



## 特色系列



浙江万丰化工有限公司  
ZHEJIANG WANFENG CHEMICAL CO., LTD.



专业化工染料生产商



## Disperse dyes Special Series 分散染料特色系列

Disperse dyes for ECO TEX Series  
环保型系列分散染料

WF-XF Dyes  
万丰 XF系列染料

WF-PUD dyes  
万丰 PUD系列染料

WF-PT dyes  
万丰 WF-PT系列染料

Super Alkaline Disperse Dyestuffs SA Series  
超耐碱分散染料SA系列

Disperse dye of P type printing Series  
分散染料P型印花系列

大力推广清洁生产，多项专利技术是领先市场的风向标  
专业化、规模化、国际化是万丰化工可持续增长的基石  
畅游多彩生活，点燃绿色激情，万丰染料让你我共享绿色家园

地址：浙江绍兴县马鞍镇新二村 邮编：312073

ADD: Xin'er Village Ma'an Town Shaoxing Zhejiang China

TEL:86-575-85620977

FAX:86-575-85620222

[Http://www.wfdyes.com](http://www.wfdyes.com)

## Disperse dyes for ECO TEX Series 环保型系列分散染料

环保型分散染料，由浙江万丰化工有限公司针对国内分散染料个别品种在环保问题上存在的问题，通过最先进的加工工艺得到解决生产而成的。

万丰环保型分散染料符合Oeko-Tex Standard 100生态纺织品I类认证标准，经正常染色后无纺织品，其禁用的24种芳香胺、致癌致敏染料、有机氯载体、四氯苯酚、五氯苯酚含量都低于标准的限值。

特别推荐环保型分散黄棕S-2R，已得到多家国外著名跨国染料公司的认可，其他品种均已通过了第三方权威机构的检测和认证。

ECO-TEX disperse dye, By ZheJiang WanFeng Chemical Co., LTD. For domestic disperse dye individual varieties in the environmental protection problems in the problem, Through the most advanced processing technology solved production and become.

WanFeng ECO-TEX disperse dyes Conform to the Oeko - Tex Standard 100 ecological textiles I kind of the authentication Standard, The normal dyeing of textiles, The disabled 24 kinds of aromatic amine, Carcinogenic sensitized dye, Organochlorine carrier, Four chloride phenol, Pentachlorophenol content is lower than the Standard limit.

Particularly recommended Environmental protection disperse Yellow Brown S-2R, Have got several foreign famous multinational dye company recognition, Other varieties have been passed the third party testing and certification authority.



Rebuttal

## WF-XF DYES

### 万丰 XF 系列染料

Disperse dyes for high levels of washing fastness

高湿牢度分散染料

WF-XF dyes are disperse dyes giving the highest levels of wash-fastness on polyester and blends, in exhaust and continuous dyeing

