

台灣永光化學工業股份有限公司
Everlight Chemical Industrial Corporation

EVERZOL C & ED

English Version



EVERLIGHT

Technical Service/Marketing Division

CONTENTS

Philosophy and Principles	1
Quality Policy	2
Safety and Health Policy	3
Risk Management Policy	4
Environmental Policy	5
Everzol C,ED introduction	6
Everzol C dye list	8
Everzol ED dye list	8
Everzol LX/LF dye list	8
Dyeing process of cellulose	9
1. Cold pad-batch process	10
2. Pad-dry-pad-steam process	29
3. Pad-dry-baking process	33
4. Pad-steam process	36
5. Emoistfix process	38
6. Wash-off process	40

Dyeing process of blended fibres	41
7. Polyester/cellulosic fibre blends	42
pad-dry-thermofix-pad-steam process	
8. Polyester/cellulosic fibre blends	44
pad-dry-thermofix-cold pad-batch process	
9. Polyamide/cellulosic fibre blends	47
cold pad-batch-exhaustion process	
10. Recommended trichromatic combination	53
11. Everzol C & ED color fastness	62

PHILOSOPHY AND PRINCIPLES

The core values of Everlight are “Business by Integrity; Management by Caring.” Our mission statement, business philosophy and principles are all derivatives of these values shared by all employees.

Philosophy

We have adopted the merit of love from the Bible as the essence of our management. From this, we have generated our philosophy of management as “Pursuit of Progress and Innovation, Stimulation of Individual Potential and Contribution to Quality of Life.”

Pursuit of Progress and Innovation

We define progress and innovation as a challenge and need to achieve continuous improvement in the increasingly competitive markets. Therefore, we focus on building solid technical foundations for improving quality, manufacturing reliable high-tech products, and nurturing technical and commercial specialists. In addition, our management oversees and coordinates all operations including R&D, production, and marketing, and has led the company into a global business.

Stimulation of Individual Potentials

We believe the most valuable asset of every company is its human resource. Everlight values all its employees and cares for their growth by providing open and fair working environment and on-the-job training. Teamwork spirit and mutual support are facilitated to develop the full potential of each employee and the company.

Contribution of Quality of Life

We recognize that the value of a company lies in its contribution to the quality of life. Everlight has endeavoured in providing top quality products, such as color chemicals, specialty chemicals, pharmaceuticals, electronic chemicals and nano-materials, to the world community. Everlight has also been actively involved in charitable activities.

Principles

In order to pursue sustainable development while shareholders interest and human dignity are to be taken care of and respected, Everlight has set forth the following principles for our operations.

- | | | |
|-----------------------------|-----------------------------------|------------------------------|
| 1. Business Ethics | 5. Customers' Satisfaction | 9. Solid Financial Structure |
| 2. Product Selection | 6. Respecting Employees | 10. Stockholders' Interests |
| 3. Industrial Safety | 7. Technological Self-Sufficiency | 11. Fair Competition |
| 4. Environmental Protection | 8. Continuous Improvement | 12. Contribution to Society |

Quality Policy

EVERLIGHT positions itself as a high-tech chemical manufacturer. Realizing that world-class quality and customers' satisfaction provide the foundation for sustainable development, we define Everlight Quality Policy as :

Customers Caring With Value Creation

And adopt the following strategies :

1. Listening to the Voice Of Customers and understanding their real needs.
2. Developing new products to increase customers' values.
3. Providing professional services to solve customers' problems.
4. Fact-based analysis and continuous process improvement.
5. Managing hazardous substances and producing "green products".



Safety and Health Policy

EVERLIGHT positions itself as a high-tech chemical manufacturer. Realizing that industrial safety and health are one of the major concerns in business management and that this responsibility should be taken by all the employees, we define Everlight Safety and Health Policy as :

Revere the Life and Pursue Zero Incident

To actualize this commitment, we adopt the following strategies :

1. Establish OHSAS 18001 Safety and Health Management System.
2. Enhance employees' consciousness and skills of safety and training.
3. Promote employee-based initiatives, and integrate safety considerations into standard operation.
4. Continuous improvement of safety and health performance under the observation of supervisor.
5. Comply the safety and health regulation and commit to the safety and health of all employees.



Risk Management Policy

EVERLIGHT positions itself as a high-tech chemical manufacturer. In order to reduce business management risks and maintain competitiveness, we define Everlight Risk Management Policy as :

Establishing Risk Management Culture Ensuring Business Sustainability

And adopt the following strategies :

1. Establishing risk management system.
2. Strengthening all employees' risk awareness by education and training.
3. Strengthening Corporate Governance.
4. Complying with international product safety regulations.
5. Commitment to our Environmental, Safety and Health Policies.



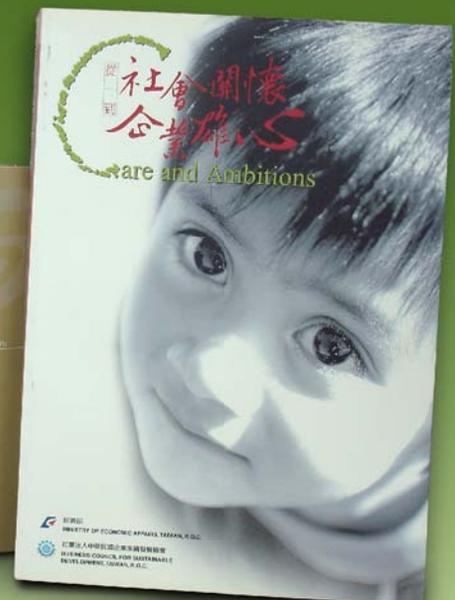
Environmental Policy

EVERLIGHT positions itself as a high-tech chemical manufacturer, realizing the limit of earth resources and the importance of "sustainable development". To take the responsibility of a global citizen and participate "the Green Campaign", we define Everlight Environmental policy as :

Conserve Earth Resources Conform to Environmental Regulations

To actualize this commitment, we adopt the following strategies:

1. Establishing ISO 14001 Environmental Management System.
2. Enhancing employees' consciousness and skills of environmental protection through education and training.
3. Continuous improvement of the production processes and the utilization of all resources.
4. Reducing industrial wastes and practicing pollution prevention.
5. Developing environmental techniques and increasing the effectiveness of waste treatment facilities.



2004/3/26 Reviewed

Introduction

Everzol C & ED dyes are especially designed for using in cold pad-batch and continuous dyeing processes.

They are :

- Designed and formulated to meet cold pad-batch and continuous dyeing properties.
- Quality assurance by cold pad-batch and continuous dyeing process inspections.
- Enhanced padding liquor stability.
- Enhanced solubility in alkali.

The advantages of Everzol C & ED dyes are :

- Batch to batch consistency in cold pad-batch and continuous dyeing.
- Excellent stability and solubility in alkali solution.
- Uniformity of reproducibility.
- Robust to dyeing process variation.

The features of Everzol C & ED dyes

High fixation rate.

Reduce effluent and save water.

Medium substantivity.

Less tailing problem from dyes and good wash-off.

Good build up.

High color yield, easy to dye heavy shades.

In cold pad-batch.

Dyeing on cotton component, less nylon side staining problem for N/C fabric.

Full range

Excellent compatibility for pale shades, and from medium to heavy shades.

Everzol C & ED dyes for your business have :

- Excellent reproducibility.
- Short process, less time, high productivity.
- Versatile application for continuous dyeing process.
- Save water.

Everzol C dye list

Everzol Yellow C-4G
Everzol Yellow C-GL
Everzol Yellow C-GR
Everzol Yellow C-3RS H/C
Everzol Yellow C-RN
Everzol Orange C-R
Everzol Orange C-2R
Everzol Orange C-3R 133%
Everzol Red C-3B
Everzol Red C-RB 133%
Everzol Red C-3BS H/C
Everzol Red C-D
Everzol Turquoise C-G 133%
Everzol Blue C-R S/P
Everzol Blue C-BB 133%
Everzol Blue C-BRF
Everzol Navy C-GG 133%
Everzol Navy C-GB H/C
Everzol Navy C-FB
Everzol Black C-B 133%
Everzol Black C-RL
Everzol Black C-N 150%
Everzol Black C-GSP

Everzol ED dyes in continuous dyeing list

Everzol Yellow ED-R
Everzol Yellow ED
Everzol Yellow ED-S
Everzol Red ED
Everzol Red ED-2B
Everzol Red ED-3B
Everzol Red ED-7B
Everzol Red ED-S
Everzol Rubine ED
Everzol Blue ED-G
Everzol Blue L-ED
Everzol Blue ED
Everzol Navy ED
Everzol Black ED
Everzol Black ED-G
Everzol Black ED-R

Everzol LX/LF dyes in continuous dyeing list

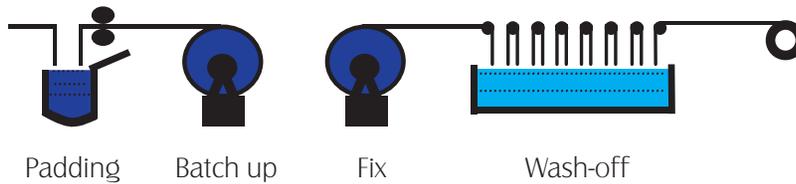
Everzol Yellow LX
Everzol Red LF-B
Everzol Red LF-2B
Everzol Blue C-LX
Everzol Dark Blue LF

DYEING PROCESS

We introduce main process presently in use world-wide for cold pad-batch and continuous dyeing.

COLD PAD-BATCH	10
PAD-DRY-PAD-STEAM	29
PAD-DRY-BAKING	33
PAD-STEAM	36
EMOISTFIX	38

1. Cold pad-batch process



Features

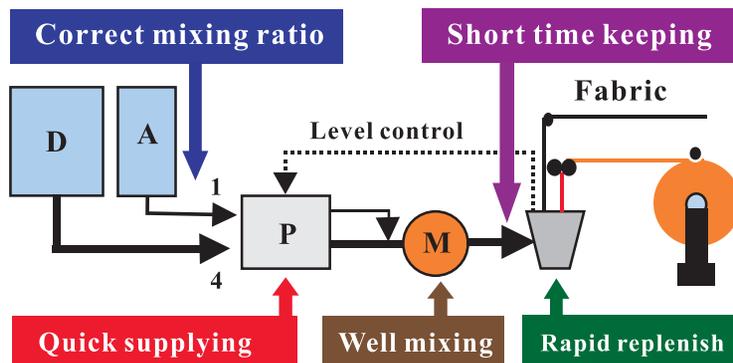
Everzol C & ED dyes in cold pad-batch have :

- Excellent solubility in alkali.
- Excellent padding liquor stability.
- High fixation rate and good color yield.
- Even dyeing.
- High productivity. Suitable for wide range of goods, especially for heavy fabrics, such as corduroy, velveteen, towel, emerized fabric and knitted fabrics etc.
- Less nylon staining problem for N/C fabric when dyeing the cotton component.

Padding :

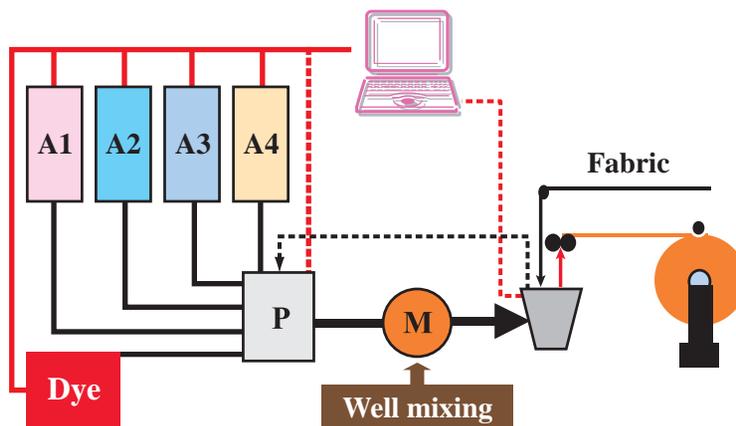
In cold pad-batch dyeing, the dye and alkali solutions are normally a mixture prepared at a ratio of 4 parts of the dye solution to 1 parts of the alkali solution by volume. These solutions are mixed at the pad with a pump type alkali mixer.

The dye and alkali solutions are mixed as follows :



When dyeing lightweight fabrics with a small-volume trough to ensures rapid exchange of the padding liquor.

New concept to dyeing center with new technology designed to control process.



The mixing ratio can be changed freely within a certain range.

Alkali requirements :

We recommend 3 kinds of alkali for the cold pad-batch process.

A. Silicate free method :

Everzol C or ED dyes	X g/l
Caustic soda (32.5%)	8+X/5 ml/l
Soda ash	20 g/l
Glauber's salt (option)	30 g/l

B. Sodium silicate method :

Sodium silicate (m/l)			Amounts of Everzol C & ED dyes used (g/l)					
			~20	30	40	50	60	70 ↑
	g/l	ml/l	Amounts of caustic soda 32.5% required (cc/l)					
37~40 °B'e	130	95	23.5	28.5	28.5	33.5	33.5	38.5
40~42 °B'e	110	75	23.5	28.5	28.5	33.5	33.5	38.5
48~50 °B'e	100	65	15	20	20	25	25	30
58~60 °B'e	90	50	6	11	11	16	16	21

C. Modified alkali method :

Sodium silicate (m/l)			Amounts of Everzol C & ED dyes used (g/l)					
			~10	20	30	40	50	60 ↑
	g/l	ml/l	Amounts of caustic soda 32.5% required (cc/l)					
37~40 °B'e	65	50	7	12	12	17	17	22
40~42 °B'e	55	40	7	12	12	17	17	22
48~50 °B'e	50	35	5	10	10	15	15	20
58~60 °B'e	45	25	3	7	7	11	11	16

Auxiliary :

The penetrating agent must also be stable in the padding liquor and be non-foaming.

Urea can be added to improve the solubility of some dyes.

Notes :

The alkali C modified alkali method reduces the amount of sodium silicate and caustic soda needed. A fixation time over 16 hours or overnight is necessary.

For application of all the recommended alkalis listed above, a mixing pump is required.

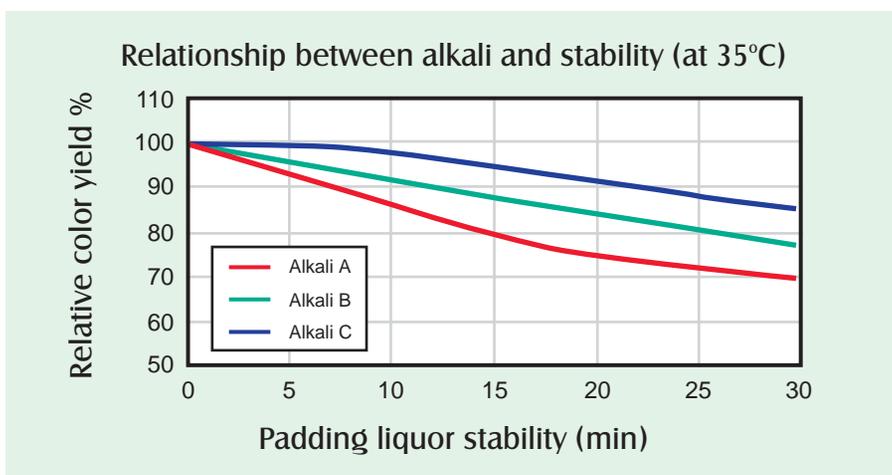
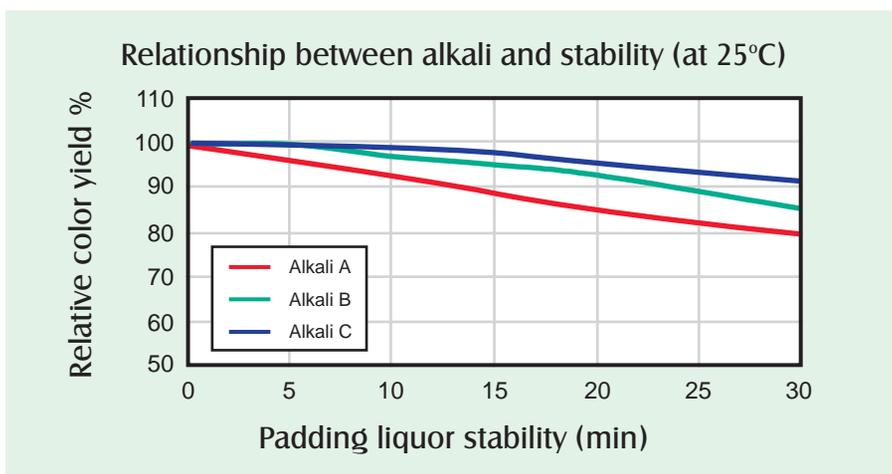
Padding liquor stability :

The stability of padding liquor is dependent on the kind of alkali within the range of storage time and padding temperatures.

Example shown in the diagram.

For most of reactive dyes in cold pad-batch dyeing.

Relationship between alkali and stability

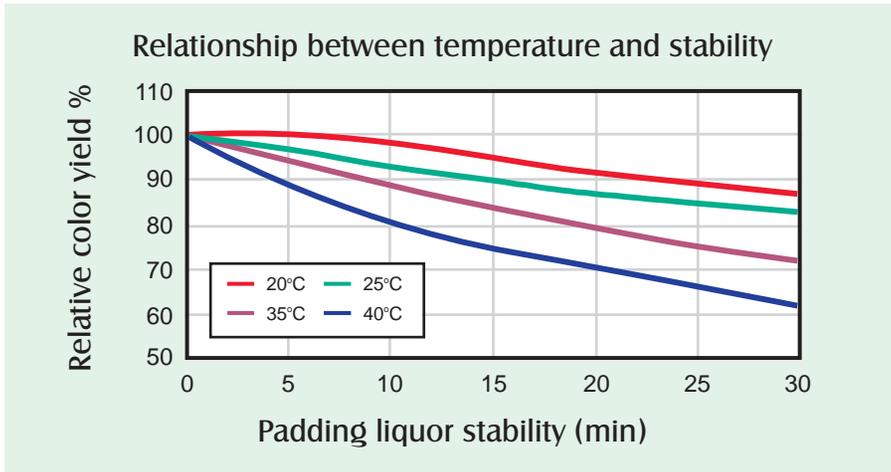


The alkali C modified alkali method is especially designed for tropical climates when the padding liquor temperature and fixation temperature are around 30~40°C, to possess of excellent padding liquor stability .

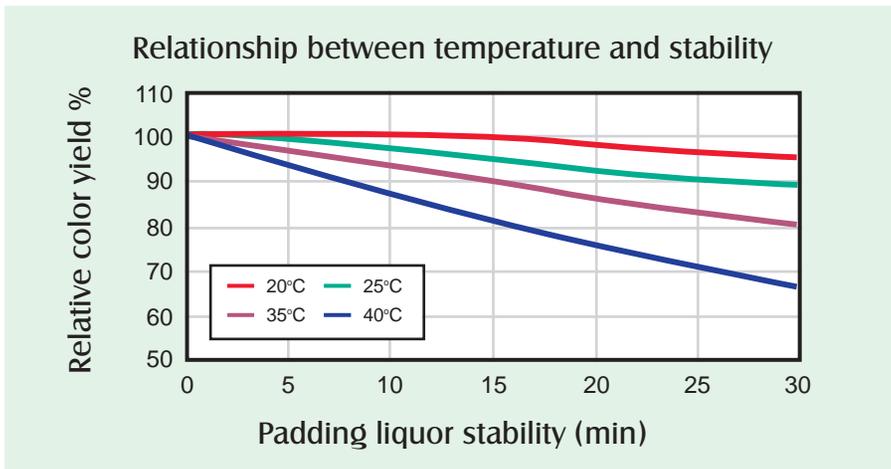
Relationship between alkali and stability

For most of reactive dyes in cold pad-batch dyeing.

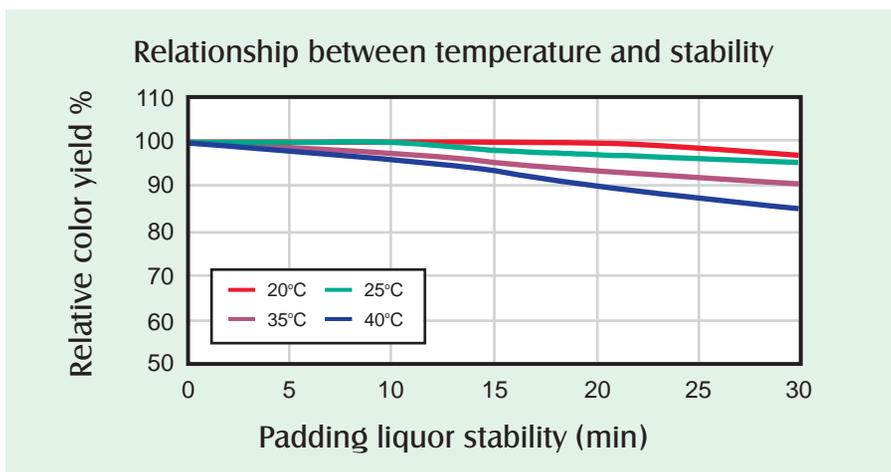
In alkali A, silicate free method :



In alkali B, sodium silicate method :



In alkali C, modified alkali method :



The alkali C modified alkali method is especially designed for tropical climates when the padding liquor temperature and fixation temperature are around 30~40°C, to possess of excellent padding liquor stability. Certainly, when the padding liquor temperature and fixation temperature are normal room temperature around 20~25°C, a longer fixation time or even overnight storage is generally needed for this method of processing to be reliable.

