Light Fastness: ISO 105-B02
 氙弧灯 Xenon-arc

超耐光 Super Light Fastness

Tester : Super Xenon Weather Mater SX75F
 89°C, 84MJ
 Filter : IR cut filter (<320nm cut)
 Irradiation Level : 162W/m² (300-400nm)
 Irradiation time : 144hrs.
 Black Panel Temperature : 89°C±3

● Kayanol Colours :

Kayanol	染色浓度 Dyeing depth (% o.w.f.)	溶解度 Solubility (80°C ● g/L)	色牢度 Fastness (Wool)									
			耐晒 Light	耐皂洗 Washing (50°C)			耐汗渍 Perspiration (碱性 Alkaline)			耐沸煮 Potting (100°C)		
Brill. Yellow NWN	1.2	100	5	3-4	4	5	4-5	3	4	4	1-2	5
Yellow NWN	1.1	100	5	3-4	4	4-5	4-5	3-4	4-5	4-5	2	5
Red NWN	0.8	60	4-5	3-4	4	4-5	4-5	3-4	4-5	4	1-2	5
Blue NWN	1.2	100	5	3-4	4	4-5	4-5	3-4	4-5	4	1-2	5
Yellow NFG	1.4	100	7	2-3	3-4	4-5	4	1-2	3	3-4	1	5
Yellow N5G	1.2	100	5	3-4	4-5	5	4-5	3	4	4-5	1-2	5
Yellow N3R	1.1	100	5	3-4	4	4-5	4-5	3-4	4-5	4-5	2	5
Acid Red FRL(K)	1.1	50	5	2-3	2-3	3-4	4	2	4	3-4	1	5
Floxine NK	0.6	70	4-5	2-3	2-3	4-5	4	2	2	3-4	1	4-5
Blue NR	0.7	15	4	2-3	2-3	4	4-5	2	3	4	1	4-5
Blue N2G(C)	1.1	70	5	2-3	2-3	2-3	3-4	1-2	2	3	1	4-5

● Kayanol Milling Colours :

Yellow 5GW	2.4	70	6	5	4-5	5	4-5	3-4	4	4-5	2	4-5
Yellow 0	1.6	100	5-6	4	4-5	4-5	4-5	3	3-4	4-5	2-3	4-5
Scarlet FGW	1.0	60	3-4	4 ^B	5	4-5	4-5	5	4-5	4-5	3	4-5
Red BW	0.8	100	3-4	4-5	5	5	4-5	4-5	4-5	4-5	3	4-5
Acid Red 2BW	1.2	60	5	4-5	5	5	4-5	5	5	4-5	3	4-5
Red 6BW	0.8	80	3-4	4-5	5	5	4-5	4-5	4-5	4-5	2-3	4-5
Violet FBW	1.3	100	5-6	4	5	5	4-5	3	4	4-5	3	4-5
Blue 2RW	1.3	70	5	4	5	5	4-5	5	5	4-5	3	5
Blue BW	1.2	100	4-5	4 ^V	5	5	4-5	5	5	4 ^V	3	5
Green GW	1.1	25	5	4 ^V	5	5	4 ^V	5	5	4-5	3	5
Black TLB	4.0	80	5-6	4	4	1-2	4-5	3	3-4	4	1-2	4-5

染色条件 Dyeing Conditions

- 染色法 Dyeing-method : 浸染 Exhaustion dyeing
- 被染物 Material : 未漂白羊毛 Scoured and unbleached wool
- 染色温度 Temperature : 100°C
- 染色时间 Time : 30min.
- 浴比 Liquor ratio : 1:20(20:1)
- 芒硝 Calc. Glauber's salt : 2% o.w.f.
- 染浴 pH Dyebath pH :

	Kayanol	Kayanol Milling	Kayakalan, Kayalax
醋酸 Acetic acid	5% o.w.f.	2% o.w.f.	1% o.w.f.
醋酸铵 Ammonium acetate	1% o.w.f.	3% o.w.f.	5% o.w.f.