万丰XF系列染料是使涤纶及其混纺织物达到最高水洗牢度性能的分散染料，无论是浸染还是连续染色，均可提供可靠的牢度和颜色

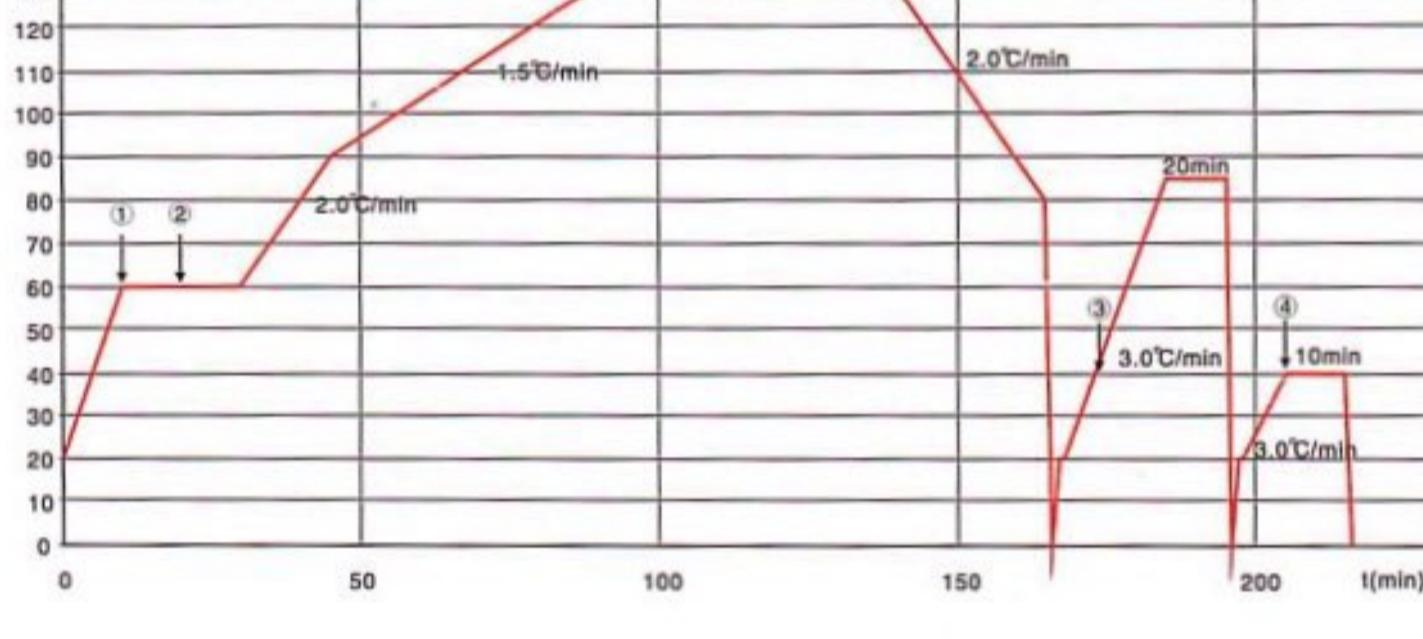
■ WF-XF dyes offer high washing fastness in all shade areas

万丰XF系列染料：在所有色系上满足您的高湿牢度要求

■ WF-XF dyes offer high wash fastness for polyester and blends specifications on high wash fast apparel : e.g. polyester/cotton and microfibre