Fixation :

The goods are batched up after padding. To avoid any effects from outside factors (air), they are wrapped in plastic film and sealed so that the roll is airtight.

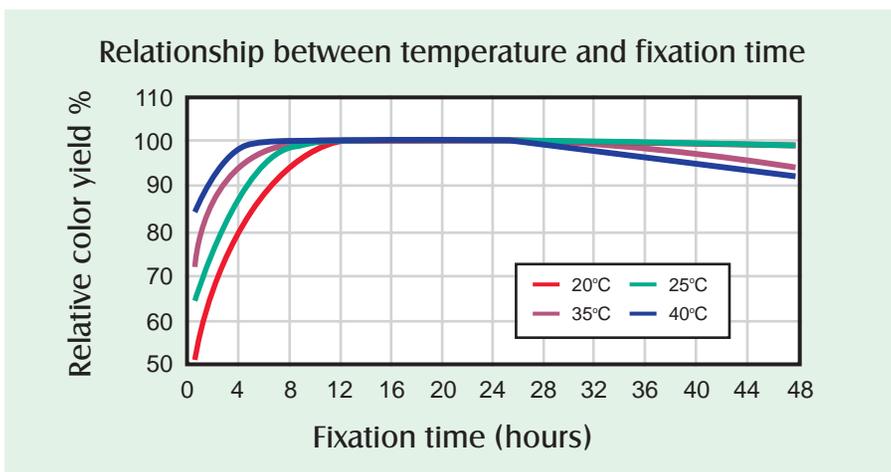
The batched roll is then continuously rotated with care taken to ensure that the selvages are aligned. The rolls must be stable and rotate slowly and horizontally.

The dyes are fixed at a constant temperature (generally close to the padding liquor temperature) and for the duration of the fixation time.

In the production workshop, we generally recommend a minimum fixation time of 4 hours and at least 25°C or more after batching (If long yardages or large batched, it is better to increase 2 hours or more of the fixation time). Longer fixation times (up to 48 hours) at room temperature do not alter the shade.

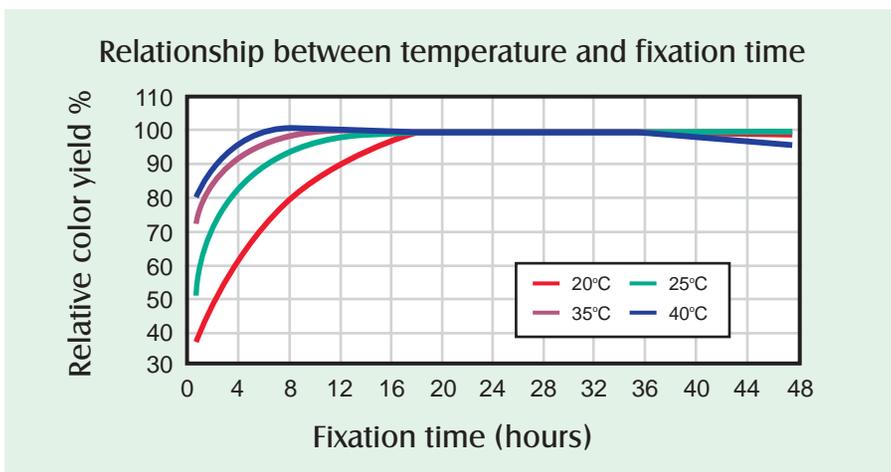
If the fixation temperature is considerably lower, the minimum fixation time must be increased or overnight. If the fixation temperature is considerably higher, we suggest that the maximum fixation time does not exceed 24 hours.

Relationship between temperature and fixation time



Test alkali : Alkali B : sodium silicate method
Mercerized cotton

If the fixation temperature is considerably higher, we suggest that the maximum fixation time does not exceed 24 hours.

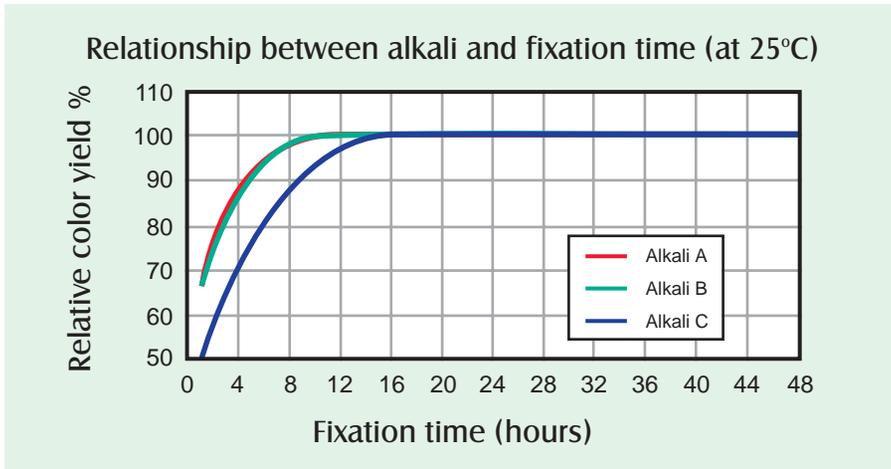


Test alkali : Alkali C : modified alkali method
Mercerized cotton

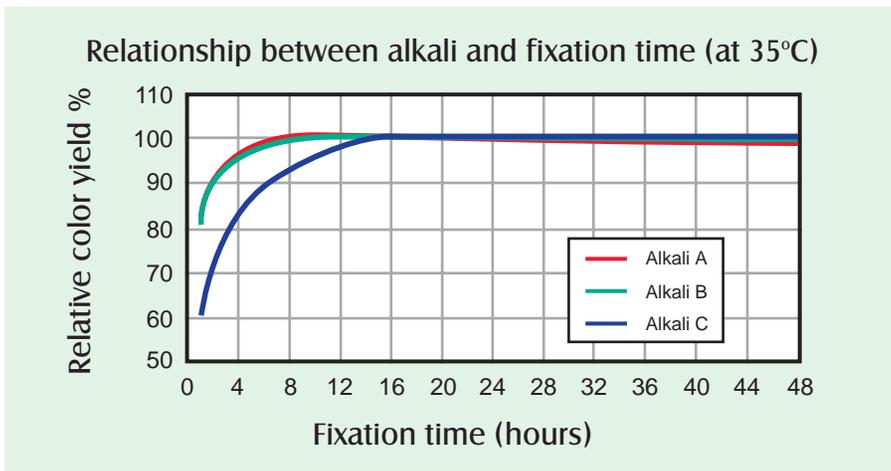
The alkali C modified alkali method is especially designed for tropical climates when the fixation temperature is around 30~40°C, to provide excellent batch stability and shade repeatability.

Relationship between alkali and fixation time requirement

For most of reactive dyes



Mercedized cotton



Mercedized cotton

The alkali C modified alkali method is especially designed for tropical climates, to provide excellent batch stability and shade repeatability.

When the padding liquor temperature and fixation temperature are normal room temperature around 20~25°C, a longer fixation time or even overnight storage is generally needed for this method of processing to be reliable.

Fixation time requirements for Everzol C and ED dyes

For mercerized cotton

Series	I	II	III	IV
Yellow	Yellow C-GL Yellow C-GR Yellow C-RN	Yellow ED-S	Yellow C-3RS H/C Orange C-R Orange C-2R Yellow ED-R	Yellow C-4G Yellow ED
Red	Orange C-3R133% Red C-3B Red C-RB133%	Red C-3BS H/C Red C-D Red ED-2B	Red LF-B Red LF-2B Red ED Red ED-S Red ED-3B Red ED-7B	Rubine ED
Blue	Navy C-GG133% Black C-B133%	Blue C-R S/P Navy C-GB H/C	Blue C-BB133% Blue L-ED Navy C-FB Navy ED	Turquoise C-G133% Blue ED-G Blue ED Blue C-BRF Blue C-LX
Other	Black C-RL Black C-N 150% Black C-GSP Black ED Black ED-G Black ED-R	Dark Blue LF		
Fixation time	~4hrs ↑	~8hrs ↑	~12hrs ↑	~16hrs ↑

Alkali requirements : Alkali A silicate free method

Alkali B sodium silicate method

Material : Mercerized cotton

Fixation temperature : 25°C

If the dyes combination involve more than one series, that means different dyes have different fixation time to be combined together, fixation time should be chosen the longest one among all the dyes in the recipe. For the alkali C modified alkali method, a longer fixation time (above 16 hrs) or an overnight storage is necessary.

For unmercerized goods, the fixation time are the following :

Fixation time requirements for Everzol C and ED dyes

Series	I	II	III	IV
Yellow	Yellow C-GL Yellow C-GR Yellow C-RN	Yellow ED-S	Yellow C-3RS H/C Orange C-R Orange C-2R Yellow ED-R	Yellow C-4G Yellow ED
Red	Orange C-3R133% Red C-3B Red C-RB133%	Red C-3BS H/C Red C-D Red ED-2B	Red LF-B Red LF-2B Red ED Red ED-S Red ED-3B Red ED-7B	Rubine ED
Blue	Navy C-GG133% Black C-B133%	Blue C-R S/P Navy C-GB H/C	Blue C-BB133% Blue L-ED Navy C-FB Navy ED	Turquoise C-G133% Blue ED-G Blue ED Blue C-BRF Blue C-LX
Other	Black C-RL Black C-N 150% Black C-GSP Black ED Black ED-G Black ED-R	Dark Blue LF		
Fixation time	~8hrs ↑	~12hrs ↑	~16hrs ↑	~24hrs ↑

Alkali requirements : Alkali A silicate free method

Alkali B sodium silicate method

Material : unmercerized cotton

Fixation temperature : 25°C

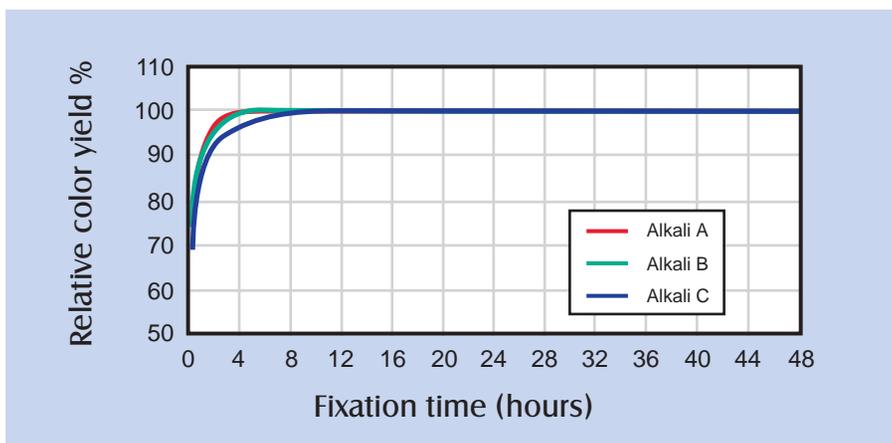
If the dyes combination in involve more than one series, fixation time should be the longest one.

For the alkali C modified alkali method, a longer fixation time (above 16 hrs) or overnight storage is necessary.

For knitted fabric a longer fixation time (above 16 hrs) or overnight storage is necessary, no mater which alkali had been use.

Relationship between alkali and fixation time requirement for color match

Color match 1: in pale shades

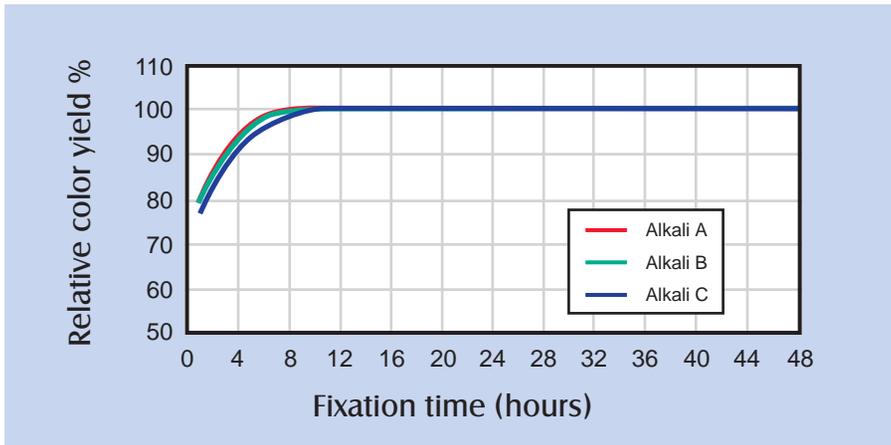


Recipe	: Everzol Yellow C-GL	3.3 g/l
	Everzol Red C-3B	3.3 g/l
	Everzol Blue C-BB 133%	3.3 g/l
Material	: Mercerized cotton	
Fixation temperature	: 25°C	as control at 24hrs

In this combination for pale shade, the fixation time is 6 hrs. If the longer fixation time is used, the dyeing result is the same and do not alter the shade. For alkali C a longer fixation time is needed.

Relationship between alkali and fixation time requirement for color match

Color match 2: in medium-deep shades

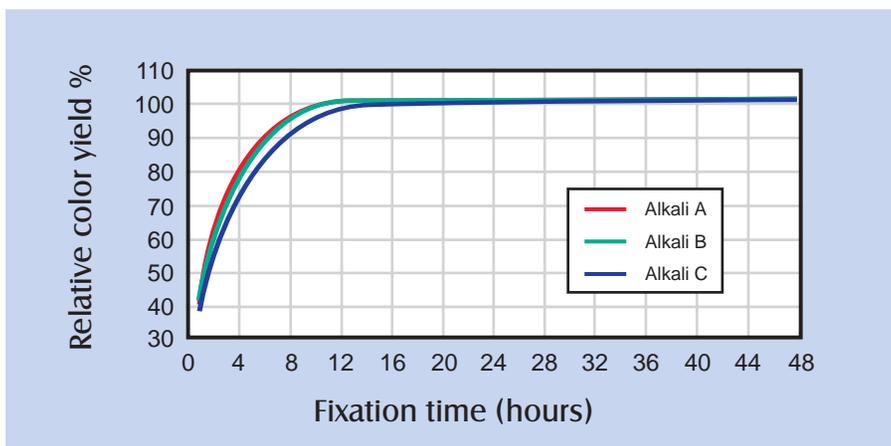


Recipe	: Everzol Yellow C-RN	15.0 g/l
	Everzol Red C-RB 133%	15.0 g/l
	Everzol Navy C-GB H/C	15.0 g/l
Material	: Mercerized cotton	
Fixation temperature	: 25°C	as control at 24hrs

In this combination for medium-deep shade, the fixation time is 8hrs. If the longer fixation time is used, do not alter the shade and the color yield has no significant changed. For alkali C a longer fixation time is needed.

Relationship between alkali and fixation time requirement for color match

Color match 3 : in medium-deep shades (bifunctional group)

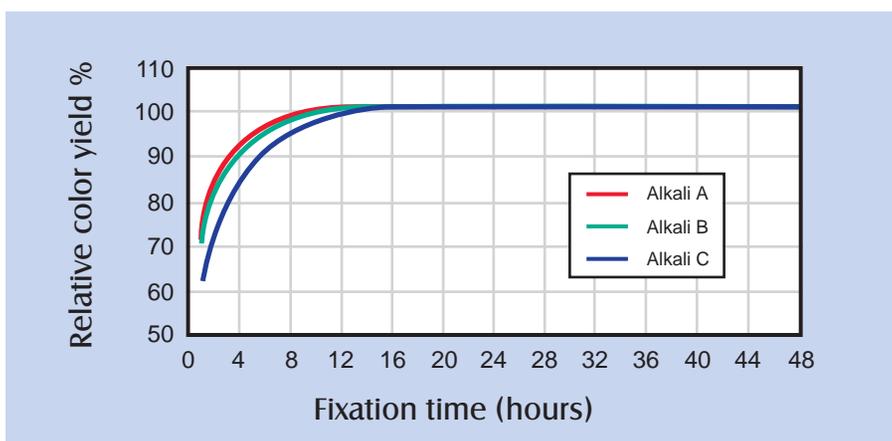


Recipe	: Everzol Yellow C-3RS H/C	26.0 g/l
	Everzol Red C-3BS H/C	12.5 g/l
	Everzol Navy C-FB	14.5 g/l
Material	: Mercerized cotton	
Fixation temperature	: 25°C	as control at 24hrs

In this bifunctional combination, minimum 12 hrs fixation time is needed. The longer fixation time gives same result and ensures good reproducibility. If the fixation time is too short, it will get less color yield and poor reproducibility. For alkali C a longer fixation time is needed.

Relationship between alkali and fixation time requirement for color match

Color match 5: in medium-deep shades



Recipe	: Everzol Yellow C-3RS H/C	25.0 g/l
	Everzol Red C-3BS H/C	10.0 g/l
	Everzol Black C-B 133%	10.0 g/l
Material	: Mercerized cotton	
Fixation temperature	: 25°C	as control at 24hrs

In this combination, although Everzol Black C-B 133% can achieve full color yield with a shorter time, a fixation time of 12hrs is necessary when dyeing with Everzol Yellow C-3RS H/C and Everzol Red C-3BS H/C, because of Everzol Yellow C- 3RS H/C & Everzol Red C-3BS H/C require the longer fixation time. If the fixation time is too short with this combination, less color yield and poor reproducibility will result.

In the cold pad-batch process, attention must be given to :

■ Solubility in alkali

alkali choice
urea addition

Alkali choice : In alkali C (modified alkali method) has good solubility for some dyes.

Urea addition : Urea can be added to improve the solubility of some dyes.

■ Stability in padding liquor

low temperature
alkali choice

Low temperature : It is preferred to keep the padding liquor at low temperature. If urea can be added to the padding liquor, the padding liquor will cool further since urea absorbs heat as it dissolves. A higher padding temperature will reduce the padding liquor stability which may cause tailing problem and reduce the dye yield.

Alkali choice : Dyes in alkali C (modified alkali method) has excellent padding liquor stability, especially for tropical climates.

■ Temperature

fabric
padding liquor

Cooling the goods after the pretreatment and cooling the padding liquor are also required. A higher temperature of the padding liquor can lower the padding liquor stability and reduce the dye yield. While higher padding temperatures reduce the padding liquor stability, non constant temperature of goods can cause uneven absorbs and tailing problem.

■ Fixation time management

fixation time
batched priority

Have sufficient fixation time and wash each batch by a priority schedule to insure shade continuity.

■ Condition of atmosphere change

summer
winter

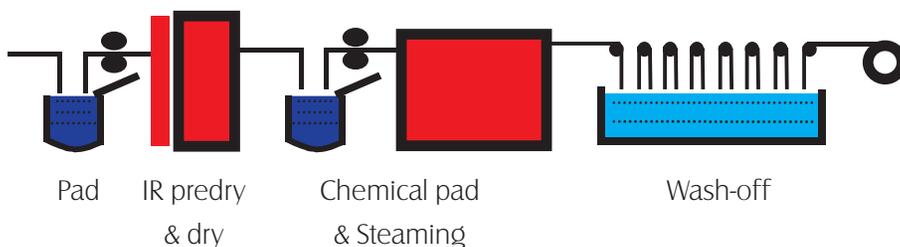
Pay attention to atmosphere change, because fixation yield and reproducibility varies with the batching condition.

Cold pad-batch the rapid dyeing method in the laboratory.

Dry oven method, good reproducibility to various fabrics by rapid dyeing method. Besides, it is easy to make sure right color matching between laboratory and bulk dyeing.

Optimum condition : 60°C x 30min or 70°C x 20min

2. Pad-dry-pad-steam process



The dyes and chemical alkali are applied separately on the goods to be dyed in two batch continuous dyeing; a wide selection of dyes are available for this method.

Features :

Everzol C & ED dyes in the pad-dry-pad-steam process have :

- Even dyeing.
- Good stability in steaming.
- High fixation rate.
- High productivity.

Padding liquor condition :

Everzol C or ED dyes	x g/l
Migration inhibitor	1 g/l
Reduction inhibitor	10 g/l
Penetrating agent	0~2 g/l

The penetrating agent must also be stable in the padding liquor and be non-foaming.

Reduction inhibitor can be added to prevent reduction of the reactive dyes.

Urea can be added to improve the solubility of some dyes.

Padding :

It is essential that the goods to be padded be uniformly absorbent. Make sure fabric is supported and gets uniform pick up across the width of the goods.

Optimum padding results are achieved under the following conditions:

Padding temperature : Higher padding temperatures can cause a tailing problem.
Keeping the padding liquor at a constant room temperature is highly recommended.

Goods : Must be evenly dried and cool. Cool the goods after the pretreatment.
Maintain at a constant room temperature and even humidity content.
Ensure the quality of the pretreatment.

Padding trough : Use of a small-volume trough to ensure a rapid exchange of the padding liquor and a constant padding speed will help avoid tailing problems.

Drying :

- IR pre-drying
- Dry to about 30% residual moisture
- Dry at 110~130°C
- Cool goods after drying

The fabric should have adequate cooling after drying.

Intermediate drying is required in the pad-dry-pad-steam process. Usually, united infrared-heaters (pre-drying) are used with hot-flue machines or on steam heated cylinders (drying).