● Acid NCN Colours :

Acid	染色浓度 Dyeing depth (% o.w.f.)	溶解度 Solubility (80°C ● g/L)	色牢度 Fastness (Wool)									
			耐晒 Light	耐皂洗 Washing (50°C)			耐汗渍 Perspiration (碱性 Alkaline)			耐沸煮 Potting (100°C)		
Yellow NCN	1.1	100	5	3-4	4	4-5	4-5	3-4	4-5	4-5	2	5
Red NCN	1.0	20	3-4	4	4-5	3-4	4-5	4	4-5	4-5	2	5
Blue NCN	1.6	100	5	4	4-5	5	4-5	5	5	4-5	3	5

● Kayakalan Colours :

Yellow GL 143	1.0	50	8	4-5	4-5	5	4-5	5	5	4-5	2-3	5
Brown GL	0.9	30	7	4-5	4-5	5	4-5	4-5	4-5	4-5	2	4-5
Red BL	2.0	10	5	4	5	5	4-5	5	5	4	2	4-5
Bordeaux BL	1.3	100	6-7	4-5	4-5	5	4-5	4	4	4-5	1-2	4-5
Grey BL 167	1.2	100	6	3-4	4-5	5	4-5	4	4-5	4	2	4-5
Black 2RL	3.2	50	7	4-5	4-5	5	4-5	4	4-5	4-5	3	4-5
Black BGL	3.6	100	7	4-5	4-5	4-5	4-5	4-5	4-5	4-5	3	4-5

● Kayalax Colours :

Acid Yellow 3G(K)	1.6	100	7	4-5	5	5	4-5	5	5	4-5	3	5
Brown GR	1.1	80	5-6	4-5	5	5	4-5	5	5	4-5	3-4	5
Red G(K)	0.5	100	4-5	5	5	4-5	4-5	5	5	4-5	4	5
Acid Dark Blue 2S(K)	1.2	100	5	4-5	5	5	4-5	5	5	4-5	4	5
Navy R	2.0	50	5-6	4-5	4-5	5	4-5	4-5	5	4-5	3	5
Navy BW	1.6	50	5-6	4-5	4-5	5	4-5	4-5	5	4-5	3	5
Acid Black RL	3.2	100	7	4-5	4-5	5	4-5	4-5	4-5	4-5	3	4-5

牢度条件 Fastness Conditions

- 耐晒 Light : JIS L 0842 碳弧 Carbon-arc
- 耐皂洗 Washing : JIS L 0844 A-2 法
(左)原布变褪色 (中)羊毛沾污 (右)棉沾污
(Left) Change in shade (Middle) Staining on Wool (Right) Staining on Cotton
- 耐汗渍 Perspiration : JIS L 0848 A 法
(左)原布变褪色 (中)羊毛沾污 (右)棉沾污
(Left) Change in shade (Middle) Staining on Wool (Right) Staining on Cotton
- 耐沸煮 Potting : JIS L 0875 97°C × 60min.
(左)原布变褪色 (中)羊毛沾污 (右)棉沾污
(Left) Change in shade (Middle) Staining on Wool (Right) Staining on Cotton