万丰XF系列染料为涤纶及其混纺织物提供高水洗牢度，特别能满足在高水洗牢度要求的织物上的牢度要求，如：涤/棉混纺，超细纤维等

#### Dyeing profile 染色曲线



① 1.0g/l 分散匀染剂

1.0g/l 聚合分散剂

1.0g/l 浴中柔软剂

用醋酸钠/醋酸调整pH 4-4.5

② X% WF-XF 染料

③ 碱性还原清洗：

3.0ml/l 38°Be烧碱

2.0g/l 保险粉

1.0g/l 洗涤剂

④ 醋酸调pH 5中和



万丰 XF 系列染料



万丰 XF 系列染料

## 分散染料

Disperse dye

### WF-PUD dyes

### 万丰 PUD系列染料

High fastness disperse dyes for PES & PES/EL fabrics  
应用于涤纶及涤/氨织物的高性能分散染料

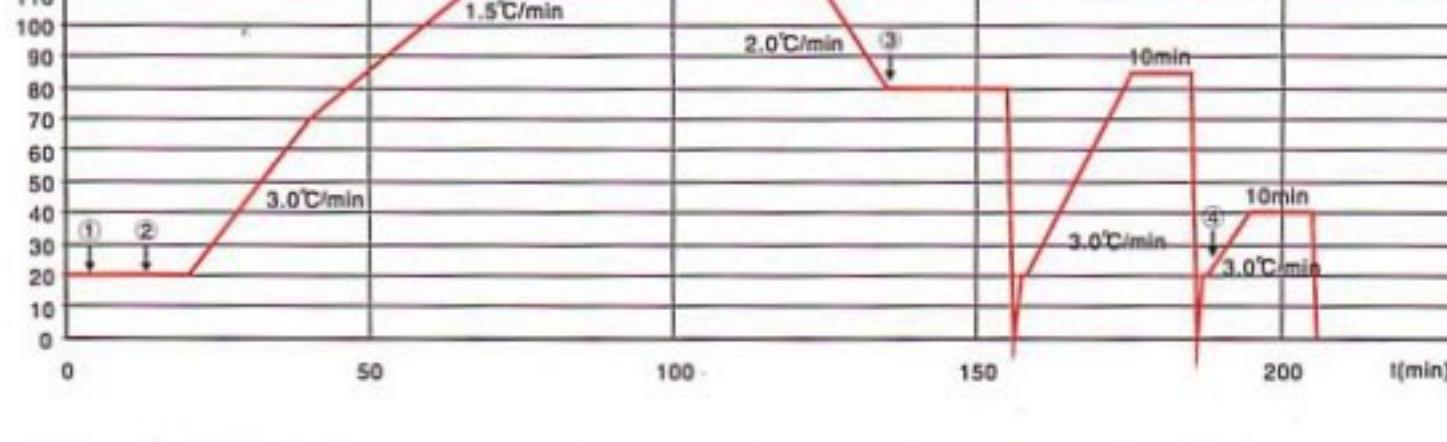
■ High levels of wash fastness: WF-PUD dyes offer high wash fastness for polyester and blends specifications on difficult fabrics, e.g. Microfibre, polyester/elastane, polyester/cotton, workwear and sportswear outlets

高水洗牢度：万丰PUD系列染料为涤纶及其混纺织物提供高水洗牢度，特别能满足在难染织物上的水洗牢度要求，如：超细纤维，涤/氨纶混纺，涤/棉混纺，工作服和运动衣

■ High productivity: WF-PUD dyes offer higher productivity especially in exhaust and continuous dyeing of PES/EL, through alkaline clearing of unfixed disperse dye, thereby minimising the need for reduction clearing

高生产率：万丰-PUD染料通过碱性还原清洗洗除未固着的分散染料，尤其针对涤/氨纶的浸染和连续染色，因此降低后处理的生产成本。

### Dyeing profile 染色曲线



① 1.0g/l 分散匀染剂

1.0g/l 融合分散剂

1.0g/l 溶中柔软剂

用醋酸钠/醋酸调整pH 4-4.5

② X% WF-PUD 染料

③ 碱性还原清洗：

3.0ml/l 38°Be烧碱

2.0g/l 保险粉

1.0g/l 洗涤剂

④ 醋酸调pH 5中和

或酸性还原清洗(涤/氨)：

4.0g/l Blankit DZ(BASF®)