The pre-drying should reduce the moisture content to about 25~30%. Under these conditions, migration is unlikely to occur during subsequent drying.

If goods are dried on ranges without a pre-drying, airflow in the hot flue must be carefully balanced and a slow fan speed used.

Goods should be dried evenly across the full width and both sides to prevent migration.

Chemicals padding and Steaming :

Stabilize and give uniform chemical padding across the width of the goods.

Chemicals requirement :

A. Sodium silicate (48~50°B'e)	60~70 %
B. Caustic soda (32.5%)	14~20 ml/l
Salt	250 g/l
C. Caustic soda (32.5%)	12~18 ml/l
Soda ash	20 g/l
Salt	250 g/l

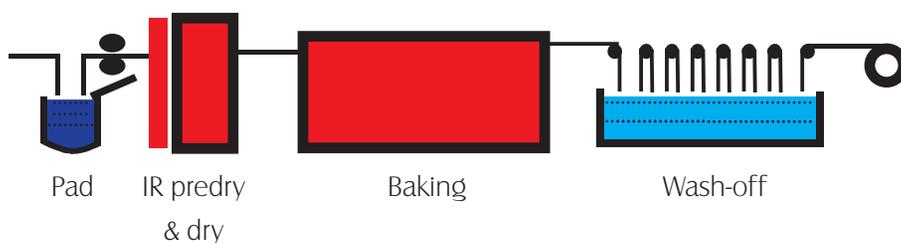
Steaming :

Continuous fixation of reactive dyes in saturated steam at 102~105°C.

Recommend steaming time :

30-70 secs
<p>Yellow C-GL, Yellow C-GR, Yellow C-3RS H/C, Yellow C-RN Orange C-R, Orange C-2R, Orange C-3R 133% Red C-3B, Red C-RB 133%, Red C-3BS H/C, Red C-D Blue C-R S/P, Blue C-BB 133%, Blue C-BRF, Blue C-LX Navy C-GG 133%, Navy C-GB H/C, Navy C-FB Black C-B 133%, Black C-RL, Black C-N 150%, Black C-GSP Yellow ED-R, Yellow ED, Yellow ED-S Red ED, Red ED-2B, Red ED-3B, Red ED-7B, Red ED-S, Rubine ED Blue ED-G, Blue L-ED, Blue ED, Navy ED Black ED, Black ED-G, Black ED-R</p>
70-100 secs
<p>Yellow C-4G Turquoise C-G 133%</p>

3. Pad-dry-baking process



This is the one batch method continuous dyeing process.

Features :

Everzol C & ED dyes in pad-dry-baking process have :

- Even dyeing.
- Excellent stability in padding liquor.
- Excellent consistency in drying and baking.
- High productivity.

Padding liquor condition :

Everzol C or ED dyes	x g/l
Alkali	see P.35
Migration inhibitor	1 g/l
Reduction inhibitor	10 g/l
Urea	50~100 g/l
Penetrating agent	0~2 g/l
Borax	0~10 g/l

The penetrating agent must also be stable in the padding liquor and be non-foaming.

Reduction inhibitor can be added to prevent reduction of the reactive dyes.

Urea can be added to improve the solubility of some dyes, which will raise the color yield in this continuous process. Urea will not be necessary when the baking temperature is higher than 160 °C.

Borax can be added to prevent the cotton component yellowing.

Padding :

It is essential that the goods to be padded be uniformly absorbent. Make sure that the fabric is supported and gets uniform pick up across the width of the goods.

Optimum padding results are achieved under the following conditions :

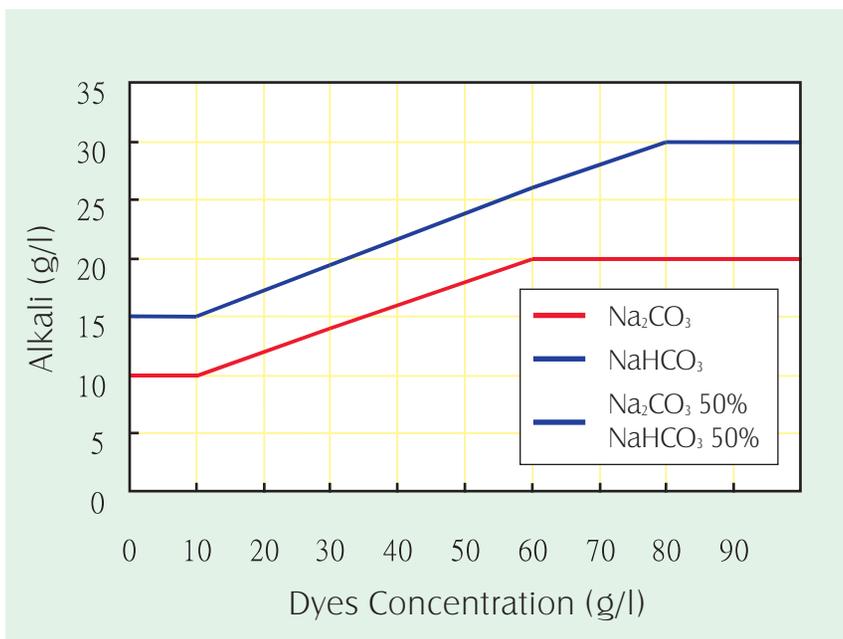
Padding temperature : Higher padding temperatures can cause a tailing problem and reduce the dye yield. Padding liquor should be kept at a constant room temperature.

Goods : Must be evenly dried and cool. Cool the goods after the pretreatment. Maintain at a constant room temperature and even humidity content. Ensure the quality of the pretreatment is very important.

Padding trough : Use of a small-volume trough, to ensure a rapid exchange of the padding liquor and a constant padding speed will help avoid tailing problems.

Alkali requirements :

The alkali requirements are diagrammed below :



Drying :

IR pre-drying

Dry down to about 30% residual moisture.

Dry at 100~110 °C

Baking :

4~6 min, at 120 °C

3~4 min, at 140 °C

2~3 min, at 150 °C

2~3 min, at 160 °C

1~2 min, at 180 °C

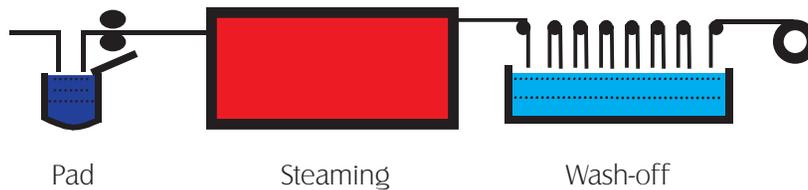
0.5~1 min, at 200 °C

Notes :

Take care about the goods yellowing at high temperature.

At high temperature dyeing i.e. 180~200°C, fabric yellowing should be counted in color matching.

4. Pad-Steam Process



This is one bath continuous dyeing process suitable for heavy fabrics without intermediate drying, because of heavy fabrics for which intermediate drying would not be economical and that would be a risk of dyestuff migration.

Everzol C & ED dyes in the pad-steam process have :

- Even dyeing.
- High productivity.
- Suitable for heavy fabrics such as corduroy, velveteen, towel and emerized fabric, etc.

Padding liquor condition :

Everzol C or ED dyes	x g/l
Caustic soda (32.5%)	See p.37
Soda ash	20 g/l
Glauber's salt (option)	30 g/l
Reduction inhibitor	10 g/l
Penetrating agent	2 g/l

Padding liquor temperature at 20~25°C

Alkali mixer is required.

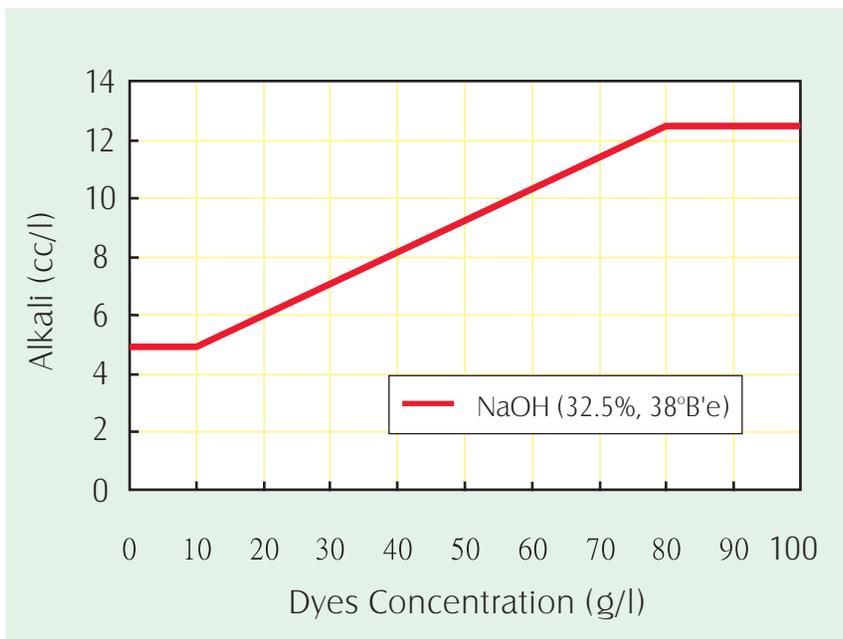
The penetrating agent must also be stable in the padding liquor and be non-foaming.

Reduction inhibitor can be added to prevent reduction of the reactive dyes.

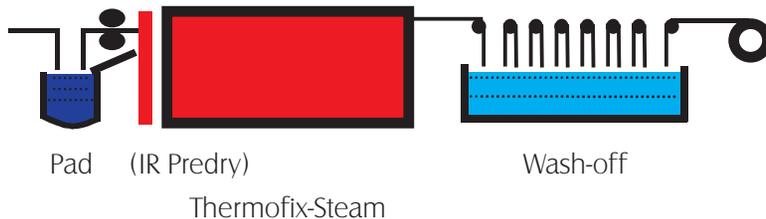
Steaming time :

60~100 seconds in saturated steam at 102~105°C.

Gaustic soda requirement is diagrammed below :



5. Emoistfix process



The Emoistfix process is combination of a continuous steaming and a drying process. That combines with dyestuff and alkalis padding together and then drying-fixing in one batch process by continuous application to make simple and more economical.

Features :

Everzol C & ED dyes in the Emoistfix process have :

- High fixation rate and good color yield.
- Excellent solubility and stability in alkalis.
- High lab-to-bulk reproducibility and reliability.
- Full range of trichromatic from pale to heavy shades.

Padding liquor condition :

It is essential to make alkali and Everzol dye solution separately.

Padding liquor:

Everzol C or ED dyes	X g/l
Reduction inhibitor	5-10 g/l
Migration inhibitor (option)	0-1 g/l
Penetrating agent in padding liquor	0-2 g/l
Urea (option)	50 g/l

The penetrating agent must also be stable in the padding liquor and be non-foaming. Reduction inhibitor can be added to prevent reduction of the reactive dyes. Urea can be added to improve the solubility of some dyes.

Alkali requirements :

Everzol C or ED dyes	Amounts of Everzol C or ED dyes used (g/l)					
	~20	20~40	40~60	60~80	80~100	100 ↑
	Amounts of caustic soda (38°B'e) required (cc/l)					
NaOH (38°B'e)	7	11	14	17	21	24
Na ₂ CO ₃	20 g/l					

Alkali mixer is required as same as cold pad-batch process.

Padding liquor temperature at 20-25°C.

Padding :

It is essential that the goods to be padded be uniformly absorbent. Make sure that the fabric is supported and gets uniform pick up across the width of the goods.

Optimum padding results are achieved under the following conditions :

Padding temperature : Higher padding temperatures can cause a tailing problem and reduce the dye yield. Padding liquor should be kept at a constant room temperature.

Goods : Must be evenly dried and cool. Cool the goods after the pretreatment. Maintain at a constant room temperature and even humidity content. Ensure the quality of the pretreatment is very important.

Padding trough : Use of a small-volume trough, to ensure a rapid exchange of the padding liquor and a constant padding speed will help avoid tailing problems.

Drying and fixation :

2-3min at 120-130°C, it depends on the substrate.

Humidity control at 25%

Make sure the dyed fabric is dry at the end of machine to achieve color yield completely.

6. Wash-off process



General wash-off process as the following :

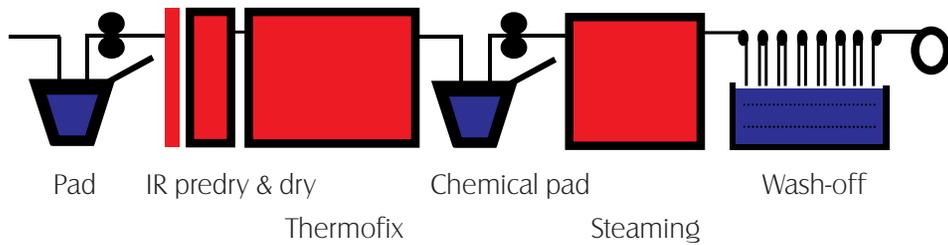
Cold rinsing (with overflow)	1 box	at 30~40 °C
Warm rinsing (or neutralizing, alkali without sodium silicate)	1 box	at 50~60 °C
Hot rinsing	2 box	at 90~95 °C
Soaping	2 box	at 90~95 °C
Warm rinsing	1 box	at 50~60 °C
Cold rinsing (neutralizing, pH value set at pH 6~7) (neutralize in the last rinsing bath when alkali with sodium silicate)	1 box	at 30~40 °C

The conditions used in the wash-off of reactive dyes will have a significant influence on the fastness properties of the finished fabric. Make sure that excess dye does not accumulates in the rinse baths. The difference in the dye/fibre and dye/liquor concentration must be sufficient to ensure good wash-off effects. The most important factor in wash-off process is by highest possible temperature for the longest possible time. It is therefore important that most of the rinse baths in the washing range be capable of achieving a temperature in the region of 90~95°C.

POLYESTER / CELLULOSIC blends	42
POLYAMIDE / CELLULOSIC blends	47

7. Polyester/Cellulosic blended fabric

Pad-dry-thermofix-pad-steam process



Dyeing of PET/CEL blended fibres by continuous process.

They are :

- A higher productivity.
- Superior uniformity of shade in this large batches

Padding liquor condition :

Evercron XF (for PET component)	x g/l
Everzol C or ED dyes (for CEL component)	y g/l
Migration inhibitor	1 g/l
Reduction inhibitor	10 g/l
Penetrating agent	0~2 g/l
Padding liquor temperature at 20~25°C	
Adjust pH value to 5~6 with acetic acid.	

Drying :

IR Pre-drying

Dry at 100~120°C

For more detailed information, see pad-dry-pad-steam process.

(page 29)

Thermofix :

60~90 seconds at 200~220°C

Chemical padding and steaming :

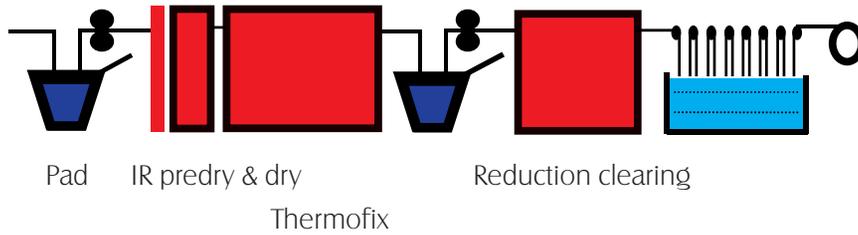
40~100 seconds in saturated steam at 102~105°C.

See pad-dry-pad-steam process. (page 29)

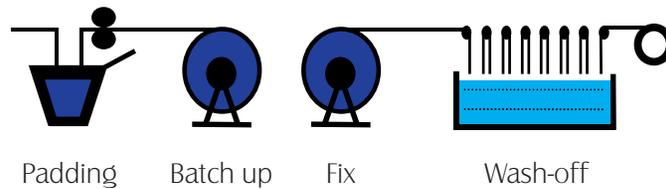
8. Polyester/Cellulosic blended fabric

Pad-dry-thermofix-cold pad-batch process

Polyester side :



cellulose side :



Advantages of dyeing of PET/CEL blended fabric by the thermofix process combined with the cold pad-batch process are :

- Intermediate reduction clearing is possible. It is easy to achieve high fastness properties.
- Wide range of brilliant shades.
- Simple to machinery available and economical process

Padding liquor condition :

Evercron XF (for PET component) x g/l
Migration inhibitor 1~2 g/l
Penetrating agent 0~2 g/l
Padding liquor temperature at 20~25°C
Adjust pH value to 5~6 with acetic acid.

Drying :

IR Pre-drying

Dry at 100~120°C

For more detailed information, see pad-dry-pad-steam process. (page 29)

Thermofix :

60~90 seconds at 200~220°C

Reduction clearing :

NaOH (32.5%) 25 cc/l

Na₂S₂O₄ 25 g/l

40~60 seconds in saturated steam at 102~105°C

neutralizing / oxidation

Cold pad-batch process :

See cold pad-batch process. (page 10)



For dyeing PET/CEL blended fabrics, we have listed the recommended Evercron dye (disperse dye) selection for polyester side dyeing.

Evercron Yellow Brown XF

Evercron Rubine XF

Evercron Blue XF

Evercron Navy XF

Evercron Black XF

Evercron Black EXSF

Features :

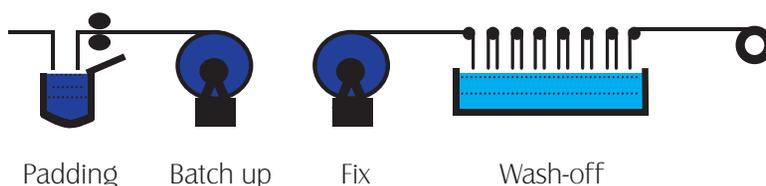
- Low cellulose side staining problem, and excellent washing fastness.
- Excellent reproducibility.
- Low alkali washing available. (It can clear with alkali washing instead of conventional reduction cleaning that requires sodium hydrosulfite)

9. Polyamide/Cellulosic blended fabric

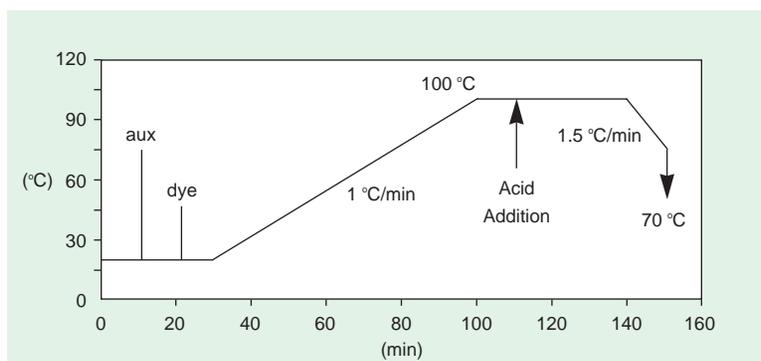
Polyamide/cellulosic fibre blends can be dyed with a two-bath process which provides good wet fastness and less nylon staining than normally obtained with reactive dyes. Everzol C dyes are used first in the cold pad-batch process to dye the cellulosic component. Everacid A, N, and Everset M dyes are then used to dye the nylon component.

Cold pad-batch process → exhaustion process

1. Everzol C or ED dyes in the cold pad-batch process for cellulose component



2. Everacid A, N, and Everset M dyes in the exhaustion process for nylon component.



Cold pad-batch process :

See cold pad-batch process. (page 10)

Nylon component in the exhaustion process :

Properties

Everacid A dyes

- high light fastness, including pale shades.
- high wet fastness in pale shades; medium depths of shade need after-treatment.
outstanding migration and excellent leveling properties.
very good coverage of fibre irregularities, e.g. barre.
- fully compatible for use in trichromatic dye combinations.
- metal free.
- simple dyeing method.

Everacid N dyes

- good build-up to heavy depths of shade.
- medium to very good light fastness properties.
- good wet fastness up to medium depths; heavy shades require after-treatment.
- medium to good migration.
- good coverage of physical fabric variation when used in combination with a leveling agent.
- compatible for use in a wide range of shades; can be used individually for bright fashion shade.
- simple dyeing method.
- mainly metal-free (exceptions blacks).

Everset M dyes

- base on 1:2 metal complex dyes.
- very good build-up on different types of nylon (including microfibres).
- high light fastness properties.
- medium migration.
- moderate coverage of physical barre.
- good compatibility.
- simple dyeing method.

Preparation of dye solutions

In order to ensure the dyeing quality, the proper preparation of dye solutions is necessary. Everacid powder dyes should be mixed into a paste with cold water, then added to boiling or hot water with mechanical agitation.

After treatments

Wet fastness properties may be improved by an after treatment, especially with heavy shades. A synthetic fixing agent is recommended.