Kayacryl ED Colours

Kayacryl ED	改性涤纶 C.D.P.	腈纶 Acryl	染色浓度 %o.w.f.	色牢度 Fastness (C.D.P.)							耐氯处理水 Chlorinated Water 100ppm	Polyester 污染 Staining on Polyester
				日晒 Light Fastness		耐热性 Heat Fastness		耐皂洗 Washing 60°C				
				ISO	AATCC	180°C×1min.	190°C×2min.	C.D.P. 污染 Staining on C.D.P.	羊毛污染 Staining on wool			
Brilliant Flavine 10G-ED			2.0	4-5	5↑	4-5	4-5	4-5	4-5	2-3	4-5	
Yellow 7GL-ED 67			3.0	6↑	5↑	4-5	4-5	4-5	4-5	3 ^R	4-5	
Yellow 3GS-ED			2.0	5-6	5↑	4-5	4-5	4-5	4-5	4-5	4-5	
Yellow 3RL-ED			2.0	6↑	5↑	4-5	4-5	4-5	4-5	4-5	4-5	
Golden Yellow GL-ED			1.0	5-6	5↑	4-5	4	4-5	4-5	4	4-5	
Red GL-ED			2.0	6	5↑	4-5	4-5	4-5	4-5	4-5	4-5	
Red GRL-ED			2.0	5	4↑	4-5	4-5	4-5	4-5	3-4 ^B	4-5	
Rhodamine BL-ED			1.5	4-5	4↑	4-5	4-5	4-5	4-5	1 ^V	4-5	
Brilliant Pink B-ED 91			1.0	3-4	4	4-5	4	4-5	4-5	1-2 ^Y	4-5	
Blue 2RL-ED			1.0	4-5	4↑	4-5	4	4-5	4-5	3 ^R	4-5	
Blue FP-ED			1.0	4	4	4-5	4-5	4-5	4-5	3	4-5	
Blue GSL-ED			1.0	5-6	4↑	4-5	3-4	4-5	4-5	4	3-4	
Blue BG-ED(N)			1.0	5-6	4↑	4-5	4	4-5	4-5	4	4-5	
Blue TL-ED			1.0	6	5↑	4-5	4-5	4-5	4-5	2-3 ^Y	3-4	
Blue GTL-ED(T)			2.0	6	5	4-5	4	4-5	4-5	2-3 ^Y	4	
Blue 2G-ED			1.0	5	4↑	4-5	4-5	4-5	4-5	3	4-5	
Blue 5G-ED			1.0	5-6	4↑	4-5	4	4-5	4-5	2-3	4-5	
Light Blue 4GSL-ED			1.0	5-6	4↑	4-5	4	4-5	4-5	3-4	4-5	
Navy A-ED 83			4.8	5-6	4↑	4-5	3-4	4-5	4-5	4-5	2-3	
Navy RP-ED(N)			4.0	5-6	4↑	4-5	4	4-5	4-5	4-5	4-5	
Black R-ED			8.0	5-6	4↑	4-5	4	4-5	4-5	4-5	2-3	
Black BS-ED			9.2	5-6	4↑	4-5	4-5	4-5	4-5	4-5	4-5	
Black MR-ED(N)			9.4	5-6	4↑	4-5	4-5	4-5	4-5	4-5	4-5	
Black MG-ED(N)			7.8	6	4↑	4-5	4-5	4-5	4-5	4-5	4-5	
Black HF-ED			8.0	5-6	4↑	4-5	4-5	4-5	4-5	4-5	4-5	
Cationic Black BS-112D			9.2	4	4↑	4-5	4-5	4-5	4-5	4-5	4-5	

染色条件 Dyeing condition
 · 被染物 Material : C.D.P
 · 浴比 Liquor ratio : 1:15 (15:1)
 · 染色 pH Dyebath pH : 4.0
 · 匀染剂 Leveling agent (Kayaclean KFS)* : 0.5%o.w.f.
 · 芒硝 Glauber's salt : 2g/L
 · 染色温度/时间 Temperature/Time : 120°C×60min.

腈纶 Acrylic
 1:15 (15:1)
 4.0
 0.5%o.w.f. (*浅色 Pale shade)
 -
 100°C×60min.

☆Kayacryl ED 型阳离子染料使用 50°C 左右的温水溶解。
 ☆注意事项:
 1. 避免直接使用醋酸、酒精溶解。
 2. 避免直接接触蒸汽。
 Kayacryl ED 型染料跟普通阳离子染料、阳离子性缓染剂、阳离子性柔软剂等阳离子物质的相容性很差,不能同浴使用。
 ☆染色时添加芒硝,能够达到匀染效果.此外,还可以防止 CDP 纤维脆化。

☆Warm water under 50°C is used for dispersing Kayacryl ED colors.
 ☆Remarks: Avoid the following processes.
 · Pasting with acetic acid or alcohol.
 · Blowing live steam.
 Kayacryl ED colors are not compatible with cationic compounds such as regular cationic dyes, cationic retarders, cationic softening agents, etc; so Kayacryl ED Colors cannot be applied with these compounds in the one-bath method.
 ☆The addition of Glauber's salt(Na2SO4) well assist the retarding effect. Moreover, it can prevent the lowering in strength of the C.D.P. fiber.