甲酸调整 pH 3.5-4



## WF-PUD dyes

品名及强度	Polyester/EL 涤/氨纶 ( 92%/8% )	Sublimation AATCC 117 Fastness to light (Xenon) 1/15D ISO 105B02 田版 (Hg 1/15D)	Standard Depth (% O.W.F.)	Level Uptake	Barre Coverage AATCC 117 Fastness to light (Xenon) 1/15D ISO 105B02 田版 (Hg 1/15D)	Sensitivity to ions 对金属离子敏感性	Washing Fastness AATCC 61 II A 水洗牢度				Water fastness ISO 105 E01 水牢度				Perspiration Fastness ISO 105 E-04 碱汗牢度						
							Cu	Fe	CA	CO	PA	PES	CA	CO	PA	PES	CA	CO	PA	PES	
象黄WF-PUD Faine WF-PUD	200%	0.50	6-7	4	3	优	3-6.5	4.5	3.4	4.5	5	4.5	5	3.4	5	3.4	4	3-4	5	4	4
金黄WF-PUD Golden Yellow WF-PUD	200%	1.20	7	4	3	优	3-8	2-3	5	3.4	5	4	4.5	4	4.5	4	4	4	4.5	4	4
橙WF-PUD Orange WF-PUD	200%	1.50	6	5	3	优	3-5.5	2	5	4	5	4.5	4.5	4	5	4.5	4.5	4	5	4.5	4.5
橙PUD-SD Orange WF-PUD-SD	200%	1.50	6	3-4	3	优	3-5	2-3	5	4	4.5	4.5	4.5	3-4	5	4	4.5	3-4	4.5	3-4	4
大红WF-PUD Scarlet WF-PUD	100%	1.80	5-6	4	2	有限	3-6	4	5	4.5	5	4.5	4.5	5	5	5	5	5	5	5	5
艳红WF-PUD Brill. Red WF-PUD	100%	2.20	5-6	4	2	有限	3-8	2-3	5	5	5	4.5	4.5	5	5	5	5	5	5	5	5
玫瑰红WF-PUD Rose Red WF-PUD	200%	1.80	5-6	4.5	2	有限	3-5.5	4	4	4.5	5	4	4	4	5	5	5	5	5	5	5
深红WF-PUD-B Deep Red WF-PUD-B	200%	1.00	5-6	4.5	2	中	3-6	5	5	4	5	4	4	4	4	5	4	4	4	5	4
深红WF-PUD Deep Red WF-PUD	200%	1.20	6-7	4	3	优	3-8	5	5	3-4	4	4	4	4.5	5	4	4.5	4.5	5	4	4.5
红玉WF-PUD Rubine WF-PUD	200%	0.85	5-6	4	2	中	3-5	5	5	3-4	5	4	4	4	4.5	4	4.5	4	4.5	4	4.5
暗红WF-PUD Dark Red WF-PUD	200%	1.20	5-6	4.5	3	优	3-5.5	5	5	4	5	4	4	4	5	4	4	4	5	4	4
翠蓝WF-PUD Tur Blue WF-PUD	200%	1.50	5-6	3-4	2	中	3-9	3	5	5	5	4.5	5	5	5	5	5	5	5	5	5
艳蓝WF-PUD Brill Blue WF-PUD	300%	1.20	5-6	4	3	中	3-5	4	4	3-4	5	4	4	4.5	5	4.5	4.5	5	5	4.5	4.5
深蓝WF-PUD Navy Blue WF-PUD	300%	3.00	6	4	2	有限	3-5	4	5	4.5	5	4	4	4	5	5	5	5	5	5	5
黑WF-PUD-G Black WF-PUD-G	400%	4.50	6	4	2	中	3-5.5	4	5	4	5	4	4	4	5	4	4	4	4	4	4
黑WF-PUD-R Black WF-PUD-R	400%	4.50	6	4	2	中	3-5.5	4	5	4	5	4	4	4	5	4	4	4	4	4	4
黑WF-PUD-SW02 Black WF-PUD-SW02	400%	4.00	5-6	4	2	中	3-5	4	5	4	5	4	4	4	5	4	4	4	4	4	4
黑HB Black HB	400%	4.00	5-6	4	2	中	3-5	4	5	4	5	4	4	4	4.5	4	4	4	4	4	4
黑SR Black SR	400%	4.00	5-6	4	2	中	3-5	4	5	4	5	4	4	4	3-4	4.5	3-4	4	4	4	4

## WF-PT dyes

## 万丰 WF-PT 系列染料

High fastness disperse dyes for PES &amp; PES/EL fabrics

应用于涤纶及涤/氨织物的高性能分散染料

万丰PT系列染料是新一代高性能分散染料，适用于涤纶以及涤/氨纶织物的染色。特别适用于含氨纶较高的涤/氨弹力织物的染色。

PT系列染料采用先进的染料商品化技术，使染料具有对金属离子络合分散性能、对酸碱变化缓冲性能。因此具有对染色用水的硬度、离子性能、用水的pH值以及酸碱度良好的适应性，大大提高染色的重现性，提高一次染色成功率。

万丰PT系列染料具有以下优点

- 染料高得色量，广泛适用于涤纶以及涤/氨纶织物的染色。特别适用于含氨纶较高的涤/氨经编织物的染色。
- 该系列染料具有良好的提升力和配伍性。
- 对涤纶以及涤/氨纶织物均具有高的湿处理牢度和升华牢度。
- 染色后还原清洗简单，具有高的生产效率。
- 特别推荐使用超级黑PT-D，染料高得色量，染色用水pH值适用性广泛，对染色用水适应性强，降低由于染色用水的重金属离子（如Fe<sup>3+</sup>、Mg<sup>2+</sup>）、pH不稳定和人工操作带来的缸差影响，具有优好的染色重现性。染色操作方便，一般情况下，染色过程中不须加入螯合分散剂、浴中柔软剂等相关助剂。