Exhaustion method

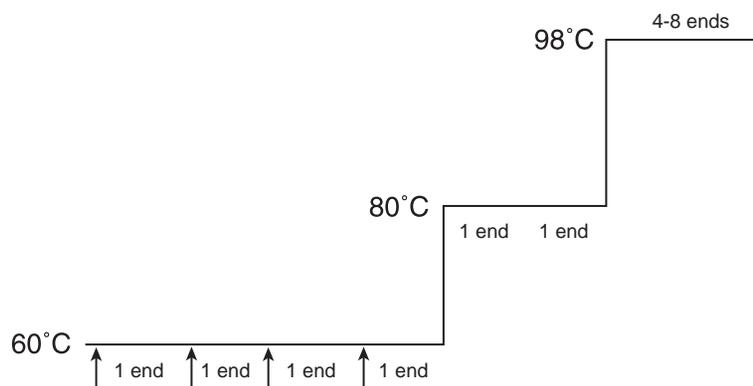


1. Fill water to required level and then heat to 50°C
2. Add chemicals
3. Add dissolved dyestuff
4. Heat dye bath to 100°C at heating rate 1°C per min
5. Dye 40-60 mins at 100°C
6. Cool & rinse

dyes type property	Everacid A type	Everacid N type	Everset M type
auxiliaries	Acetic acid Ammonium sulphate leveling agent	Acetic acid Ammonium sulphate leveling agent	Acetic acid Ammonium sulphate leveling agent
optimum pH	6-7	5-6	5-6
covering	excellent	excellent-good	moderate
leveling	excellent	excellent-good	moderate
application	pale-medium	medium-heavy	pale-heavy

Remark : Everset Black M-B : PH 4~4.5

Jig dyeing



Recommended :

- Leveling agent 1-3 g/l
Ammonium sulphate/acetic acid for adjusting pH
Added over two ends
- X% dissolved Everacid dyes
Added over two ends
- Two ends at 80°C
- Heat to 98°C, dye to completion in 4-8 ends

Trichromatic combinations of Everacid dyes.

Pale-medium trichromatic.

Everacid Yellow A-4R	Everacid Yellow A-4R
Everacid Red A-RL	Everacid Red A-2B
Everacid Blue A-RL	Everacid Blue A-RRL

Medium-heavy trichromatic.

Everacid Yellow N3R	Everacid Orange N-GTL
Everacid Red N-2BL	Everacid Rubine N-5BL
Everacid Blue N-RL	Everacid Cyanine N-5R

Supplementary :

- Everacid Yellow N-MR
- Everacid Yellow N-RP
- Everacid Red N-RFN
- Everacid Blue N-AFN

Trichromatic combinations of Everset dyes.

Pale shade trichromatic.

- Everset Yellow M-2R
- Everset Red M-G
- Everset Grey M-G

Medium-heavy trichromatic.

- Everset Yellow M-2R
- Everset Red M-2B
- Everset Blue M-2R

Deep Black Shades.

- Everacid Black MR
- Everacid Black LD
- Everacid Black LDN
- Everacid Black N-D
- Everset Black M-B

Recommended Everzol C dyes trichromatic :

For pale shades

good reproducibility
suitable for emerized fabric

excellent lightfastness

Everzol Yellow C-GL

Everzol Red C-3B

Everzol Blue C-BB 133%

Supplementary products :

Everzol Red LF-B

Everzol Red LF-2B

Everzol Blue C-LX

Everzol Black C-RL

For pale-medium shades

excellent perspiration lightfastness

Everzol Yellow C-3RS H/C

Everzol Red LF-2B

Everzol Blue C-R s/p

Supplementary products :

Everzol Yellow C-GL

Everzol Blue C-BRF

Everzol Blue C-LX

For medium-deep shades (bifunctional group)

wide applicability
excellent chlorinated water fastness

good reproducibility
good stability in padding liquor

Everzol Yellow C-3RS H/C

Everzol Red C-3BS H/C

Everzol Navy C-FB

For medium-deep shades (short fixation time in CPB)

high fixation rate
shorter fixation time
economical combination
non phototropism

excellent color yield
good reproducibility
good wash-off
suitable for emerized fabric

Everzol Yellow C-RN

Everzol Red C-RB 133%

Everzol Navy C-GB H/C

Supplementary products :

Everzol Yellow C-GR

Everzol Orange C-3R 133%

Everzol Black C-B 133%

For brilliant turquoise and green shades

brilliant

good reproducibility

economical combination

Everzol Yellow C-4G

Supplementary products :

Everzol Turquoise C-G 133%

Everzol Blue ED-G

Everzol Blue C-R s/p

Everzol Navy C-GG 133%

For brilliant orange

Everzol Orange C-R

Everzol Orange C-2R

For brilliant red \ deep red \ scarlet shades

brilliant

good reproducibility

short time fixation

Everzol Orange C-3R 133%

Supplementary products :

Everzol Red C-RB 133%

Everzol Yellow C-RN

Everzol Red C-D

excellent stability

economical

Everzol Yellow C-3RS H/C

Everzol Red C-3BS H/C

For royal blue and violet shades

brilliant
excellent solubility in alkali

good reproducibility

Everzol Red C-3BS H/C
Everzol Blue C-R s/p

Supplementary products :
Everzol Blue C-BB 133%
Everzol Blue ED-G

For navy and dark blue shades

economical
short time fixation
high fixation rate

good reproducibility
excellent build up
good wash-off

Everzol Yellow C-RN
Everzol Red C-RB 133%
Everzol Black C-B 133%

Supplementary products :
Everzol Navy C-GB H/C
Everzol Dark Blue LF
(high fastness to light)

For black shade

economical
short fixation time
high fixation rate
suitable for resistance and discharge print

good reproducibility
excellent build up
good wash-off

Everzol Black C-N 150%

Everzol Black C-GSP

Recommended Everzol ED dyes trichromatic :

For medium-heavy shades

good reproducibility
high build up
excellent compatibility

high color yield
high fixation rate

Everzol Yellow ED
Everzol Red ED
Everzol Navy ED

Supplementary products :
Everzol Yellow ED-S
Everzol Red ED-2B
Everzol Red ED-3B

For medium-heavy shades

good reproducibility
high build up

high color yield
high fastness to light

Everzol Yellow ED-R
Everzol Red ED-7B
Everzol Blue ED

Supplementary products :
Everzol Red ED-3B
Everzol Red ED-S

For black shades

good reproducibility
high fixation rate

high build up
excellent wash-off property

Everzol Black ED
Everzol Black ED-G
Everzol Black ED-R

For medium-heavy shades

good reproducibility
high fixation rate

high build up
excellent wash-off property
suitable for emerized fabric

Everzol Yellow ED-S
Everzol Red ED-S
Everzol Blue L-ED

Everzol C Dyes

10 g/l	30 g/l	dyes	properties
		Everzol Yellow C-4G	Good in colorfastness to chlorinated water Good in colorfastness to light Suitable for resistance discharge
		Everzol Yellow C-GL	Excellent in colorfastness to light Suitable for resistance discharge
		Everzol Yellow C-GR	A versatile yellow dye Suitable for resistance discharge Non phototropism
		Everzol Yellow C-3RS H/C	Very good for multi-washing fastness Good in colorfastness to chlorinated water Broad color range for color match
		Everzol Yellow C-RN	A primary yellow of trichromatic Suitable for resistance discharge High color yield Golden yellow non phototropism
		Everzol Orange C-R	Excellent solubility and stability in alkaline padding liquor Suitable for color match
		Everzol Orange C-2R	Brilliant orange color and wide range of scarlet shade Excellent solubility and stability in alkaline padding liquor
		Everzol Orange C-3R 133%	Suitable for resistance discharge High build up
		Everzol Red C-3B	Excellent in colorfastness to light
		Everzol Red C-RB 133%	A primary red of trichromatic High color yield

Everzol C Dyes

10 g/l	30 g/l	dyes	properties
		Everzol Red C-3BS H/C	Very good for multi-washing fastness Good in colorfastness to chlorinated water Broad color range for color match
		Everzol Red C-D	High color yield Excellent color fastness to light Suitable for resistance and discharge printing
		Everzol Turq. C-G 133%	Suitable for color match of brilliant green
		Everzol Blue C-R S/P	Very good of solubility in alkali Good in colorfastness to chlorinated water Excellent color fastness to light Suitable for resistance printing
		Everzol Blue C-BB 133%	A primary light blue of trichromatic combination Good in colorfastness to light Suitable for resistance printing
		Everzol Blue C-BRF	A primary blue of trichromatic combination Excellent color fastness to light
		Everzol Navy C-GG 133%	A versatile navy dye with green Suitable for resistance discharge printing
		Everzol Navy C-GB H/C	An economical versatile navy dye with green and broad color range for color match. Suitable for resistance discharge printing
		Everzol Navy C-FB	A primary navy broad color range for color match Excellent in colorfastness to chlorinated water
		Everzol Black C-B 133%	An economical versatile heavy dye

Everzol C Dyes

10 g/l	30 g/l	dyes	properties
		Everzol Black C-RL	Good in colorfastness to light
		Everzol Black C-N 150%	A versatile good leveling black dye Suitable for resistance discharge printing
		Everzol Black C-GSP	An versatile black dye Excellent color yield Suitable for resistance discharge printing Very good for multi-washing fastness
Notes : Yellow C-GL, Red C-3B, Black C-RL the dyeing depth are 10g/l, 20g/l Black C-N 150% and Black C-GSP the dyeing depth are 30g/l , 60g/l Cold pad-batch dyed, mercerized cotton.			

Everzol LX /LF Dyes

10 g/l	20 g/l	dyes	properties
		Everzol Yellow LX	A tinctorial yellow, broad color yield for color match. Compatible with Everzol Red LF-B, LF-2B and Blue C-LX.
		Everzol Red LF-B	Good lightfastness and perspiration lightfastness at pale shade. Compatible with Everzol yellow LX, Blue C-LX.
		Everzol Red LF-2B	Excellent lightfastness and perspiration lightfastness at pale shade. Compatible with Everzol yellow LX, Blue C-LX.
		Everzol Blue C-LX	Excellent color fastness to light Good compatibility with Everzol LX and LF range in CPB dyeing or other continuous dyeing
		Everzol Dark Blue LF	Excellent lightfastness. Recommend for medium shade dyeing.

Everzol ED Dyes

10 g/l	60 g/l	dyes	properties
		Everzol Yellow ED-R	Brilliant and excellent build-up Very good for multi-washing fastness (UK-TO) With Red ED-3B, Blue ED for good light fastness trichromate
		Everzol Yellow ED	Excellent build-up Main component for medium to deep trichromate Excellent compatible with Red ED, Navy ED
		Everzol Yellow ED-S	Excellent build-up Suitable for resistance, continuous, CPB dyeing Compatible with Red ED-S for resistance, discharge printing
		Everzol Red ED	Very high tinctorial strength for deep Red Main component for medium to deep trichromate Excellent compatible with Yellow ED, Navy ED
		Everzol Red ED-2B	Tinctorially very strong Very good build up For medium to heavy trichromate
		Everzol Red ED-3B	Brilliant and tinctorially very strong With Yellow ED-R, Blue ED for good light fastness trichromate Excellent in colorfastness to chlorinated water
		Everzol Red ED-7B	Excellent build-up High lightfastness & chlorinated water fastness
		Everzol Red ED-S	Excellent build-up Compatible with Yellow ED-S, Blue L-ED for resistance, discharge print
		Everzol Rubine ED	Especially for brilliant burgundy shade dyeing Excellent compatible with Yellow ED and Navy ED at deep shade
		Everzol Blue ED-G	Brilliant greenish royal blue dyes High lightfastness Compatible with Yellow C-4G, Turq. Blue C-G for matching brilliant jade green shade Low nylon stain for N/C fabric

Everzol ED Dyes

10 g/l	60 g/l	dyes	properties
		Everzol Blue L-ED	Basic blue for trichromatic Good in colorfastness to light Suitable for discharge and resist printing Excellent reproducibility
		Everzol Blue ED	Good in colorfastness to light With Yellow ED-R, Red ED-3B for good light fastness trichromate Good in colorfastness to chlorinated water
		Everzol Navy ED	Excellent build-up Main component for medium to deep trichromate Excellent compatible with Yellow ED, Red ED
		Everzol Black ED	Deep black with good build up Suitable for resistance, discharge printing
		Everzol Black ED-G	Deep black with good build up Greenish black Suitable for resistance, discharge printing less lycra stain for cotton/lycra dyeing
		Everzol Black ED-R	Deep black with good build up Reddish black Suitable for resistance, discharge printing Good in colorfastness to post mercerizing
<p>Notes : Black ED, Black ED G, Black ED R the dyeing depth are 30g/l and 60g/l</p> <p> Cold pad batch dyed, mercerized cotton.</p>			

Color fastness

1. Fastness to washing	ISO 105 C02 ISO 105 C03 ISO 105 C04 ISO 105 C06-C1S ISO 105 C06-C2S Marks & Spencer C4A
2. Fastness to water	ISO 105 E01
3. Fastness to hot water	ISO 105 E08
4. Fastness to sea water	ISO 105 E02
5. Fastness to post mercerizing	ISO 105 X04
6. Fastness to acid hydrolysis	1% Acetic acid solution for 30 min, 38°C x 6hours.
7. Fastness to perspiration	ISO 105 E04
8. Fastness to chlorinated water (20ppm)	ISO 105 E03
Peroxide Bleaching	ISO 105 N02
9. Fastness to rubbing	ISO 105 x 12
10. Fastness to detergent light	Marks & Spencer C9A
11. Fastness to multi-washing	Marks & Spencer C10A
12. Fastness to saliva	DIN 53160
13. Fastness to hot-pressing	ISO 105 x 11
14. Fastness to dry cleaning	ISO 105 D01
15. Fastness to light	ISO 105 B02 & AATCC 16E

Dyeing Properties

Dyeing Properties 染料特性

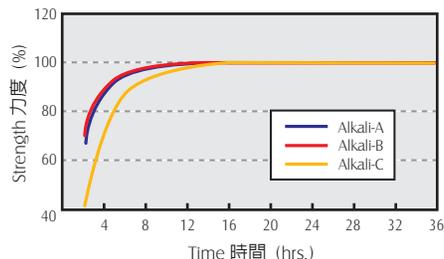
	Characteristics 特性	Evaluation 評級
Fixation Rate 固著率(%)	CPB 冷壓染 (30g/l)	> 85 %
	PDPS 連染 (30g/l)	> 75 %
	Emoistfix (30g/l)	> 85 %
Solubility 溶解度(g/l)	25°C Water 水	100
	50°C Water + 50g/l Salt 水 + 鹽 50g/l	50
Solubility in Alkali 耐鹼溶解度(g/l)	Alkali-A 鹼劑A	30
	Alkali-A + Urea 100g/l 鹼劑 A + 尿素 100g/l	30
	Alkali-B 鹼劑 B	100
	Alkali-B + Urea 100g/l 鹼劑 B + 尿素 100g/l	100
	Alkali-C 鹼劑 C	100
Stripping 脫色性	Alkali 鹼處理	×
	Reduction 還原處理	△
	Reduction-Oxidization 還原處理後再氧化處理	△
	Oxidization-Reduction 氧化處理後再還原處理	○
Color Constancy 色恆性	Tungsten Lamp 鎢絲燈	Y
	TL84 Lamp	Y
Effect of Metallic Ions 金屬離子的影響	Fe ⁺⁺ 鐵離子	4-5
	Cu ⁺⁺ 銅離子	4-5
Acid Spotting 酸滴	Hydrochloric Acid 鹽酸	3-4
	Acetic Acid 醋酸	4
Alkali Spotting 鹼滴	Ammonia Water 氨水	3-4
	Soda Ash Solution 純鹼	4-5
Shade Change After Fixing Treatment 固色後變色性	Polyamide 聚乙醯胺	3R
	Quaternary Ammonium Salt 四級胺鹽	3R
Resin Finishing 樹脂加工	Melamine 三聚氰胺	4-5
	Glyoxal 乙二醛	5
Discharge Ability 拔染性	Neutral 中性	2
	Alkaline 鹼性	4

× : un-suitable, △ : moderate, ○ : suitable, Dyeing properties are based on 30g/l depth.

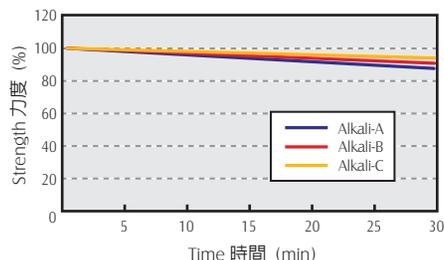
Dyeing Process to Recommend 染程推薦

	Very Good 非常好	Moderate 適用
Exhaustion Process 浸染	✓	
Cold Pad-Batch (CPB)	✓	
Pad dyeing		✓
Pad-Dry Chemical Pad-Steam (PDPS)	✓	
Process		✓
Pad-Dry Baking (PDB)	✓	
壓染		✓
Pad-Steam (PS)	✓	
Emoistfix	✓	
Discharge Printing 拔染印花		✓

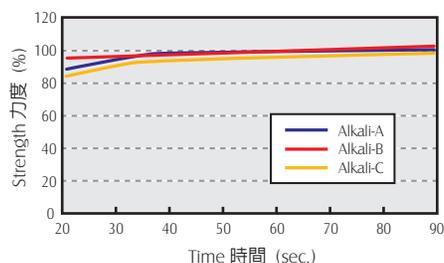
Dependency of Batching Time 捲置時間依存性(CPB)
(Dyeing temperature at 25°C)



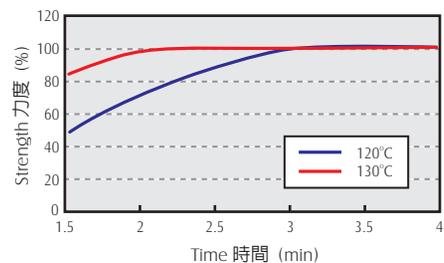
Stability of Padding liquor 染液安定性(CPB)
(Dyeing temperature at 25°C)



Dependency of Steaming Time 蒸處時間依存性(PD/PS)
(Saturated steam at 102°C)



Dependency of Fixation Time 固著時間依存性(Emoistfix)
(Substrate:130x70/32x20 1/3 twill cotton)



Everzol Yellow C-4G



Fastness Before Fixing Treatment 固色前牢度表

Fastness 牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色	Staining 污染				
					Acetate 醋酸纖維	Cotton 棉	Nylon 尼龍	Polyester 聚酯	Acrylic 壓克力
Washing 耐水洗	ISO CO2	30 g/l	5	5	5	5	5	5	5
	ISO CO3		5	5	4-5	5	5	5	5
	ISO CO4		5	4-5	3-4	4-5	5	5	3
	ISO CO6-C1S		5	5	4-5	5	5	5	5
	ISO CO6-C2S		5	5	4-5	5	5	5	5
	M&S C4A		5	5	4-5	5	5	5	5
Water 耐水		30 g/l	5	5	5	5	5	5	5
Hot Water 耐熱水		30 g/l	5	5	5	5	5	5	5
Sea Water 耐海水		30 g/l	5	5	5	5	5	5	5
Post Mercerizing 後絲光		30 g/l	3R	-	4	-			
Acid Hydrolysis 酸水解		30 g/l	3-4	5	5	5	5	5	5
Perspiration 耐汗	Acid 酸	30 g/l	5	5	5	5	5	5	5
	Alkali 鹼	30 g/l	5	5	5	5	5	5	5

Dyeing Depth 染色濃度		5 g/l	10 g/l	30 g/l	60 g/l	
Rubbing 耐磨擦	Dry 乾	5	5	5	5	
	Wet 溼	4-5	4-5	4	3-4	
		Color Change 變褪色	Color Change 變褪色	Color Change 變褪色	Color Change 變褪色	
Bleach 耐漂白	Chlorinated Water 耐氯水(20ppm)	-	-	4-5	-	
	Peroxide Bleaching 雙氧水漂白	-	-	4	-	
Hot-Pressing 耐熱壓	Dry 乾	Immediately	-	4-5	-	
		4 hours after	-	5	-	
	Wet 溼	Immediately	-	-	4	-
		4 hours after	-	-	4-5	-
M&S C10A (UK-TO) 多次水洗		-	-	4	-	
Saliva (DIN) 耐唾液		-	-	5	-	
Dry Cleaning 耐乾洗		-	-	4-5	-	

Lightfastness 耐晒牢度表

Lightfastness 耐晒牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色 20 AFU	Grade 級數 ISO Blue Scale (藍色票)	
Artificial Light 耐日光 (Xenon-Arc Lamp)			5 g/l	4-5	5	
			10 g/l	5	5-6	
			30 g/l	5	6	
			60 g/l	5	>6	
Perspiration Light 耐汗日光	Acid 酸		5 g/l	4-5	5-6	
			10 g/l	4-5	6	
			30 g/l	4-5	6	
			60 g/l	4-5	6	
	Alkali 鹼			5 g/l	4-5	5
				10 g/l	4-5	5-6
				30 g/l	4-5	6
				60 g/l	4-5	6
M&S C9A (Detergent Light)			10 g/l	-	-	
			30 g/l	>4-5	-	

Dyeing Properties 染料特性

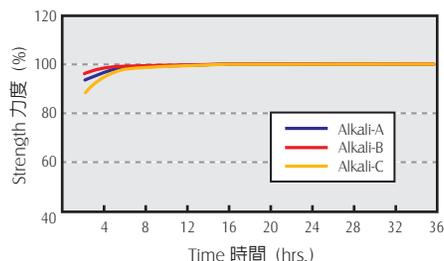
	Characteristics 特性	Evaluation 評級
Fixation Rate 固著率(%)	CPB 冷壓染 (30g/l)	> 85 %
	PDPS 連染 (30g/l)	> 80 %
	Emoistfix (30g/l)	> 90 %
Solubility 溶解度(g/l)	25°C Water 水	100
	50°C Water + 50g/l Salt 水 + 鹽 50g/l	100
Solubility in Alkali 耐鹼溶解度(g/l)	Alkali-A 鹼劑A	50
	Alkali-A + Urea 100g/l 鹼劑 A + 尿素 100g/l	70
	Alkali-B 鹼劑 B	100
	Alkali-B + Urea 100g/l 鹼劑 B + 尿素 100g/l	100
	Alkali-C 鹼劑 C	100
Stripping 脫色性	Alkali 鹼處理	×
	Reduction 還原處理	×
	Reduction-Oxidization 還原處理後再氧化處理	○
	Oxidization-Reduction 氧化處理後再還原處理	○
Color Constancy 色恆性	Tungsten Lamp 鎢絲燈	R
	TL84 Lamp	R
Effect of Metallic Ions 金屬離子的影響	Fe ⁺⁺ 鐵離子	4-5(R)
	Cu ⁺⁺ 銅離子	4-5
Acid Spotting 酸滴	Hydrochloric Acid 鹽酸	3-4
	Acetic Acid 醋酸	4(R)
Alkali Spotting 鹼滴	Ammonia Water 氨水	4-5
	Soda Ash Solution 純鹼	4-5
Shade Change After Fixing Treatment 固色後變色性	Polyamide 聚乙醯胺	4-5
	Quaternary Ammonium Salt 四級胺鹽	4-5
Resin Finishing 樹脂加工	Melamine 三聚氰胺	4-5
	Glyoxal 乙二醛	4-5
Discharge Ability 拔染性	Neutral 中性	4
	Alkaline 鹼性	4

× : un-suitable, △ : moderate, ○ : suitable, Dyeing properties are based on 30g/l dye.