Kayacryl & Cationic Colours (一般阳离子染料 Regular cationic dyestuff)

Kayacryl	改性涤纶 C.D.P.	腈纶 Acryl	染色浓度 %o.w.f.	色牢度 Fastness (C.D.P.)							耐氯处理水 Chlorinated Water 100ppm	Polyester 污染 Staining on Polyester
				日晒 Light Fastness		耐热性 Heat Fastness		耐皂洗 Washing 60°C				
				ISO	AATCC	180°C×1min.	190°C×2min.	C.D.P. 污染 Staining on C.D.P.	羊毛污染 Staining on wool			
Kayacryl Yellow 3RL			1.0	6↑	5↑	4-5	4-5	4-5	4-5	4-5	4-5	
Kayacryl Red GRL			1.0	5	4↑	4-5	4-5	4-5	4-5	3-4 ^B	4-5	
Kayacryl Blue GRL			1.0	5	4↑	4	1-2	4-5	4-5	3-4	2-3	
Kayacryl Black YA			4.0	6	5↑	4-5	4-5	4-5	4-5	4-5	3	
Cationic Yellow CA			1.0	5-6	5↑	4-5	4-5	4-5	4-5	4	4-5	
Cationic Red CA			1.0	5-6	5↑	4-5	4-5	4-5	4-5	3-4 ^B	4-5	
Cationic Blue CA			1.0	5	4↑	4-5	3-4	4-5	4-5	3-4	4	
Cationic Black CA			3.0	5-6	4↑	4-5	4	4-5	4-5	4-5	4	
Cationic Black CML 77			4.0	6	5↑	4-5	4-5	4-5	4-5	4-5	4	

染色条件 Dyeing condition
 · 被染物 Material : C.D.P 腈纶 Acrylic
 · 浴比 Liquor ratio : 1:15 (15:1) 1:15 (15:1)
 · 染色 pH Dyebath pH : 4.0 4.0
 · 芒硝 Glauber's salt : 2g/L -
 · 染色温度/时间 Temperature/Time : 120°C×60min. 100°C×60min.

溶解方法:
 1.加入染料重量的三分之一的50%醋酸打浆。
 2.然后加入热水溶解。
 注意事项:一般阳离子染料溶解时,一定要加醋酸打浆溶解,否则可能造成溶液不安定,发生分解。

Dissolved method
 1,Stirring three units of 50% acetic acid to one unit of dye
 2,Dissolved in hot water
 (Remarks)
 There is a possibility that the decomposition of the dye when it dissolves in hot water without carrying out process 1

☆牢度条件 Fastness condition
 日晒 Light Fastness (Xenon-arc)
 ISO 105-B02
 AATCC 16 2003
 耐热性 Heat Fastness
 定型机 Heat-Setting machine 180°C×1min. & 190°C×2min.

耐皂洗 Washing: ISO105 C-10 Tset 3
 C.D.P.污染 Staining on C.D.P
 羊毛污染 Staining on wool
 耐氯处理水 Chlorinated Water (ISO 105-E03)
 浓度 Concentration : 100ppm
 浴比 Liquor ratio : 100:1
 温度/时间 Temperature/Time : 27°C×60min

☆Polyester 污染 Staining on Polyester
 染色条件 Dyeing condition
 · 被染物 Material : C.D.P/Polyester (50/50)
 · 浴比 Liquor ratio : 1:15 (15:1)
 · 染色 pH Dyebath pH : 4.0
 · 芒硝 Glauber's salt : 2g/L
 · 染色温度/时间 Temperature/Time : 120°C×60min.

还原洗净条件 Reduction cleaning condition
 · 浴比 Liquor ratio : 1:20
 · 氢氧化钠 NaOH flake : 1g/L
 · Kayaclean KFS : 2g/L
 · 保险粉 Hydrosulfite conc : 2g/L
 · 染色温度/时间 Temperature/Time : 70°C×20min.

● Kayafect Colours :