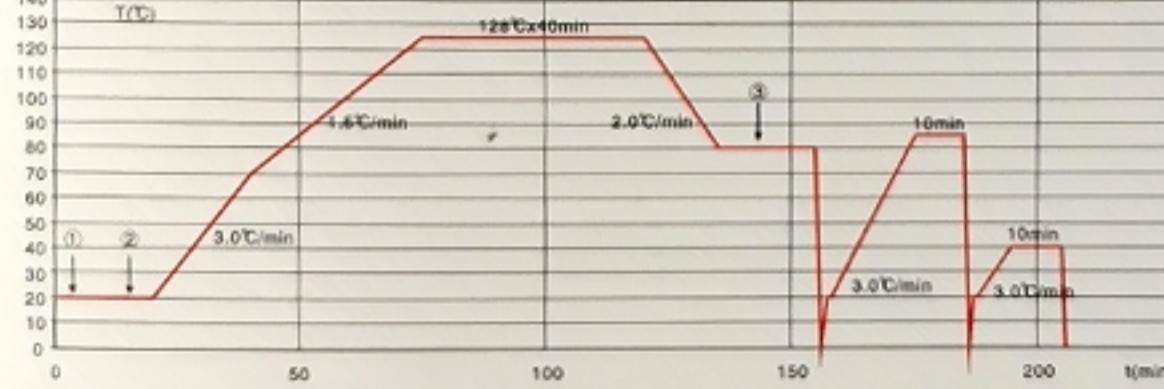
WANFENG-PT dyes are a new generation of high performance disperse dyes, apply to polyester/elastane dyeing, especially suitable for the ammonia polyester containing high elastic fabric dyeing.

PT Series dye adopts advanced commercial technology dye, make dye has for metal ions complexation scattered performance, the acid and alkali buffer performance changes. So has the value of water for dyeing hardness, ion performance, water PH value, acid and alkali good adaptability, greatly improve the dyeing reproducibility, improve the success rate of a dyeing.

WANFENG-PT dyes have the following advantages.

- 1. The dyes have high colour quantity, widely used in polyester fabric, spandex dyeing.
- 2. This series of dye has good compatibility of the lifting force.
- 3. For polyester/elastane has high levels of wash fastness and sublimation fastness.
- 4. After dyeing reduction, has high simple cleaning production efficiency.
- 5. Particularly recommended for super BLACK PT-D, hs dye high colour quantity, dyeing water PH value applicability extensively, to dyeing water adaptability, because of the lower dyeing water heavy metal ions (such as Fe<sup>3+</sup>, Mg<sup>2+</sup>), PH unstable and manual operation of the cylinder, bring difference with optional good dyeing reproducibility. Dyeing convenient operation, usually, in the process of dyeing need not to join chelating dispersant, bath of softner and related auxiliaries.

## Dyeing profile 染色曲线



① 染料 X%WF-PT 染料  
Dyes X%WF-PT dyes

③ 还原清洗  
Reduction clearing  
2g/l 碳酸钠  
2g/l rongalite  
1g/l 洗涤剂  
1g/l detergent

② 醋酸 0.5g/l  
Aceticacid 0.5g/l



## WF-PT dyes

Standard Depth (% O.W.F)  
标准深度 (% O.W.F)