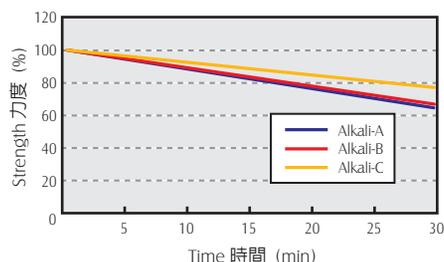
Dyeing Process to Recommend 染程推薦

	Very Good 非常好	Moderate 適用
Exhaustion Process 浸染		√
Pad dyeing	Cold Pad-Batch (CPB)	√
	Pad-Dry Chemical Pad-Steam (PDPS)	√
Process	Pad-Dry Baking (PDB)	√
壓染	Pad-Steam (PS)	√
	Emoistfix	√
Discharge Printing 拔染印花	√	

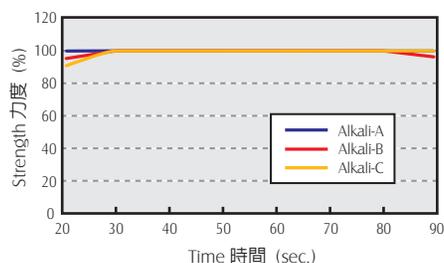
Dependency of Batching Time 捲置時間依存性(CPB) (Dyeing temperature at 25°C)



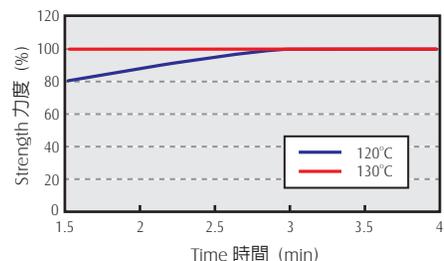
Stability of Padding liquor 染液安定性(CPB) (Dyeing temperature at 25°C)



Dependency of Steaming Time 蒸處時間依存性(PD/PS) (Saturated steam at 102°C)



Dependency of Fixation Time 固著時間依存性(Emoistfix) (Substrate:130x70/32x20 1/3 twill cotton)



Everzol Yellow C-GL



Fastness Before Fixing Treatment 固色前牢度表

Fastness 牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色	Staining 污染				
					Acetate 醋酸纖維	Cotton 棉	Nylon 尼龍	Polyester 聚酯	Acrylic 壓克力
Washing 耐水洗	ISO CO2	10 g/l	5	5	5	5	5	5	5
	ISO CO3		5	5	5	5	5	5	5
	ISO CO4		4-5	5	5	5	5	5	4-5
	ISO CO6-C1S		5	5	5	5	5	5	5
	ISO CO6-C2S		5	5	5	5	5	5	5
	M&S C4A		5	5	5	5	5	5	5
Water 耐水		10 g/l	5	5	5	5	5	5	5
Hot Water 耐熱水		10 g/l	5	5	5	5	5	5	5
Sea Water 耐海水		10 g/l	5	5	5	5	5	5	5
Post Mercerizing 後絲光		10 g/l	4-5	-	4	-			
Acid Hydrolysis 酸水解		10 g/l	4-5	5	5	5	5	5	5
Perspiration 耐汗	Acid 酸	10 g/l	5	5	5	5	5	5	5
	Alkali 鹼	10 g/l	5	5	5	5	5	5	5

Dyeing Depth 染色濃度		1 g/l	5 g/l	10 g/l	30 g/l
Rubbing 耐磨擦	Dry 乾	5	5	5	5
	Wet 溼	4-5	4-5	4-5	4
		Color Change 變褪色	Color Change 變褪色	Color Change 變褪色	Color Change 變褪色
Bleach 耐漂白	Chlorinated Water 耐氯水(20ppm)	-	-	3	-
	Peroxide Bleaching 雙氧水漂白	-	-	4-5	-
Hot-Pressing 耐熱壓	Dry 乾	Immediately	-	4-5	-
		4 hours after	-	5	-
	Wet 溼	Immediately	-	4	-
		4 hours after	-	4-5	-
M&S C10A (UK-TO) 多次水洗		-	-	4-5	-
Saliva (DIN) 耐唾液		-	-	4-5	-
Dry Cleaning 耐乾洗		-	-	4-5	-

Lightfastness 耐晒牢度表

Lightfastness 耐晒牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色 20 AFU	Grade 級數 ISO Blue Scale (藍色票)	
Artificial Light 耐日光 (Xenon-Arc Lamp)			1 g/l	4-5	5	
			5 g/l	4-5	5-6	
			10 g/l	5	6	
			30 g/l	5	>6	
Perspiration Light 耐汗日光	Acid 酸		1 g/l	4-5	4	
			5 g/l	4-5	4-5	
			10 g/l	4-5	5	
			30 g/l	4-5	5-6	
	Alkali 鹼			1 g/l	4-5	4
				5 g/l	4-5	4-5
				10 g/l	4-5	5-6
				30 g/l	4-5	6
M&S C9A (Detergent Light)			10 g/l	-	>4-5	
			30 g/l	-	-	

Dyeing Properties 染料特性

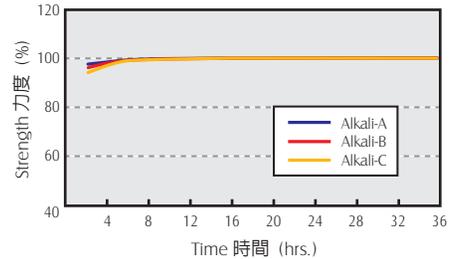
	Characteristics 特性	Evaluation 評級
Fixation Rate 固著率(%)	CPB 冷壓染 (30g/l)	> 90 %
	PDPS 連染 (30g/l)	> 85 %
	Emoistfix (30g/l)	> 90 %
Solubility 溶解度(g/l)	25°C Water 水	150
	50°C Water + 50g/l Salt 水 + 鹽 50g/l	150
Solubility in Alkali 耐鹼溶解度(g/l)	Alkali-A 鹼劑A	100
	Alkali-A + Urea 100g/l 鹼劑 A + 尿素 100g/l	100
	Alkali-B 鹼劑 B	100
	Alkali-B + Urea 100g/l 鹼劑 B + 尿素 100g/l	100
	Alkali-C 鹼劑 C	100
Alkali-C + Urea 100g/l 鹼劑 C + 尿素 100g/l	Alkali 鹼處理	×
	Reduction 還原處理	×
	Reduction-Oxidization 還原處理後再氧化處理	○
	Oxidization-Reduction 氧化處理後再還原處理	○
Color Constancy 色恆性	Tungsten Lamp 鎢絲燈	B(G)
	TL84 Lamp	B(G)
Effect of Metallic Ions 金屬離子的影響	Fe ⁺⁺ 鐵離子	4
	Cu ⁺⁺ 銅離子	2D
Acid Spotting 酸滴	Hydrochloric Acid 鹽酸	5
	Acetic Acid 醋酸	4-5
Alkali Spotting 鹼滴	Ammonia Water 氨水	4
	Soda Ash Solution 純鹼	2
Shade Change After Fixing Treatment 固色後變色性	Polyamide 聚乙醯胺	4-5
	Quaternary Ammonium Salt 四級胺鹽	4-5
Resin Finishing 樹脂加工	Melamine 三聚氰胺	4-5
	Glyoxal 乙二醛	5
Discharge Ability 拔染性	Neutral 中性	4
	Alkaline 鹼性	4

× : un-suitable, △ : moderate, ○ : suitable, Dyeing properties are based on 30g/l dye.

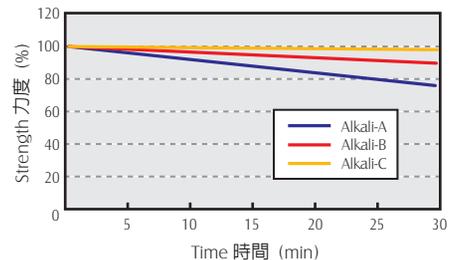
Dyeing Process to Recommend 染程推薦

	Very Good 非常好	Moderate 適用
Exhaustion Process 浸染		√
Pad dyeing	Cold Pad-Batch (CPB)	√
	Pad-Dry Chemical Pad-Steam (PDPS)	√
Process	Pad-Dry Baking (PDB)	√
壓染	Pad-Steam (PS)	√
	Emoistfix	√
Discharge Printing 拔染印花	√	

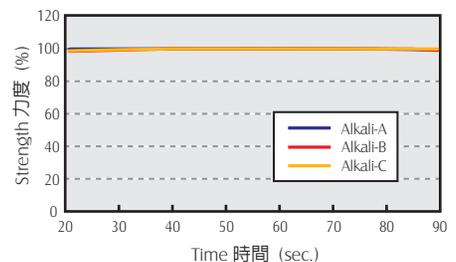
Dependency of Batching Time 捲置時間依存性(CPB)
(Dyeing temperature at 25°C)



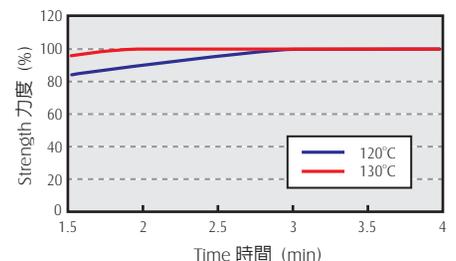
Stability of Padding liquor 染液安定性(CPB)
(Dyeing temperature at 25°C)



Dependency of Steaming Time 蒸處時間依存性(PD/PS)
(Saturated steam at 102°C)



Dependency of Fixation Time 固著時間依存性(Emoistfix)
(Substrate:130x70/32x20 1/3 twill cotton)



Everzol Yellow C-GR



Fastness Before Fixing Treatment 固色前牢度表

Fastness 牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色	Staining 污染				
					Acetate 醋酸纖維	Cotton 棉	Nylon 尼龍	Polyester 聚酯	Acrylic 壓克力
Washing 耐水洗	ISO CO2	30 g/l	5	5	5	5	5	5	5
	ISO CO3		5	5	5	5	5	5	5
	ISO CO4		4	5	4-5	5	5	5	3
	ISO CO6-C1S		5	5	5	5	5	5	5
	ISO CO6-C2S		5	5	5	5	5	5	5
	M&S C4A		5	5	5	5	5	5	5
Water 耐水		30 g/l	4-5	5	5	5	5	5	5
Hot Water 耐熱水		30 g/l	5	5	5	4-5	5	5	5
Sea Water 耐海水		30 g/l	4-5	5	5	5	5	5	5
Post Mercerizing 後絲光		30 g/l	2-3R	-	4	-			
Acid Hydrolysis 酸水解		30 g/l	5	5	5	3-4	5	5	4-5
Perspiration 耐汗	Acid 酸	30 g/l	4-5	5	5	5	5	5	5
	Alkali 鹼	30 g/l	4-5	5	5	5	5	5	5

Dyeing Depth 染色濃度		5 g/l	10 g/l	30 g/l	60 g/l	
Rubbing 耐磨擦	Dry 乾	5	5	5	5	
	Wet 溼	4-5	4-5	4	4	
		Color Change 變褪色	Color Change 變褪色	Color Change 變褪色	Color Change 變褪色	
Bleach 耐漂白	Chlorinated Water 耐氯水(20ppm)	-	-	2	-	
	Peroxide Bleaching 雙氧水漂白	-	-	4	-	
Hot-Pressing 耐熱壓	Dry 乾	Immediately	-	4Y	-	
		4 hours after	-	4-5	-	
	Wet 溼	Immediately	-	-	4Y	-
		4 hours after	-	-	4-5	-
M&S C10A (UK-TO) 多次水洗		-	-	3-4	-	
Saliva (DIN) 耐唾液		-	-	5	-	
Dry Cleaning 耐乾洗		-	-	4-5	-	

Lightfastness 耐晒牢度表

Lightfastness 耐晒牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色 20 AFU	Grade 級數 ISO Blue Scale (藍色票)
Artificial Light 耐日光 (Xenon-Arc Lamp)			5 g/l	4-5	5
			10 g/l	5	5-6
			30 g/l	5	6
			60 g/l	5	6
Perspiration Light 耐汗日光		Acid 酸	5 g/l	4	5
			10 g/l	4-5	5-6
			30 g/l	4-5	6
			60 g/l	4-5	6
		Alkali 鹼	5 g/l	4	4-5
			10 g/l	4-5	5
			30 g/l	4-5	5-6
			60 g/l	4-5	6
M&S C9A (Detergent Light)			10 g/l	-	-
			30 g/l	-	4

Dyeing Properties 染料特性

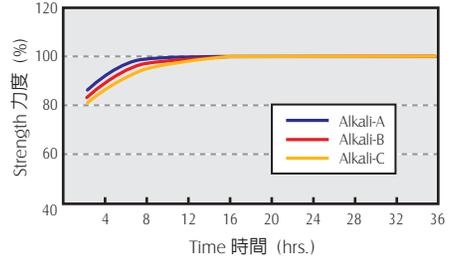
	Characteristics 特性	Evaluation 評級
Fixation Rate 固著率(%)	CPB 冷壓染 (30g/l)	> 85 %
	PDPS 連染 (30g/l)	> 80 %
	Emoistfix (30g/l)	> 95 %
Solubility 溶解度(g/l)	25°C Water 水	120
	50°C Water + 50g/l Salt 水 + 鹽 50g/l	120
Solubility in Alkali 耐鹼溶解度(g/l)	Alkali-A 鹼劑A	75
	Alkali-A + Urea 100g/l 鹼劑 A + 尿素 100g/l	100
	Alkali-B 鹼劑 B	100
	Alkali-B + Urea 100g/l 鹼劑 B + 尿素 100g/l	100
	Alkali-C 鹼劑 C	100
Alkali-C + Urea 100g/l 鹼劑 C + 尿素 100g/l		100
		100
Stripping 脫色性	Alkali 鹼處理	×
	Reduction 還原處理	△
	Reduction-Oxidization 還原處理後再氧化處理	×
	Oxidization-Reduction 氧化處理後再還原處理	△
Color Constancy 色恆性	Tungsten Lamp 鎢絲燈	Y
	TL84 Lamp	Y
Effect of Metallic Ions 金屬離子的影響	Fe ⁺⁺ 鐵離子	4-5
	Cu ⁺⁺ 銅離子	4G
Acid Spotting 酸滴	Hydrochloric Acid 鹽酸	3-4
	Acetic Acid 醋酸	5
Alkali Spotting 鹼滴	Ammonia Water 氨水	3-4
	Soda Ash Solution 純鹼	5
Shade Change After Fixing Treatment 固色後變色性	Polyamide 聚乙醯胺	5
	Quaternary Ammonium Salt 四級胺鹽	5
Resin Finishing 樹脂加工	Melamine 三聚氰胺	4-5
	Glyoxal 乙二醛	5
Discharge Ability 拔染性	Neutral 中性	4
	Alkaline 鹼性	3

× : un-suitable, △ : moderate, ○ : suitable, Dyeing properties are based on 30g/l dye.

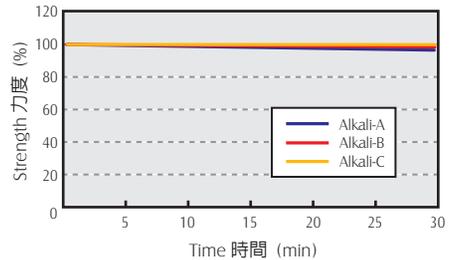
Dyeing Process to Recommend 染程推薦

	Very Good 非常好	Moderate 適用
Exhaustion Process 浸染	✓	
Cold Pad-Batch (CPB)	✓	
Pad dyeing Pad-Dry Chemical Pad-Steam (PDPS)	✓	
Process Pad-Dry Baking (PDB)	✓	
壓染 Pad-Steam (PS)	✓	
Emoistfix	✓	
Discharge Printing 拔染印花		

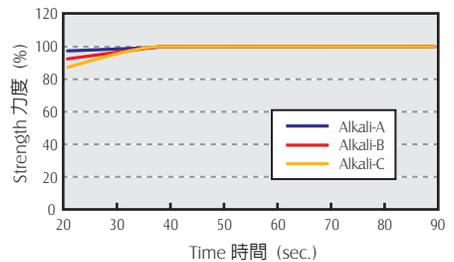
Dependency of Batching Time 捲置時間依存性(CPB)
(Dyeing temperature at 25°C)



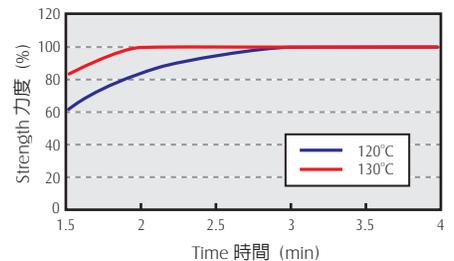
Stability of Padding liquor 染液安定性(CPB)
(Dyeing temperature at 25°C)



Dependency of Steaming Time 蒸處時間依存性(PD/PS)
(Saturated steam at 102°C)



Dependency of Fixation Time 固著時間依存性(Emoistfix)
(Substrate:130x70/32x20 1/3 twill cotton)



Everzol Yellow C-3RS H/C



Fastness Before Fixing Treatment 固色前牢度表

Fastness 牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色	Staining 污染				
					Acetate 醋酸纖維	Cotton 棉	Nylon 尼龍	Polyester 聚酯	Acrylic 壓克力
Washing 耐水洗	ISO CO2	30 g/l	5	5	4-5	5	5	5	5
	ISO CO3		5	5	4-5	5	5	5	5
	ISO CO4		5	5	3-4	5	5	5	4
	ISO CO6-C1S		5	5	4-5	5	5	5	5
	ISO CO6-C2S		5	5	4-5	5	5	5	5
	M&S C4A		5	5	4-5	5	5	5	5
Water 耐水		30 g/l	5	5	5	5	5	5	5
Hot Water 耐熱水		30 g/l	5	5	5	5	5	5	5
Sea Water 耐海水		30 g/l	5	5	5	5	5	5	5
Post Mercerizing 後絲光		30 g/l	4R	-	4	-			
Acid Hydrolysis 酸水解		30 g/l	4-5	5	4-5	5	5	5	5
Perspiration 耐汗	Acid 酸	30 g/l	5	5	5	5	5	5	5
	Alkali 鹼	30 g/l	5	5	5	5	5	5	5

Dyeing Depth 染色濃度		5 g/l	10 g/l	30 g/l	60 g/l	
Rubbing 耐磨擦	Dry 乾	5	5	5	5	
	Wet 溼	4	3-4	3-4	3	
		Color Change 變褪色	Color Change 變褪色	Color Change 變褪色	Color Change 變褪色	
Bleach 耐漂白	Chlorinated Water 耐氯水(20ppm)	-	-	4	-	
	Peroxide Bleaching 雙氧水漂白	-	-	4	-	
Hot-Pressing 耐熱壓	Dry 乾	Immediately	-	4	-	
		4 hours after	-	-	4-5	-
	Wet 溼	Immediately	-	-	4	-
		4 hours after	-	-	4-5	-
M&S C10A (UK-TO) 多次水洗		-	-	4-5	-	
Saliva (DIN) 耐唾液		-	-	5	-	
Dry Cleaning 耐乾洗		-	-	4-5	-	

Lightfastness 耐晒牢度表

Lightfastness 耐晒牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色 20 AFU	Grade 級數 ISO Blue Scale (藍色票)	
Artificial Light 耐日光 (Xenon-Arc Lamp)			5 g/l	4-5	5	
			10 g/l	5	5-6	
			30 g/l	5	6	
			60 g/l	5	>6	
Perspiration Light 耐汗日光	Acid 酸		5 g/l	4	5	
			10 g/l	4-5	5-6	
			30 g/l	4-5	6	
			60 g/l	4-5	6	
	Alkali 鹼			5 g/l	4	4-5
				10 g/l	4-5	5
				30 g/l	4-5	5-6
				60 g/l	4-5	6
M&S C9A (Detergent Light)			10 g/l	-	-	
			30 g/l	-	>4-5	

Dyeing Properties 染料特性

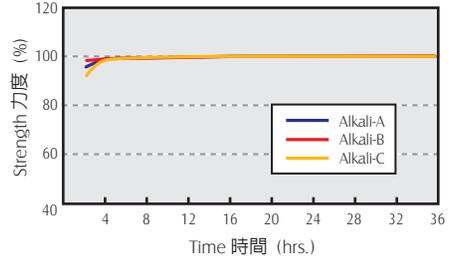
	Characteristics 特性	Evaluation 評級
Fixation Rate 固著率(%)	CPB 冷壓染 (30g/l)	> 90 %
	PDPS 連染 (30g/l)	> 90 %
	Emoistfix (30g/l)	> 90 %
Solubility 溶解度(g/l)	25°C Water 水	150
	50°C Water + 50g/l Salt 水 + 鹽 50g/l	100
Solubility in Alkali 耐鹼溶解度(g/l)	Alkali-A 鹼劑A	100
	Alkali-A + Urea 100g/l 鹼劑 A + 尿素 100g/l	100
	Alkali-B 鹼劑 B	100
	Alkali-B + Urea 100g/l 鹼劑 B + 尿素 100g/l	100
	Alkali-C 鹼劑 C	100
Stripping 脫色性	Alkali 鹼處理	×
	Reduction 還原處理	△
	Reduction-Oxidization 還原處理後再氧化處理	○
	Oxidization-Reduction 氧化處理後再還原處理	○
Color Constancy 色恆性	Tungsten Lamp 鎢絲燈	3-4R
	TL84 Lamp	4Y
Effect of Metallic Ions 金屬離子的影響	Fe ⁺⁺ 鐵離子	5
	Cu ⁺⁺ 銅離子	5
Acid Spotting 酸滴	Hydrochloric Acid 鹽酸	4
	Acetic Acid 醋酸	2
Alkali Spotting 鹼滴	Ammonia Water 氨水	5
	Soda Ash Solution 純鹼	4-5
Shade Change After Fixing Treatment 固色後變色性	Polyamide 聚乙醯胺	4-5
	Quaternary Ammonium Salt 四級胺鹽	4-5
Resin Finishing 樹脂加工	Melamine 三聚氰胺	4-5
	Glyoxal 乙二醛	4-5
Discharge Ability 拔染性	Neutral 中性	5
	Alkaline 鹼性	4-5

× : un-suitable, △ : moderate, ○ : suitable, Dyeing properties are based on 30g/l dye.