Kayafect	染色浓度 Dyeing depth (% o. w. p.)	溶解度 Solubility		耐晒 Light	脱色性 Bleachability	
		80℃	25℃		还原 Reduction	氧化 Oxidation
		Yellow G	1.0		100	30
Yellow G(T)	1.0	90	25	2-3	5	4-5
Yellow Y	1.0	50	45	2	1-2	3
Yellow A	1.0	80	60	4-5	2	2-3
Yellow S	1.0	30	3	1	1-2	3
Orange G	1.0	100	25	4	1	4 ^y
Orange S	1.0	10	8	1	4-5	1-2
Brown G	1.0	50	30	2-3	1-2 ^x	2-3 ^y
Brown KNA	1.0	50	40	1-2	1-2	1-2 ^y
Brown T	1.0	70	35	3-4	2 ^x	3 ^x
Red B	1.0	100	45	2-3	2 ^y	2
Red BF	1.0	60	50	3	2-3 ^y	3
Red P	1.0	100	60	1-2	2 ^y	1
Blue 2R	1.0	40	20	3	3	1-2
Blue F	1.0	70	50	3-4	2-3 ^x	2
Turquoise RT	1.0	100 ↑	100	4-5	1-2	1
Green G	1.0	50	35	3	2 ^b	1
Black S	5.0	50	30	2-3	1-2 ^x	3-4 ^y
Black LW	4.0	30	10	5	2 ^x	2-3 ^y
Black LW(N)	4.0	80	50	5	2 ^x	2-3 ^y

[染色条件 Dyeing Conditions]

- 被染物 Material : 纸浆 (L. B. KP) Pulp (L. B. KP)
- 使用水 Water : 离子交换水 Ion-exchanged water
- 拨水剂 Size agent : 1.0% o. w. p. (松脂油) 1.0% o. w. p. (Rosin size)
- 硫酸铝 Aluminium sulfate : 3.0% o. w. p.
- 浴比 Liquor ratio : 1:33 (33:1)

[抄纸条件 Sheeting Conditions]

- 抄纸 pH Sheeting pH : 5.5
- 纸浆浓度 Pulp concentration : 0.1%
- 坪量 Basic weight : 100g/m²
- 干燥温度 Drying temperature : 50℃

● Kayafect Liquid Colours :

Kayafect Liquid	染色浓度 Dyeing depth (% o. w. p.)	pH (25℃)	比重 Specific gravity (25℃)	耐晒 Light	脱色性 Bleachability	
					还原 Reduction	氧化 Oxidation
					Yellow G Liquid	4.0
Yellow YQ Liquid	5.0	8-9	1.067	2	1-2	3
Yellow C liquid	2.0	7-9	1.075	3-4	1	1
Yellow F Liquid	3.0	9-10	1.170	4-5	2	2-3
Yellow RT Liquid	4.0	9-10	1.182	1	1-2 ^b	3
Orange L Liquid	3.0	8-9	1.150	4	1	4 ^y
Red B Liquid	5.0	8-9	1.102	2-3	2 ^y	2
Red H Liquid 50	8.0	8-9	1.084	1-2	1-2 ^b	2
Red BF Liquid	5.0	9-10	1.090	3	2-3 ^y	3
Red P Liquid	10.0	8-9	1.120	1-2	2 ^y	1
Violet BC Liquid	4.0	9-10	1.130	4	1	1
Violet P Liquid 200 *	2.0	8-9	1.120	1-2	2	2
Blue F Liquid 400 *	2.5	9-11	1.073	3-4	2-3 ^b	2
Black S Liquid	50.0	9-10	1.048	2-3	1-2 ^x	3-4 ^y

*同时可用于纸张的发蓝增白。Also can be used for paper bluing.

● Kayacel Colours :

Kayacel Liquid	染色浓度 Dyeing depth (% o. w. p.)	pH (25℃)	比重 Specific gravity (25℃)	耐晒 Light	脱色性 Bleachability		白水着色性 Colouration of back water
					还原 Reduction	氧化 Oxidation	
					Yellow CG Liquid	5.0	
Red CB Liquid	5.0	3-4	1.14	2	2	1	5
Black CN Liquid	25.0	3-4	1.06	3-4	1-2	1-2	5

[测试条件 Test Conditions]

- 耐晒 Light : JIS L 0842 碳弧 Carbon-arc
- 脱色性 Bleachability: 50℃ × 30min
 - 氧化 Oxidation : 次氯酸钠 500ppm, pH11.0 sodium hypochlorite 500ppm at pH11.0
 - 还原 Reduction : 保险粉 5g/L, pH7.0 sodium hydrosulfite 5g/L at pH7.0
- 白水着色性 Colouration of back water: 染色后用 6 倍水稀释, 抽滤后用污染用次卡判定滤液等级。
Diluted with water in 6 times after dyeing, then filtered, and the concentration of the filtration liquid be measured by the scale.