日晒  
light水牢度  
Water fastness

水洗牢度  
Washing  
Fastness

AATCC 61 II A 升华牢度  
Sublimation Fastness  
180°Cx30'S

酸碱稳定性  
PH Stability

品名及强度	布样 Pattern Polyester/EL (92%/8%)	Standard Depth (% O.W.F)	日晒 light	水牢度 Water fastness	水洗牢度 Washing Fastness				AATCC 61 II A 升华牢度 Sublimation Fastness 180°Cx30'S				酸碱稳定性 PH Stability
					CA	CO	PA	PES	CA	CO	PA	PES	
金黄WF-PT 200%	G.Yellow WF-PT	0.5	6	4-5	4-5	4-5	4	4-5	4-5	4	4-5	4-5	3-5
红棕WF-PT 200%	Red Brown WF-PT	1.50	6	5	4	5	4	5	5	5	4-5	4-5	3-5.5
艳大红WF-PT 100%	Brill.Scarlet WF-PT	2.00	6	5	5	5	5	5	5	5	4-5	4	5
大红WF-PTGN100%	Scarlet WF-PTGN	2.00	5-6	4-5	5	5	4-5	4-5	5	5	4-5	3-4	3-5
运动红WF-PT 200%	Sport Red WF-PT	2.00	6	5	5	5	5	5	4-5	5	4-5	3-4	5
深红WF-PT 200%	Deep Red WF-PT	2.00	6	5	5	5	5	5	5	5	5	4-5	5
酱红WF-PT 200%	Crimson WF-PT	2.00	5-6	5	5	5	5	5	5	5	5	4	5
艳红WF-PTN 200%	Brill.Red WF-PTN	2.00	6	5	5	5	5	5	5	5	5	4-5	5
橡皮红WF-PT 200%	Rubber Red WF-PT	2.00	6	5	5	5	5	5	5	5	5	4-5	5
红玉WF-PT 200%	Rubine WF-PT	1.20	5-6	4-5	5	5	5	5	5	4-5	4-5	4	3-9
紫WF-PT 200%	Violet WF-PT	1.20	5-6	4-5	3-4	5	4	5	5	5	4-5	4	3-5.5
翠兰WF-PT 200%	Turquoise Blue WF-PT	1.50	5-6	4-5	5	5	4-5	5	5	5	4-5	3-4	3-5
艳蓝WF-PT 300%	Brill.Blue WF-PT	1.20	5-6	4	4	5	4	4	4-5	5	4	3-4	3-5
深蓝WF-PT 300%	Navy Blue WF-PT	3.00	6	4-5	4-5	5	4	4	4-5	5	4	3-4	3-5.5
黑WF-PTN 400%	Black WF-PTN	4.50	6	4	4	5	4	4	4	5	3-4	3-4	3-5.5
黑WF-PTD 400%	Black WF-PTD	4.50	6	4	4	5	4	4	4	5	3-4	3-4	3-6
黑WF-PT01 400%	Black WF-PT01	4.50	6	4-5	5	5	4-5	5	5	5	4-5	4-5	3-6
黑WF-KSD 300%	Black WF-KSD	6.00	6	4-5	5	5	4-5	5	5	5	4-5	4-5	3-6

## Super Alkaline Disperse Dyestuffs SA Series 超耐碱分散染料SA系列

超级碱性分散染料SA系列，由万丰独创，具有国际领先水平。SA系列是由万丰技术人员经多年努力和反复的实践验证开发而成。本系列产品具有多项国际和国内专利。

SA系列分散染料，具有适应性广，稳定性高。可以在酸性、中性、碱性不同的条件下染色，在10g/l的片碱，5g/l的双氧水，130℃条件下，颜色保持稳定。各项牢度指标高于常规染料1级以上。在涤棉织物上，可以和漂白，碱煮同浴。在全涤织物上，可以和退浆、除油、碱减量、开纤同浴，并可免还原清洗。与常规碱性染料相比，耐碱性和耐氧化性能，显著提升，颜色稳定再现性好，对涤纶低聚物的去除彻底，并且可以减少洗缸。碱性染色的面料手感柔滑，色泽鲜艳。而且大大的缩短了染色工艺，节省大量的水、电、蒸汽能源消耗，减少污水的排放量，缩短了工艺时间，提高产能。为企业的节能减排、产品质量的提升，降低生产成本、增加企业的竞争能力，助您一臂之力。

Super alkaline disperse dyestuffs SA series, which is WANFENG original with international leading level. SA dyes are the technical personnel who are worked in WANFENG efforts and repeated practice verification development in many years. This series product have many international and domestic patent.