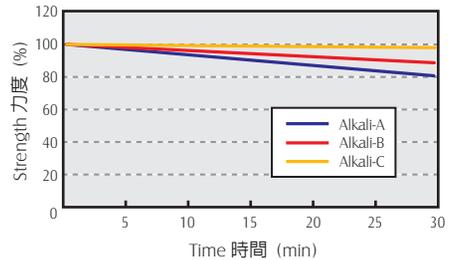
Dyeing Process to Recommend 染程推薦

	Very Good 非常好	Moderate 適用
Exhaustion Process 浸染		√
Pad dyeing	Cold Pad-Batch (CPB)	√
	Pad-Dry Chemical Pad-Steam (PDPS)	√
Process	Pad-Dry Baking (PDB)	√
壓染	Pad-Steam (PS)	√
	Emoistfix	√
Discharge Printing 拔染印花	√	

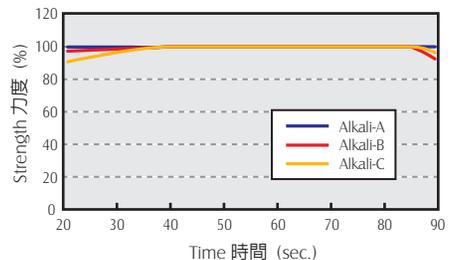
Dependency of Batching Time 捲置時間依存性(CPB) (Dyeing temperature at 25°C)



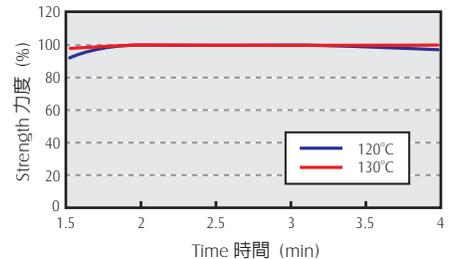
Stability of Padding liquor 染液安定性(CPB) (Dyeing temperature at 25°C)



Dependency of Steaming Time 蒸處時間依存性(PD/PS) (Saturated steam at 102°C)



Dependency of Fixation Time 固著時間依存性(Emoistfix) (Substrate:130x70/32x20 1/3 twill cotton)



Everzol Yellow C-RN



Fastness Before Fixing Treatment 固色前牢度表

Fastness 牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色	Staining 污染				
					Acetate 醋酸纖維	Cotton 棉	Nylon 尼龍	Polyester 聚酯	Acrylic 壓克力
Washing 耐水洗	ISO CO2	30 g/l	5	5	4-5	5	5	5	5
	ISO CO3		5	5	4-5	5	5	5	5
	ISO CO4		4	5	4-5	5	5	5	3-4
	ISO CO6-C1S		5	5	5	5	5	5	5
	ISO CO6-C2S		5	5	5	5	5	5	5
	M&S C4A		5	5	5	5	5	5	5
Water 耐水		30 g/l	4-5	5	5	5	5	5	5
Hot Water 耐熱水		30 g/l	4-5	5	5	5	5	5	5
Sea Water 耐海水		30 g/l	4-5	5	5	5	5	5	5
Post Mercerizing 後絲光		30 g/l	4-5	-	3-4	-			
Acid Hydrolysis 酸水解		30 g/l	4-5	5	5	5	5	5	5
Perspiration 耐汗	Acid 酸	30 g/l	4-5	5	5	5	5	5	5
	Alkali 鹼	30 g/l	4-5	5	5	5	5	5	5

Dyeing Depth 染色濃度		5 g/l	10 g/l	30 g/l	60 g/l	
Rubbing 耐磨擦	Dry 乾	5	5	5	5	
	Wet 溼	4-5	4-5	4	3-4	
		Color Change 變褪色	Color Change 變褪色	Color Change 變褪色	Color Change 變褪色	
Bleach 耐漂白	Chlorinated Water 耐氯水(20ppm)	-	-	3-4	-	
	Peroxide Bleaching 雙氧水漂白	-	-	4-5	-	
Hot-Pressing 耐熱壓	Dry 乾	Immediately	-	4-5	-	
		4 hours after	-	5	-	
	Wet 溼	Immediately	-	-	3-4Y	-
		4 hours after	-	-	5	-
M&S C10A (UK-TO) 多次水洗		-	-	4-5	-	
Saliva (DIN) 耐唾液		-	-	5	-	
Dry Cleaning 耐乾洗		-	-	4-5	-	

Lightfastness 耐晒牢度表

Lightfastness 耐晒牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色 20 AFU	Grade 級數 ISO Blue Scale (藍色票)	
Artificial Light 耐日光 (Xenon-Arc Lamp)			5 g/l	4-5	5	
			10 g/l	5	5-6	
			30 g/l	5	6	
			60 g/l	5	6	
Perspiration Light 耐汗日光	Acid 酸		5 g/l	4	5	
			10 g/l	4-5	5-6	
			30 g/l	4-5	6	
			60 g/l	4-5	6	
	Alkali 鹼			5 g/l	4	5
				10 g/l	4-5	5-6
				30 g/l	4-5	6
				60 g/l	4-5	6
M&S C9A (Detergent Light)			10 g/l	-	-	
			30 g/l	-	4-5	

Dyeing Properties 染料特性

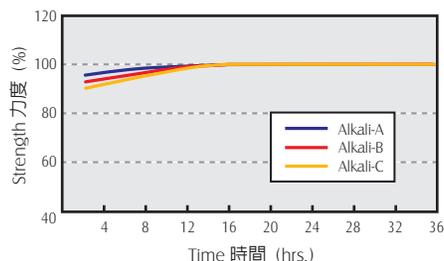
	Characteristics 特性	Evaluation 評級
Fixation Rate 固著率(%)	CPB 冷壓染 (30g/l)	> 80 %
	PDPS 連染 (30g/l)	> 80 %
	Emoistfix (30g/l)	> 80 %
Solubility 溶解度(g/l)	25°C Water 水	100
	50°C Water + 50g/l Salt 水 + 鹽 50g/l	100
Solubility in Alkali 耐鹼溶解度(g/l)	Alkali-A 鹼劑A	80
	Alkali-A + Urea 100g/l 鹼劑 A + 尿素 100g/l	100
	Alkali-B 鹼劑 B	100
	Alkali-B + Urea 100g/l 鹼劑 B + 尿素 100g/l	100
	Alkali-C 鹼劑 C	100
Stripping 脫色性	Alkali 鹼處理	×
	Reduction 還原處理	○
	Reduction-Oxidization 還原處理後再氧化處理	○
	Oxidization-Reduction 氧化處理後再還原處理	○
Color Constancy 色恆性	Tungsten Lamp 鎢絲燈	R(Y)
	TL84 Lamp	v(G)
Effect of Metallic Ions 金屬離子的影響	Fe ⁺⁺ 鐵離子	5
	Cu ⁺⁺ 銅離子	5
Acid Spotting 酸滴	Hydrochloric Acid 鹽酸	4-5
	Acetic Acid 醋酸	3
Alkali Spotting 鹼滴	Ammonia Water 氨水	4-5
	Soda Ash Solution 純鹼	2-3
Shade Change After Fixing Treatment 固色後變色性	Polyamide 聚乙醯胺	4
	Quaternary Ammonium Salt 四級胺鹽	4-5
Resin Finishing 樹脂加工	Melamine 三聚氰胺	4-5
	Glyoxal 乙二醛	4-5
Discharge Ability 拔染性	Neutral 中性	2-3
	Alkaline 鹼性	2-3

× : un-suitable, △ : moderate, ○ : suitable, Dyeing properties are based on 30g/l depth.

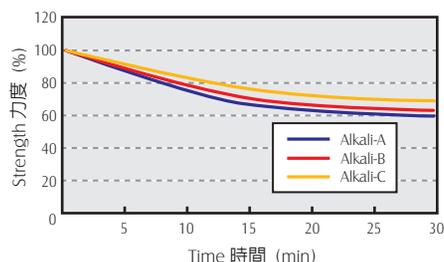
Dyeing Process to Recommend 染程推薦

	Very Good 非常好	Moderate 適用
Exhaustion Process 浸染		√
Pad dyeing	Cold Pad-Batch (CPB)	√
	Pad-Dry Chemical Pad-Steam (PDPS)	√
Process	Pad-Dry Baking (PDB)	√
壓染	Pad-Steam (PS)	√
	Emoistfix	√
Discharge Printing 拔染印花		

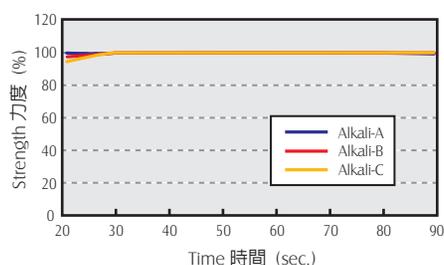
Dependency of Batching Time 捲置時間依存性(CPB) (Dyeing temperature at 25°C)



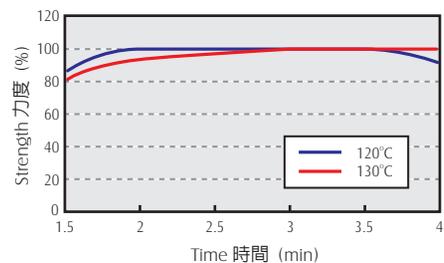
Stability of Padding liquor 染液安定性(CPB) (Dyeing temperature at 25°C)



Dependency of Steaming Time 蒸處時間依存性(PD/PS) (Saturated steam at 102°C)



Dependency of Fixation Time 固著時間依存性(Emoistfix) (Substrate:130x70/32x20 1/3 twill cotton)



Everzol Orange C-R



Fastness Before Fixing Treatment 固色前牢度表

Fastness 牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色	Staining 污染				
					Acetate 醋酸纖維	Cotton 棉	Nylon 尼龍	Polyester 聚酯	Acrylic 壓克力
Washing 耐水洗	ISO CO2	30 g/l	5	5	4	5	5	5	5
	ISO CO3		5	5	4	5	5	5	5
	ISO CO4		4-5	5	3	5	5	5	4
	ISO CO6-C1S		5	5	3-4	5	5	5	5
	ISO CO6-C2S		5	5	4	5	5	5	5
	M&S C4A		5	5	4	5	5	5	5
Water 耐水		30 g/l	4	5	4-5	4-5	5	5	5
Hot Water 耐熱水		30 g/l	4-5	5	4-5	3-4	5	5	4-5
Sea Water 耐海水		30 g/l	4-5	5	5	5	5	5	5
Post Mercerizing 後絲光		30 g/l	4-5	-	3-4	-			
Acid Hydrolysis 酸水解		30 g/l	4-5	5	5	5	5	5	5
Perspiration 耐汗	Acid 酸	30 g/l	4-5	5	5	5	5	5	5
	Alkali 鹼	30 g/l	4-5	5	5	5	5	5	5

Dyeing Depth 染色濃度		5 g/l	10 g/l	30 g/l	60 g/l
Rubbing 耐磨擦	Dry 乾	5	5	5	5
	Wet 溼	4-5	4-5	4	3-4
		Color Change 變褪色	Color Change 變褪色	Color Change 變褪色	Color Change 變褪色
Bleach 耐漂白	Chlorinated Water 耐氯水(20ppm)	-	-	4	-
	Peroxide Bleaching 雙氧水漂白	-	-	4-5	-
Hot-Pressing 耐熱壓	Dry 乾	Immediately	-	2(R)	-
		4 hours after	-	5	-
	Wet 溼	Immediately	-	2(R)	-
		4 hours after	-	5	-
M&S C10A (UK-TO) 多次水洗		-	-	4-5	-
Saliva (DIN) 耐唾液		-	-	5	-
Dry Cleaning 耐乾洗		-	-	4-5	-

Lightfastness 耐晒牢度表

Lightfastness 耐晒牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色 20 AFU	Grade 級數 ISO Blue Scale (藍色票)	
Artificial Light 耐日光 (Xenon-Arc Lamp)			5 g/l	3	3	
			10 g/l	3-4	3-4	
			30 g/l	4	4	
			60 g/l	4	4	
Perspiration Light 耐汗日光	Acid 酸		5 g/l	3	3	
			10 g/l	3-4	3-4	
			30 g/l	3-4	4	
			60 g/l	3-4	4	
	Alkali 鹼			5 g/l	3	3-4
				10 g/l	3-4	4
				30 g/l	3-4	4
				60 g/l	3-4	4
M&S C9A (Detergent Light)			10 g/l	-	-	
			30 g/l	-	4-5	

Dyeing Properties 染料特性

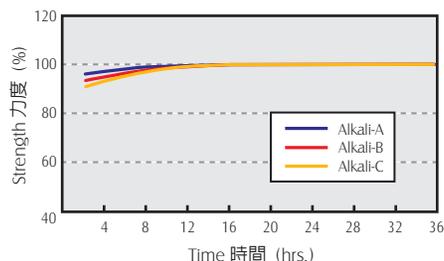
	Characteristics 特性	Evaluation 評級
Fixation Rate 固著率(%)	CPB 冷壓染 (30g/l)	> 80 %
	PDPS 連染 (30g/l)	> 80 %
	Emoistfix (30g/l)	> 90 %
Solubility 溶解度(g/l)	25°C Water 水	100
	50°C Water + 50g/l Salt 水 + 鹽 50g/l	100
Solubility in Alkali 耐鹼溶解度(g/l)	Alkali-A 鹼劑A	70
	Alkali-A + Urea 100g/l 鹼劑 A + 尿素 100g/l	80
	Alkali-B 鹼劑 B	80
	Alkali-B + Urea 100g/l 鹼劑 B + 尿素 100g/l	80
	Alkali-C 鹼劑 C	80
Stripping 脫色性	Alkali 鹼處理	×
	Reduction 還原處理	△
	Reduction-Oxidization 還原處理後再氧化處理	△
	Oxidization-Reduction 氧化處理後再還原處理	△
Color Constancy 色恆性	Tungsten Lamp 鎢絲燈	3R(Y)
	TL84 Lamp	1-2Y(G)
Effect of Metallic Ions 金屬離子的影響	Fe ⁺⁺ 鐵離子	5
	Cu ⁺⁺ 銅離子	5
Acid Spotting 酸滴	Hydrochloric Acid 鹽酸	4-5
	Acetic Acid 醋酸	2-3
Alkali Spotting 鹼滴	Ammonia Water 氨水	5
	Soda Ash Solution 純鹼	4
Shade Change After Fixing Treatment 固色後變色性	Polyamide 聚乙醯胺	4
	Quaternary Ammonium Salt 四級胺鹽	4-5
Resin Finishing 樹脂加工	Melamine 三聚氰胺	4-5
	Glyoxal 乙二醛	4-5
Discharge Ability 拔染性	Neutral 中性	2-3
	Alkaline 鹼性	2-3

× : un-suitable, △ : moderate, ○ : suitable, Dyeing properties are based on 30g/l depth.

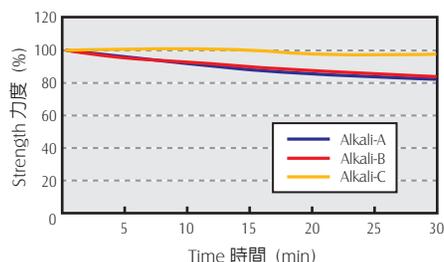
Dyeing Process to Recommend 染程推薦

	Very Good 非常好	Moderate 適用
Exhaustion Process 浸染	✓	
Cold Pad-Batch (CPB)	✓	
Pad dyeing		✓
Pad-Dry Chemical Pad-Steam (PDPS)	✓	
Process		✓
Pad-Dry Baking (PDB)	✓	
壓染		✓
Pad-Steam (PS)		✓
Emoistfix	✓	
Discharge Printing 拔染印花		

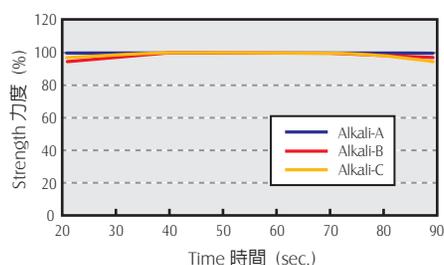
Dependency of Batching Time 捲置時間依存性(CPB)
(Dyeing temperature at 25°C)



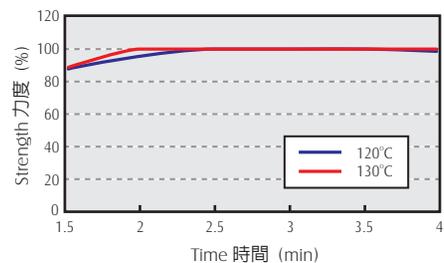
Stability of Padding liquor 染液安定性(CPB)
(Dyeing temperature at 25°C)



Dependency of Steaming Time 蒸處時間依存性(PD/PS)
(Saturated steam at 102°C)



Dependency of Fixation Time 固著時間依存性(Emoistfix)
(Substrate:130x70/32x20 1/3 twill cotton)



Everzol Orange C-2R



Fastness Before Fixing Treatment 固色前牢度表

Fastness 牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色	Staining 污染				
					Acetate 醋酸纖維	Cotton 棉	Nylon 尼龍	Polyester 聚酯	Acrylic 壓克力
Washing 耐水洗	ISO CO2	30 g/l	5	5	4	5	5	5	5
	ISO CO3		5	5	3-4	5	5	5	5
	ISO CO4		4-5	4-5	3	5	5	5	4
	ISO CO6-C1S		5	5	3-4	5	5	5	5
	ISO CO6-C2S		5	5	4	5	5	5	5
	M&S C4A		5	5	4	5	5	5	5
Water 耐水		30 g/l	4	5	5	5	5	5	5
Hot Water 耐熱水		30 g/l	4-5	5	4-5	3-4	5	5	4-5
Sea Water 耐海水		30 g/l	4-5	5	5	5	5	5	5
Post Mercerizing 後絲光		30 g/l	4-5	-	3-4	-			
Acid Hydrolysis 酸水解		30 g/l	4-5	5	4-5	4-5	5	5	5
Perspiration 耐汗	Acid 酸	30 g/l	4-5	5	5	5	5	5	5
	Alkali 鹼	30 g/l	4-5	5	5	5	5	5	5

Dyeing Depth 染色濃度		5 g/l	10 g/l	30 g/l	60 g/l
Rubbing 耐磨擦	Dry 乾	5	5	5	4-5
	Wet 溼	4	3-4	3	3
		Color Change 變褪色	Color Change 變褪色	Color Change 變褪色	Color Change 變褪色
Bleach 耐漂白	Chlorinated Water 耐氯水(20ppm)	-	-	4-5	-
	Peroxide Bleaching 雙氧水漂白	-	-	4-5	-
Hot-Pressing 耐熱壓	Dry 乾	Immediately	-	2(R)	-
		4 hours after	-	5	-
	Wet 溼	Immediately	-	2(R)	-
		4 hours after	-	5	-
M&S C10A (UK-TO) 多次水洗		-	-	4-5	-
Saliva (DIN) 耐唾液		-	-	5	-
Dry Cleaning 耐乾洗		-	-	4-5	-