Alkaline disperse dyestuffs SA series, which is wide adaptability and high stability. Under the condition of different dyeing with the Acidic, neutral and alkaline, in the 10g/l of alkali, in 5g/l of hydrogen peroxide, 130 degree under the conditions of the colour remain stable. The fastness standard index higher than conventional dye grade 1 above. In the cotton/polyester fabric can bleach alkali boiled with bath. In all the polyester fabric have desizing, in addition to oil, alkali deweighting, open with bath and fiber from reduction cleaning, compared with conventional alkaline dye, alkali and

### 前处理染涤一浴法工艺 全涤布(纱)

工艺流程：染涤（除油、退浆、减量、开纤）-水洗-酸洗-水洗  
工艺配方：染料SA X % (OWF)  
    耐碱匀染剂 1 g/l  
★ 除油剂 0-1.5 g/l  
★ 片碱 0-10 g/l   ★ 根据不同要求选择使用  
浴比1:10 温度135℃ 时间30-60分钟

### Dye polyester-bath Pertreatment atod process T/C cloth (yarn)

Process:dye polyester(bleaching,cooking practice cleaning)washing-pickling-washing-dye cotton.

Technological formula:Dye SA	X	% (OWF)
Alkali resistance level	1	g/l
★ H <sub>2</sub> O <sub>2</sub>	0-1.5	g/l
★ PH stabilizer	0-2	g/l
★ Caustic soda flake	0-2	g/l
Bath ratio 1:10	temperature:135°	time:30-60min

### 前处理染涤一浴法工艺 T/C布(纱)

工艺流程：染涤（漂白、煮练、还原清洗）-水洗-酸洗-水洗-染棉  
工艺配方：染料SA X % (OWF)  
    耐碱匀染剂 1 g/l  
★ 双氧水 0-1.5 g/l  
★ PH稳定剂 0-2 g/l  
★ 片碱 0-2 g/l   ★ 根据不同要求选择使用  
浴比1:10 温度135℃ 时间30-60分钟

### Dye polyester-bath mPertreatment atod process T/C cloth (yarn)

Process:dye polyester(desizing,reduction,open fiber)washing-pickling-washing-dye cotton.

Technological formula:Dye SA	X	% (OWF)
Alkali resistance level	1	g/l
★ Exception of agent	0-1.5	g/l
★ Caustic soda flake	0-10	g/l
Bath ratio 1:10	temperature:135°	time:30-60min

### 染色曲线

Dyeing profile



以上工艺数据仅供参考，敬请用户根据各自特点和要求，试样后再批量生产。



## SA Series

## **Super Alkaline Disperse Dyestuffs SA Series**

## 超耐候分散涂料 SA系列

品名及强度	布样 Pattern 100% Polyester	Standard Depth (% O.W.F.)	水洗牢度 Washing Fastness						升华牢度 Sublimation Fastness		汗渍牢度 GB/T 3922-1995 Perspiration				备注	
			AATCC 61 II A						180°Cx30'S		酸汗		碱汗			
			CA	CO	PA	PES	PAC	WO	CO	PES	CO	PES	CO	PES		
猩红 SA-GL 100%	猩红 SA-GL 100%	1.00%	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	耐片碱	
黄 SA-RL 100%	Yellow SA-RL 100%	1.00%	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	耐片碱	
全黄 SA-2RL 标100%	Golden Yellow SA-2RL 100%	1.00%	4.5	4.5	4.5	4.5	4.5	4.5	4	4	4.5	4.5	4.5	4.5	耐片碱	
红 SA-3B 100%	Red SA-3B 100%	1.00%	4.5	4.5	4	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	耐片碱	
蓝 SA-BL 标100%	BriBlue SA-BL 100%	1.00%	4.5	4.5	3.4	3.4	4.5	4	4	4	4.5	4.5	4.5	4.5	耐片碱	
橙 SA-BR 200%	Orange SA-BR 200%	1.00%	4.5	4.5	4.5	4.5	4.5	4.5	4	4	4.5	4.5	4.5	4.5	耐片碱	
大红 SA-BB 200%	Scarlet SA-BB 200%	1.00%	4	4.5	3	4	4.5	4.5	4	4	4.5	4.5	4.5	4.5	耐片碱	
深红 SA-6B 200%	Deep Red SA-6B 200%	1.00%	4.5	4.5	3.4	4	4.5	4.5	4	3.4	4.5	4.5	4.5	4.5	耐片碱	
红玉 SA-BPL 200%	Rubine SA-BPL 200%	1.00%	3.4	4.5	3.4	4	4.5	4	4	4	4.5	4.5	4.5	4.5	耐片碱	
紫 SA-RSL 200%	Violet SA-RSL 200%	1.00%	4	4.5	3.4	4	4.5	4.5	4.5	4	4.5	4.5	4.5	4.5	耐片碱	
蓝 SA-GBL 300%	Blue SA-GBL 300%	2.00%	4	4.5	3.4	3.4	4.5	4	4	4	4.5	4.5	4.5	4.5	耐片碱	
藏青 SA-NB 400%	Nav Blue SA-NB 400%	3.00%	4	4.5	3.4	3.4	4.5	3.4	4	4	4.5	4.5	4.5	4.5	耐片碱	

## Disperse dye of P type printing Series 分散染料P型印花系列

Economical range of quality disperse dyes for printing  
高性能经济型分散印花染料

### ■ Direct Prnting profile 直接印花工艺

#### ■ Printing paste preparation 印花色浆配制

Printing paste 印花色浆

WF-PH dye	印花染料	Xg
Water	温水 (50-60°C)	200g
Tartanic acid	酒石酸	2-3g
Sodium chlorate	氧化剂	2-7 g
Stock thickening	糊料	Yg
		1000g

Stock thickening 印花糊料:

Polyphosphate	六偏磷酸钠	5g
Sodium alginate	海藻酸钠	40-60g
Water/thickening	水/增稠剂	Xg

1000g

#### ■ Fixation methods 固色方法

HT-Steam ( HTS ) 高温汽蒸 7 minutes at 180°C

Hot air (HA) 烘干 8 minutes at 180°C

Pressure steam (PS) 高温高压汽蒸 25 minutes at 1.5 bar 125-130 °C

#### ■ Washing-Off 后处理

Box1	水洗槽1: rinse cold in overflow	冷水冲洗
Box2	水洗槽2: rinse at 40°C	40°C水洗
Box3&4	水洗槽3和4: reduction clearing at 70 °C 2g/l Hydrosulphite 3ml/l caustic soda(38° Be)	70 °C 还原清洗 保险粉 烧碱
Box5	水洗槽5: rinse at 60-70 °C	60-70 °C 水洗
Box6	水洗槽6: rinse at 80 °C with 1.0g/l detergent	洗涤剂80 °C水洗
Box7	水洗槽7: rinse at 50 °C	50 °C 水洗
Box8	水洗槽8: rinse cold	冷水洗



## P type printing Series

## 分散染料P型印花系列

品名及强度 Name & Strength	色样 Pattern (100% Regular Polyester)	印花深度 Powder (g/Kg) Liquid (g/Kg)	日晒 Light fastness ISO 105 B02 Xeon	皂洗 Washing fastness ISO 105 C03	水渍 Water fastness *	升华 Sublimation (180°Cx30s) AATCC 117	热迁移 Thermal migration
嫩黄P-6G 200%		10	6-7	4-5	4-5	4-5	4-5
Brill.Orange P-RSF 200%		5	4	4-5	4-5	5	4-5
橙P-4RL 100%		10	6	4-5	4-5	4-5	4
红P-F4BS 100%		20	4-5	4	4-5	4-5	4
艳红P-CBN 100%		10	5-6	4-5	4-5	4	4
Red P-F3BS 100%		10	5	4	4	4	4
红玉P-3GFL 100%		20	>4-5	4-5	4	4-5	4-5
蓝P-FBLN 115%		10	5	4	4	4	4
Blue P-2R 86%		15	5	4	4	4-5	3-4
紫红P-RSL 200%		5	3	4	4-5	4	4-5
翠兰P-TS 190%		10	6-7	4-5	4-5	4-5	4
Turquoise P-TM 200%		15	4-5	4-5	4-5	4-5	4-5
黑P-D 300%		40	5	4	4	4	3-4
Black P-E		60	5	4	4-5	4	4

\*水渍牢度按万丰工厂标准测试