Lightfastness 耐晒牢度表

Lightfastness 耐晒牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色 20 AFU	Grade 級數 ISO Blue Scale (藍色票)	
Artificial Light 耐日光 (Xenon-Arc Lamp)			5 g/l	3	3-4	
			10 g/l	3-4	3-4	
			30 g/l	4	3-4	
			60 g/l	4	3-4	
Perspiration Light 耐汗日光	Acid 酸		5 g/l	3	3	
			10 g/l	3-4	3-4	
			30 g/l	3-4	3-4	
			60 g/l	3-4	3-4	
	Alkali 鹼			5 g/l	3	3
				10 g/l	3-4	3-4
				30 g/l	3-4	3-4
				60 g/l	3-4	3-4
M&S C9A (Detergent Light)			10 g/l	-	-	
			30 g/l	-	4-5	

Dyeing Properties 染料特性

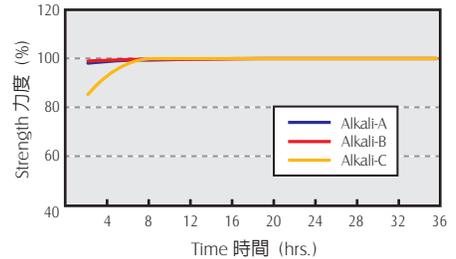
	Characteristics 特性	Evaluation 評級
Fixation Rate 固著率(%)	CPB 冷壓染 (30g/l)	< 85 %
	PDPS 連染 (30g/l)	< 85 %
	Emoistfix (30g/l)	< 90 %
Solubility 溶解度(g/l)	25°C Water 水	150
	50°C Water + 50g/l Salt 水 + 鹽 50g/l	100
Solubility in Alkali 耐鹼溶解度(g/l)	Alkali-A 鹼劑A	60
	Alkali-A + Urea 100g/l 鹼劑 A + 尿素 100g/l	80
	Alkali-B 鹼劑 B	60
	Alkali-B + Urea 100g/l 鹼劑 B + 尿素 100g/l	80
	Alkali-C 鹼劑 C	80
Stripping 脫色性	Alkali 鹼處理	×
	Reduction 還原處理	△
	Reduction-Oxidization 還原處理後再氧化處理	○
	Oxidization-Reduction 氧化處理後再還原處理	○
Color Constancy 色恆性	Tungsten Lamp 鎢絲燈	R
	TL84 Lamp	Y
Effect of Metallic Ions 金屬離子的影響	Fe ⁺⁺ 鐵離子	5
	Cu ⁺⁺ 銅離子	4-5
Acid Spotting 酸滴	Hydrochloric Acid 鹽酸	1-2B
	Acetic Acid 醋酸	4
Alkali Spotting 鹼滴	Ammonia Water 氨水	4
	Soda Ash Solution 純鹼	1-2B
Shade Change After Fixing Treatment 固色後變色性	Polyamide 聚乙醯胺	4-5Y
	Quaternary Ammonium Salt 四級胺鹽	5
Resin Finishing 樹脂加工	Melamine 三聚氰胺	4-5
	Glyoxal 乙二醛	5
Discharge Ability 拔染性	Neutral 中性	4-5
	Alkaline 鹼性	4-5

× : un-suitable, △ : moderate, ○ : suitable, Dyeing properties are based on 30g/l dye.

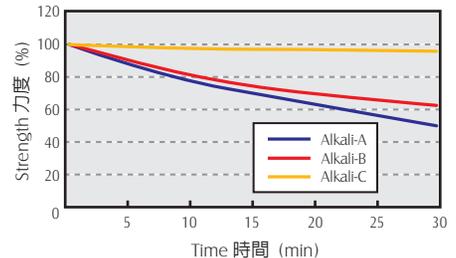
Dyeing Process to Recommend 染程推薦

	Very Good 非常好	Moderate 適用
Exhaustion Process 浸染		√
Cold Pad-Batch (CPB)	√	
Pad dyeing		√
Pad-Dry Chemical Pad-Steam (PDPS)	√	
Process		√
Pad-Dry Baking (PDB)	√	
壓染		√
Pad-Steam (PS)	√	
Emoistfix	√	
Discharge Printing 拔染印花	√	

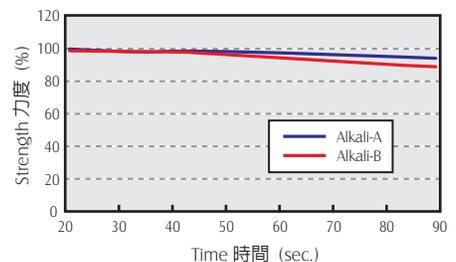
Dependency of Batching Time 捲置時間依存性(CPB)
(Dyeing temperature at 25°C)



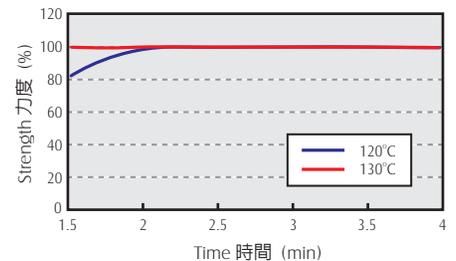
Stability of Padding liquor 染液安定性(CPB)
(Dyeing temperature at 25°C)



Dependency of Steaming Time 蒸處時間依存性(PD/PS)
(Saturated steam at 102°C)



Dependency of Fixation Time 固著時間依存性(Emoistfix)
(Substrate:130x70/32x20 1/3 twill cotton)



Everzol Orange C-3R 133%



Fastness Before Fixing Treatment 固色前牢度表

Fastness 牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色	Staining 污染				
					Acetate 醋酸纖維	Cotton 棉	Nylon 尼龍	Polyester 聚酯	Acrylic 壓克力
Washing 耐水洗	ISO CO2	30 g/l	4-5	5	5	5	5	5	5
	ISO CO3		4-5	5	5	5	5	4	
	ISO CO4		4-5	5	4	4-5	5	4-5	1-2
	ISO CO6-C1S		4-5	5	4-5	5	5	4-5	
	ISO CO6-C2S		4-5	5	4-5	5	5	5	
	M&S C4A		4-5	5	5	5	5	5	
Water 耐水		30 g/l	5	5	5	5	5	5	
Hot Water 耐熱水		30 g/l	4-5	5	5	5	5	5	
Sea Water 耐海水		30 g/l	5	5	5	5	5	5	
Post Mercerizing 後絲光		30 g/l	2-3R	-	4	-			
Acid Hydrolysis 酸水解		30 g/l	4-5	5	4	4	5	5	4-5
Perspiration 耐汗	Acid 酸	30 g/l	5	5	5	5	5	5	5
	Alkali 鹼	30 g/l	5	5	5	5	5	5	5

Dyeing Depth 染色濃度		5 g/l	10 g/l	30 g/l	60 g/l	
Rubbing 耐磨擦	Dry 乾	5	5	5	4-5	
	Wet 溼	4-5	4	3-4	3-4	
		Color Change 變褪色	Color Change 變褪色	Color Change 變褪色	Color Change 變褪色	
Bleach 耐漂白	Chlorinated Water 耐氯水(20ppm)	1	1	2	2-3	
	Peroxide Bleaching 雙氧水漂白	-	-	4	-	
Hot-Pressing 耐熱壓	Dry 乾	Immediately	-	4-5	-	
		4 hours after	-	4	-	
	Wet 溼	Immediately	-	-	4-5	-
		4 hours after	-	-	4	-
M&S C10A (UK-TO) 多次水洗		1-2	1-2	2-3	4	
Saliva (DIN) 耐唾液		-	-	5	-	
Dry Cleaning 耐乾洗		-	-	4-5	-	

Lightfastness 耐晒牢度表

Lightfastness 耐晒牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色 20 AFU	Grade 級數 ISO Blue Scale (藍色票)
Artificial Light 耐日光 (Xenon-Arc Lamp)			5 g/l	3	3-4
			10 g/l	4	4-5
			30 g/l	4-5	5-6
			60 g/l	4-5	5-6
Perspiration Light 耐汗日光	Acid 酸	5 g/l	3-4	4-5	
		10 g/l	4	5	
		30 g/l	4-5	5-6	
		60 g/l	4-5	6	
	Alkali 鹼	5 g/l	4	3-4	
		10 g/l	4-5	4	
		30 g/l	4-5	5	
		60 g/l	4-5	5-6	
M&S C9A (Detergent Light)			10 g/l	-	-
			30 g/l	-	4

Dyeing Properties 染料特性

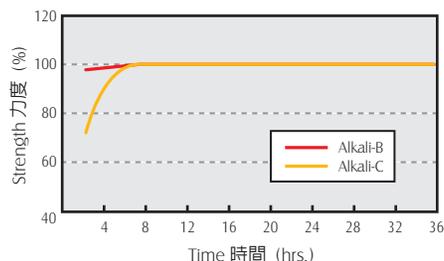
	Characteristics 特性	Evaluation 評級
Fixation Rate 固著率(%)	CPB 冷壓染 (30g/l)	> 80 %
	PDPS 連染 (30g/l)	> 80 %
	Emoistfix (30g/l)	> 85 %
Solubility 溶解度(g/l)	25°C Water 水	100
	50°C Water + 50g/l Salt 水 + 鹽 50g/l	100
Solubility in Alkali 耐鹼溶解度(g/l)	Alkali-A 鹼劑A	10
	Alkali-A + Urea 100g/l 鹼劑 A + 尿素 100g/l	20
	Alkali-B 鹼劑 B	60
	Alkali-B + Urea 100g/l 鹼劑 B + 尿素 100g/l	60
	Alkali-C 鹼劑 C	80
	Alkali-C + Urea 100g/l 鹼劑 C + 尿素 100g/l	80
Stripping 脫色性	Alkali 鹼處理	△
	Reduction 還原處理	△
	Reduction-Oxidization 還原處理後再氧化處理	△
	Oxidization-Reduction 氧化處理後再還原處理	△
Color Constancy 色恆性	Tungsten Lamp 鎢絲燈	B
	TL84 Lamp	B
Effect of Metallic Ions 金屬離子的影響	Fe ⁺⁺ 鐵離子	4-5
	Cu ⁺⁺ 銅離子	4-5
Acid Spotting 酸滴	Hydrochloric Acid 鹽酸	4-5
	Acetic Acid 醋酸	4(Y)
Alkali Spotting 鹼滴	Ammonia Water 氨水	3-4(Y)
	Soda Ash Solution 純鹼	4-5
Shade Change After Fixing Treatment 固色後變色性	Polyamide 聚乙醯胺	4B
	Quaternary Ammonium Salt 四級胺鹽	4B
Resin Finishing 樹脂加工	Melamine 三聚氰胺	4-5
	Glyoxal 乙二醛	4-5
Discharge Ability 拔染性	Neutral 中性	4-5
	Alkaline 鹼性	4-5

× : un-suitable, △ : moderate, ○ : suitable, Dyeing properties are based on 30g/l depth.

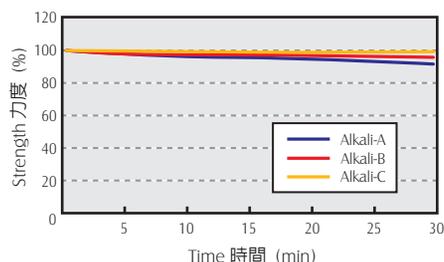
Dyeing Process to Recommend 染程推薦

	Very Good 非常好	Moderate 適用
Exhaustion Process 浸染		√
	Cold Pad-Batch (CPB)	√
Pad dyeing	Pad-Dry Chemical Pad-Steam (PDPS)	√
Process	Pad-Dry Baking (PDB)	√
壓染	Pad-Steam (PS)	√
	Emoistfix	√
Discharge Printing 拔染印花	√	

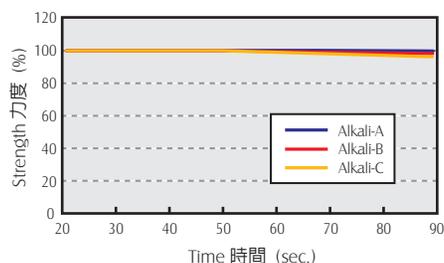
Dependency of Batching Time 捲置時間依存性(CPB) (Dyeing temperature at 25°C)



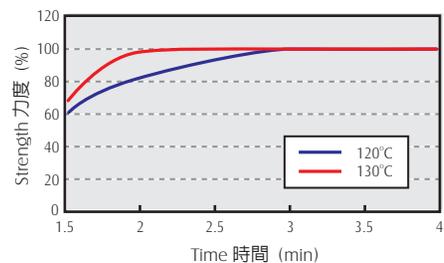
Stability of Padding liquor 染液安定性(CPB) (Dyeing temperature at 25°C)



Dependency of Steaming Time 蒸處時間依存性(PD/PS) (Saturated steam at 102°C)



Dependency of Fixation Time 固著時間依存性(Emoistfix) (Substrate:130x70/32x20 1/3 twill cotton)



Everzol Red C-3B



Fastness Before Fixing Treatment 固色前牢度表

Fastness 牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色	Staining 污染				
					Acetate 醋酸纖維	Cotton 棉	Nylon 尼龍	Polyester 聚酯	Acrylic 壓克力
Washing 耐水洗	ISO CO2	10 g/l	5	5	5	5	5	5	5
	ISO CO3		5	5	5	5	5	5	5
	ISO CO4		4-5	5	5	5	5	5	4-5
	ISO CO6-C1S		5	5	5	5	5	5	5
	ISO CO6-C2S		5	5	5	5	5	5	5
	M&S C4A		5	5	5	5	5	5	5
Water 耐水		10 g/l	4-5	5	5	5	5	5	5
Hot Water 耐熱水		10 g/l	5	5	5	5	5	5	5
Sea Water 耐海水		10 g/l	4-5	5	5	5	5	5	5
Post Mercerizing 後絲光		10 g/l	3	-	5	-			
Acid Hydrolysis 酸水解		10 g/l	4-5	5	5	5	5	5	5
Perspiration 耐汗	Acid 酸	10 g/l	4-5	5	5	5	5	5	5
	Alkali 鹼	10 g/l	4	5	5	5	5	5	5

Dyeing Depth 染色濃度		1 g/l	5 g/l	10 g/l	30 g/l	
Rubbing 耐磨擦	Dry 乾	5	5	5	5	
	Wet 溼	4-5	4-5	4-5	3-4	
		Color Change 變褪色	Color Change 變褪色	Color Change 變褪色	Color Change 變褪色	
Bleach 耐漂白	Chlorinated Water 耐氯水(20ppm)	-	-	3-4	-	
	Peroxide Bleaching 雙氧水漂白	-	-	2	-	
Hot-Pressing 耐熱壓	Dry 乾	Immediately	-	4	-	
		4 hours after	-	5	-	
	Wet 溼	Immediately	-	-	3-4	-
		4 hours after	-	-	4-5	-
M&S C10A (UK-TO) 多次水洗		-	-	4	-	
Saliva (DIN) 耐唾液		-	-	4-5	-	
Dry Cleaning 耐乾洗		-	-	4-5	-	

Lightfastness 耐晒牢度表

Lightfastness 耐晒牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色 20 AFU	Grade 級數 ISO Blue Scale (藍色票)	
Artificial Light 耐日光 (Xenon-Arc Lamp)			1 g/l	4	4	
			5 g/l	4	4-5	
			10 g/l	4-5	5	
			30 g/l	5	6	
Perspiration Light 耐汗日光	Acid 酸		1 g/l	2-3	3-4	
			5 g/l	3	4	
			10 g/l	3	4-5	
			30 g/l	3-4	5	
	Alkali 鹼			1 g/l	2-3	2
				5 g/l	3	2-3
				10 g/l	3	3
				30 g/l	3-4	4
M&S C9A (Detergent Light)			10 g/l	-	4-5	
			30 g/l	-	-	

Dyeing Properties 染料特性

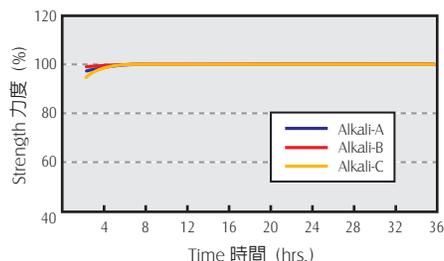
	Characteristics 特性	Evaluation 評級
Fixation Rate 固著率(%)	CPB 冷壓染 (30g/l)	> 95 %
	PDPS 連染 (30g/l)	> 95 %
	Emoistfix (30g/l)	> 85 %
Solubility 溶解度(g/l)	25°C Water 水	100
	50°C Water + 50g/l Salt 水 + 鹽 50g/l	100
Solubility in Alkali 耐鹼溶解度(g/l)	Alkali-A 鹼劑A	100
	Alkali-A + Urea 100g/l 鹼劑 A + 尿素 100g/l	100
	Alkali-B 鹼劑 B	100
	Alkali-B + Urea 100g/l 鹼劑 B + 尿素 100g/l	100
	Alkali-C 鹼劑 C	100
Stripping 脫色性	Alkali 鹼處理	×
	Reduction 還原處理	△
	Reduction-Oxidization 還原處理後再氧化處理	△
	Oxidization-Reduction 氧化處理後再還原處理	△
Color Constancy 色恆性	Tungsten Lamp 鎢絲燈	R
	TL84 Lamp	R
Effect of Metallic Ions 金屬離子的影響	Fe ⁺⁺ 鐵離子	4-5B
	Cu ⁺⁺ 銅離子	4B
Acid Spotting 酸滴	Hydrochloric Acid 鹽酸	5
	Acetic Acid 醋酸	4-5Y
Alkali Spotting 鹼滴	Ammonia Water 氨水	4-5B
	Soda Ash Solution 純鹼	1B
Shade Change After Fixing Treatment 固色後變色性	Polyamide 聚乙醯胺	4B
	Quaternary Ammonium Salt 四級胺鹽	4B
Resin Finishing 樹脂加工	Melamine 三聚氰胺	4-5B
	Glyoxal 乙二醛	4-5B
Discharge Ability 拔染性	Neutral 中性	2
	Alkaline 鹼性	2

× : un-suitable, △ : moderate, ○ : suitable, Dyeing properties are based on 30g/l depth.

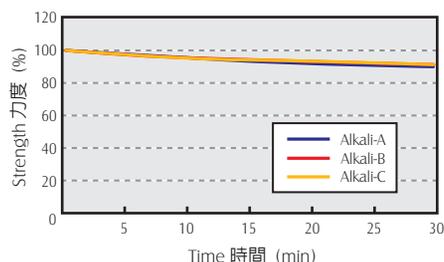
Dyeing Process to Recommend 染程推薦

	Very Good 非常好	Moderate 適用
Exhaustion Process 浸染	✓	
Cold Pad-Batch (CPB)	✓	
Pad dyeing		✓
Pad-Dry Chemical Pad-Steam (PDPS)	✓	
Process		✓
Pad-Dry Baking (PDB)	✓	
壓染		✓
Pad-Steam (PS)	✓	
Emoistfix	✓	
Discharge Printing 拔染印花		

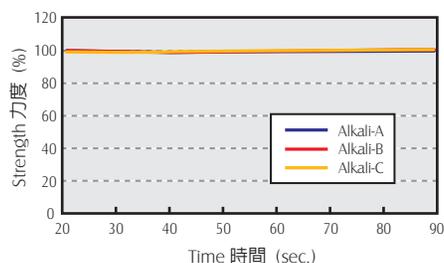
Dependency of Batching Time 捲置時間依存性(CPB)
(Dyeing temperature at 25°C)



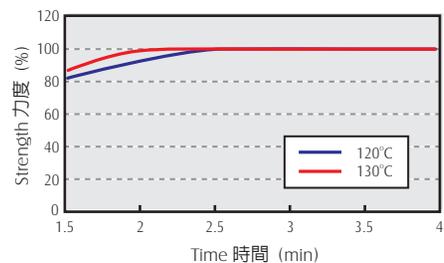
Stability of Padding liquor 染液安定性(CPB)
(Dyeing temperature at 25°C)



Dependency of Steaming Time 蒸處時間依存性(PD/PS)
(Saturated steam at 102°C)



Dependency of Fixation Time 固著時間依存性(Emoistfix)
(Substrate:130x70/32x20 1/3 twill cotton)



Everzol Red C-RB 133%



Fastness Before Fixing Treatment 固色前牢度表

Fastness 牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色	Staining 污染				
					Acetate 醋酸纖維	Cotton 棉	Nylon 尼龍	Polyester 聚酯	Acrylic 壓克力
Washing 耐水洗	ISO CO2	30 g/l	5	5	5	5	5	5	5
	ISO CO3		5	5	4-5	5	5	5	5
	ISO CO4		5	5	4-5	5	5	5	4
	ISO CO6-C1S		5	5	4-5	5	5	5	5
	ISO CO6-C2S		5	5	4-5	5	5	5	5
	M&S C4A		5	5	5	5	5	5	5
Water 耐水		30 g/l	5	5	5	5	5	5	5
Hot Water 耐熱水		30 g/l	4-5	5	4-5	5	5	5	5
Sea Water 耐海水		30 g/l	5	5	5	5	5	5	5
Post Mercerizing 後絲光		30 g/l	1-2Y	-	3-4	-			
Acid Hydrolysis 酸水解		30 g/l	4	5	5	4	5	5	5
Perspiration 耐汗	Acid 酸	30 g/l	5	5	5	5	5	5	5
	Alkali 鹼	30 g/l	4-5	5	5	5	5	5	5

Dyeing Depth 染色濃度		5 g/l	10 g/l	30 g/l	60 g/l
Rubbing 耐磨擦	Dry 乾	5	6	5	5
	Wet 溼	4	3-4	3	3
		Color Change 變褪色	Color Change 變褪色	Color Change 變褪色	Color Change 變褪色
Bleach 耐漂白	Chlorinated Water 耐氯水(20ppm)	-	-	2-3	-
	Peroxide Bleaching 雙氧水漂白	-	-	3-4	-
Hot-Pressing 耐熱壓	Dry 乾	Immediately	-	4-5	-
		4 hours after	-	5	-
	Wet 溼	Immediately	-	4	-
		4 hours after	-	4-5	-
M&S C10A (UK-TO) 多次水洗		-	-	2-3	-
Saliva (DIN) 耐唾液		-	-	5	-
Dry Cleaning 耐乾洗		-	-	4-5	-

Lightfastness 耐晒牢度表

Lightfastness 耐晒牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色 20 AFU	Grade 級數 ISO Blue Scale (藍色票)	
Artificial Light 耐日光 (Xenon-Arc Lamp)			5 g/l	3-4	4	
			10 g/l	4	4	
			30 g/l	4-5	4-5	
			60 g/l	4-5	5	
Perspiration Light 耐汗日光	Acid 酸		5 g/l	2-3	3-4	
			10 g/l	3	4	
			30 g/l	3-4	4-5	
			60 g/l	4	5	
	Alkali 鹼			5 g/l	2-3	3
				10 g/l	3	3-4
				30 g/l	3-4	4
				60 g/l	4	4-5
M&S C9A (Detergent Light)			10 g/l	-	-	
			30 g/l	-	4-5	

Dyeing Properties 染料特性

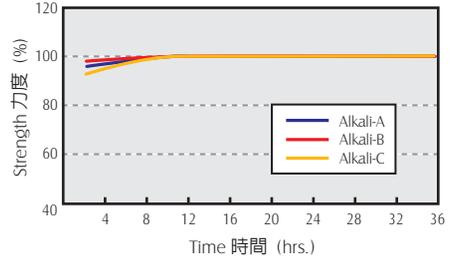
	Characteristics 特性	Evaluation 評級
Fixation Rate 固著率(%)	CPB 冷壓染 (30g/l)	> 85 %
	PDPS 連染 (30g/l)	> 85 %
	Emoistfix (30g/l)	> 85 %
Solubility 溶解度(g/l)	25°C Water 水	100
	50°C Water + 50g/l Salt 水 + 鹽 50g/l	100
Solubility in Alkali 耐鹼溶解度(g/l)	Alkali-A 鹼劑A	70
	Alkali-A + Urea 100g/l 鹼劑 A + 尿素 100g/l	80
	Alkali-B 鹼劑 B	100
	Alkali-B + Urea 100g/l 鹼劑 B + 尿素 100g/l	100
	Alkali-C 鹼劑 C	100
Stripping 脫色性	Alkali 鹼處理	×
	Reduction 還原處理	△
	Reduction-Oxidization 還原處理後再氧化處理	△
	Oxidization-Reduction 氧化處理後再還原處理	△
Color Constancy 色恆性	Tungsten Lamp 鎢絲燈	Y
	TL84 Lamp	Y
Effect of Metallic Ions 金屬離子的影響	Fe ⁺⁺ 鐵離子	3-4
	Cu ⁺⁺ 銅離子	2-3B
Acid Spotting 酸滴	Hydrochloric Acid 鹽酸	4
	Acetic Acid 醋酸	5
Alkali Spotting 鹼滴	Ammonia Water 氨水	3B
	Soda Ash Solution 純鹼	5
Shade Change After Fixing Treatment 固色後變色性	Polyamide 聚乙醯胺	4B
	Quaternary Ammonium Salt 四級胺鹽	5
Resin Finishing 樹脂加工	Melamine 三聚氰胺	4-5
	Glyoxal 乙二醛	5
Discharge Ability 拔染性	Neutral 中性	1-2
	Alkaline 鹼性	2

× : un-suitable, △ : moderate, ○ : suitable, Dyeing properties are based on 30g/l dye.

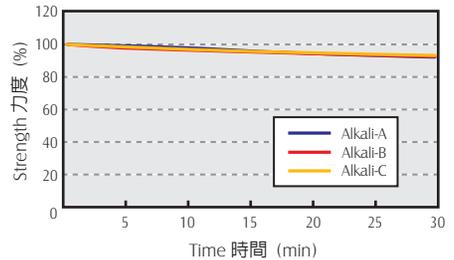
Dyeing Process to Recommend 染程推薦

	Very Good 非常好	Moderate 適用
Exhaustion Process 浸染	✓	
Cold Pad-Batch (CPB)	✓	
Pad dyeing Pad-Dry Chemical Pad-Steam (PDPS)	✓	
Process Pad-Dry Baking (PDB)	✓	
壓染 Pad-Steam (PS)	✓	
Emoistfix	✓	
Discharge Printing 拔染印花		

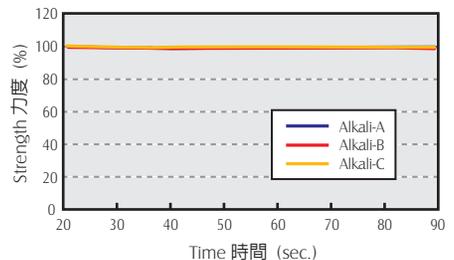
Dependency of Batching Time 捲置時間依存性(CPB)
(Dyeing temperature at 25°C)



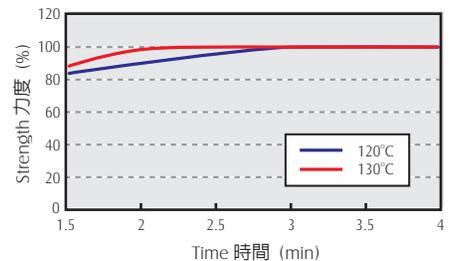
Stability of Padding liquor 染液安定性(CPB)
(Dyeing temperature at 25°C)



Dependency of Steaming Time 蒸處時間依存性(PD/PS)
(Saturated steam at 102°C)



Dependency of Fixation Time 固著時間依存性(Emoistfix)
(Substrate:130x70/32x20 1/3 twill cotton)



Everzol Red C-3BS H/C



Fastness Before Fixing Treatment 固色前牢度表

Fastness 牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色	Staining 污染				
					Acetate 醋酸纖維	Cotton 棉	Nylon 尼龍	Polyester 聚酯	Acrylic 壓克力
Washing 耐水洗	ISO CO2	30 g/l	5	5	5	5	5	5	5
	ISO CO3		5	5	5	5	5	5	5
	ISO CO4		5	5	4-5	5	5	5	4-5
	ISO CO6-C1S		5	5	4-5	5	5	5	4-5
	ISO CO6-C2S		5	5	4-5	5	5	5	5
	M&S C4A		5	5	5	5	5	5	5
Water 耐水		30 g/l	5	5	4-5	4-5	5	5	5
Hot Water 耐熱水		30 g/l	5	5	5	5	5	5	5
Sea Water 耐海水		30 g/l	4-5	5	5	5	5	5	5
Post Mercerizing 後絲光		30 g/l	1-2Y	-	3-4	-			
Acid Hydrolysis 酸水解		30 g/l	4-5	5	4	4-5	5	5	4
Perspiration 耐汗	Acid 酸	30 g/l	4-5	5	5	5	5	4	5
	Alkali 鹼	30 g/l	5	5	4-5	5	5	4-5	5

Dyeing Depth 染色濃度		5 g/l	10 g/l	30 g/l	60 g/l	
Rubbing 耐磨擦	Dry 乾	5	5	5	5	
	Wet 溼	4	3-4	3	3	
		Color Change 變褪色	Color Change 變褪色	Color Change 變褪色	Color Change 變褪色	
Bleach 耐漂白	Chlorinated Water 耐氯水(20ppm)	-	-	4-5	-	
	Peroxide Bleaching 雙氧水漂白	-	-	4	-	
Hot-Pressing 耐熱壓	Dry 乾	Immediately	-	4	-	
		4 hours after	-	-	4-5	-
	Wet 溼	Immediately	-	-	4	-
		4 hours after	-	-	4-5	-
M&S C10A (UK-TO) 多次水洗		-	-	4-5	-	
Saliva (DIN) 耐唾液		-	-	4-5	-	
Dry Cleaning 耐乾洗		-	-	4-5	-	

Lightfastness 耐晒牢度表

Lightfastness 耐晒牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色 20 AFU	Grade 級數 ISO Blue Scale (藍色票)	
Artificial Light 耐日光 (Xenon-Arc Lamp)			5 g/l	4	3-4	
			10 g/l	4	4	
			30 g/l	4-5	4-5	
			60 g/l	5	5	
Perspiration Light 耐汗日光	Acid 酸		5 g/l	3	3-4	
			10 g/l	3-4	4	
			30 g/l	4	4-5	
			60 g/l	4-5	5	
	Alkali 鹼			5 g/l	3	3
				10 g/l	3-4	3-4
				30 g/l	4	4
				60 g/l	4-5	4-5
M&S C9A (Detergent Light)			10 g/l	-	-	
			30 g/l	-	>4-5	

Dyeing Properties 染料特性

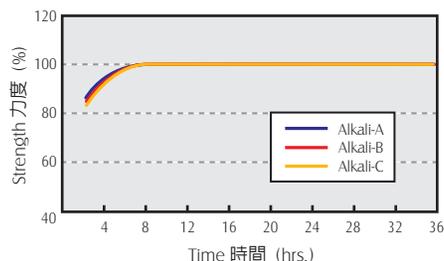
	Characteristics 特性	Evaluation 評級
Fixation Rate 固著率(%)	CPB 冷壓染 (30g/l)	> 85 %
	PDPS 連染 (30g/l)	> 90 %
	Emoistfix (30g/l)	> 75 %
Solubility 溶解度(g/l)	25°C Water 水	100
	50°C Water + 50g/l Salt 水 + 鹽 50g/l	100
Solubility in Alkali 耐鹼溶解度(g/l)	Alkali-A 鹼劑A	100
	Alkali-A + Urea 100g/l 鹼劑 A + 尿素 100g/l	100
	Alkali-B 鹼劑 B	100
	Alkali-B + Urea 100g/l 鹼劑 B + 尿素 100g/l	100
	Alkali-C 鹼劑 C	100
Stripping 脫色性	Alkali 鹼處理	×
	Reduction 還原處理	○
	Reduction-Oxidization 還原處理後再氧化處理	○
	Oxidization-Reduction 氧化處理後再還原處理	○
Color Constancy 色恆性	Tungsten Lamp 鎢絲燈	Y
	TL84 Lamp	Y
Effect of Metallic Ions 金屬離子的影響	Fe ⁺⁺ 鐵離子	5
	Cu ⁺⁺ 銅離子	1B
Acid Spotting 酸滴	Hydrochloric Acid 鹽酸	4-5
	Acetic Acid 醋酸	4-5
Alkali Spotting 鹼滴	Ammonia Water 氨水	4-5
	Soda Ash Solution 純鹼	1-2
Shade Change After Fixing Treatment 固色後變色性	Polyamide 聚乙醯胺	4-5
	Quaternary Ammonium Salt 四級胺鹽	4-5
Resin Finishing 樹脂加工	Melamine 三聚氰胺	4
	Glyoxal 乙二醛	3-4
Discharge Ability 拔染性	Neutral 中性	3-4
	Alkaline 鹼性	4

× : un-suitable, △ : moderate, ○ : suitable, Dyeing properties are based on 30g/l dye.

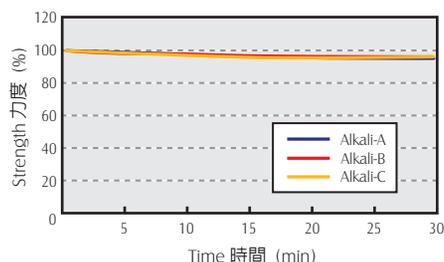
Dyeing Process to Recommend 染程推薦

	Very Good 非常好	Moderate 適用
Exhaustion Process 浸染		
	Cold Pad-Batch (CPB)	✓
Pad dyeing	Pad-Dry Chemical Pad-Steam (PDPS)	✓
Process	Pad-Dry Baking (PDB)	✓
壓染	Pad-Steam (PS)	✓
	Emoistfix	✓
Discharge Printing 拔染印花	✓	

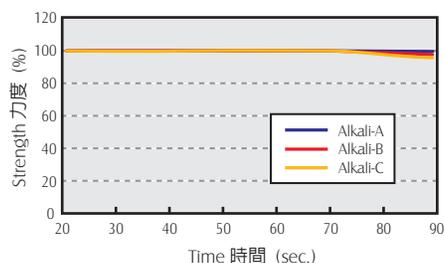
Dependency of Batching Time 捲置時間依存性(CPB) (Dyeing temperature at 25°C)



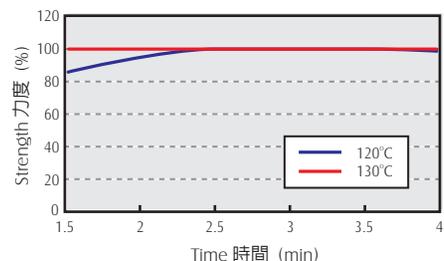
Stability of Padding liquor 染液安定性(CPB) (Dyeing temperature at 25°C)



Dependency of Steaming Time 蒸處時間依存性(PD/PS) (Saturated steam at 102°C)



Dependency of Fixation Time 固著時間依存性(Emoistfix) (Substrate:130x70/32x20 1/3 twill cotton)



Everzol Red CD



Fastness Before Fixing Treatment 固色前牢度表

Fastness 牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色	Staining 污染				
					Acetate 醋酸纖維	Cotton 棉	Nylon 尼龍	Polyester 聚酯	Acrylic 壓克力
Washing 耐水洗	ISO CO2	30 g/l	4-5	5	4-5	5	5	5	5
	ISO CO3		4-5	5	3-4	5	5	5	5
	ISO CO4		4-5	5	2-3	4-5	5	5	2-3
	ISO CO6-C1S		4-5	5	3-4	5	5	4-5	5
	ISO CO6-C2S		4-5	5	4	5	5	4-5	5
	M&S C4A		4-5	5	4-5	5	5	5	5
Water 耐水		30 g/l	4-5	5	5	5	5	5	5
Hot Water 耐熱水		30 g/l	4-5	5	4-5	3-4	4-5	5	5
Sea Water 耐海水		30 g/l	4-5	5	5	5	5	5	5
Post Mercerizing 後絲光		30 g/l	2	-	2	-			
Acid Hydrolysis 酸水解		30 g/l	4-5	5	5	5	5	5	5
Perspiration 耐汗	Acid 酸	30 g/l	4-5	5	5	5	5	5	5
	Alkali 鹼	30 g/l	4-5	5	5	5	5	5	5

Dyeing Depth 染色濃度		5 g/l	10 g/l	30 g/l	60 g/l	
Rubbing 耐磨擦	Dry 乾	5	5	5	5	
	Wet 溼	4-5	4-5	4	3-4	
		Color Change 變褪色	Color Change 變褪色	Color Change 變褪色	Color Change 變褪色	
Bleach 耐漂白	Chlorinated Water 耐氯水(20ppm)	-	-	4-5	-	
	Peroxide Bleaching 雙氧水漂白	-	-	4-5	-	
Hot-Pressing 耐熱壓	Dry 乾	Immediately	-	4	-	
		4 hours after	-	-	4-5	-
	Wet 溼	Immediately	-	-	2	-
		4 hours after	-	-	4-5	-
M&S C10A (UK-TO) 多次水洗		-	-	4-5	-	
Saliva (DIN) 耐唾液		-	-	5	-	
Dry Cleaning 耐乾洗		-	-	-	-	

Lightfastness 耐晒牢度表

Lightfastness 耐晒牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色 20 AFU	Grade 級數 ISO Blue Scale (藍色票)	
Artificial Light 耐日光 (Xenon-Arc Lamp)			5 g/l	4	4-5	
			10 g/l	4	5	
			30 g/l	4-5	6	
			60 g/l	4-5	>6	
Perspiration Light 耐汗日光	Acid 酸		5 g/l	3-4	4-5	
			10 g/l	4	5	
			30 g/l	4-5	6	
			60 g/l	4-5	>6	
	Alkali 鹼			5 g/l	3-4	4
				10 g/l	4	4-5
				30 g/l	4-5	5-6
				60 g/l	4-5	6
M&S C9A (Detergent Light)			10 g/l	-	-	
			30 g/l	-	4-5	

Dyeing Properties 染料特性

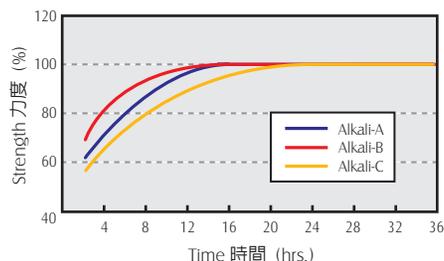
	Characteristics 特性	Evaluation 評級
Fixation Rate 固著率(%)	CPB 冷壓染 (30g/l)	> 80 %
	PDPS 連染 (30g/l)	> 70 %
	Emoistfix (30g/l)	-
Solubility 溶解度(g/l)	25°C Water 水	150
	50°C Water + 50g/l Salt 水 + 鹽 50g/l	10 ↓
Solubility in Alkali 耐鹼溶解度(g/l)	Alkali-A 鹼劑A	100
	Alkali-A + Urea 100g/l 鹼劑 A + 尿素 100g/l	100
	Alkali-B 鹼劑 B	100
	Alkali-B + Urea 100g/l 鹼劑 B + 尿素 100g/l	100
	Alkali-C 鹼劑 C	100
Stripping 脫色性	Alkali 鹼處理	△
	Reduction 還原處理	△
	Reduction-Oxidization 還原處理後再氧化處理	○
	Oxidization-Reduction 氧化處理後再還原處理	○
Color Constancy 色恆性	Tungsten Lamp 鎢絲燈	R
	TL84 Lamp	R
Effect of Metallic Ions 金屬離子的影響	Fe ⁺⁺ 鐵離子	5
	Cu ⁺⁺ 銅離子	5
Acid Spotting 酸滴	Hydrochloric Acid 鹽酸	2-3Y
	Acetic Acid 醋酸	3Y
Alkali Spotting 鹼滴	Ammonia Water 氨水	3Y
	Soda Ash Solution 純鹼	2-3Y
Shade Change After Fixing Treatment 固色後變色性	Polyamide 聚乙醯胺	3-4Y
	Quaternary Ammonium Salt 四級胺鹽	4-5
Resin Finishing 樹脂加工	Melamine 三聚氰胺	5
	Glyoxal 乙二醛	4Y
Discharge Ability 拔染性	Neutral 中性	3
	Alkaline 鹼性	2

× : un-suitable, △ : moderate, ○ : suitable, Dyeing properties are based on 30g/l depth.

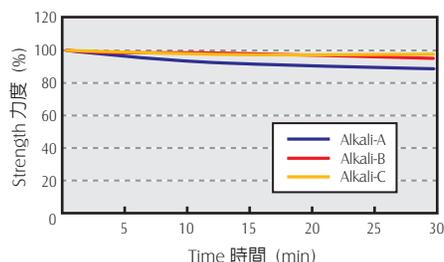
Dyeing Process to Recommend 染程推薦

	Very Good 非常好	Moderate 適用
Exhaustion Process 浸染	✓	
Cold Pad-Batch (CPB)	✓	
Pad dyeing		✓
Pad-Dry Chemical Pad-Steam (PDPS)	✓	
Process		✓
Pad-Dry Baking (PDB)	✓	
壓染		✓
Pad-Steam (PS)		✓
Emoistfix		
Discharge Printing 拔染印花		

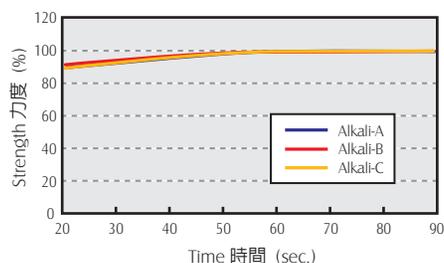
Dependency of Batching Time 捲置時間依存性(CPB)
(Dyeing temperature at 25°C)



Stability of Padding liquor 染液安定性(CPB)
(Dyeing temperature at 25°C)



Dependency of Steaming Time 蒸處時間依存性(PD/PS)
(Saturated steam at 102°C)



Everzol Turquoise C-G 133%



Fastness Before Fixing Treatment 固色前牢度表

Fastness 牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色	Staining 污染				
					Acetate 醋酸纖維	Cotton 棉	Nylon 尼龍	Polyester 聚酯	Acrylic 壓克力
Washing 耐水洗	ISO CO2	30 g/l	5	5	3	4-5	5	5	5
	ISO CO3		5	5	3	4-5	5	5	5
	ISO CO4		4	4-5	2-3	4	4-5	5	2-3
	ISO CO6-C1S		5	5	3	4-5	4-5	4-5	5
	ISO CO6-C2S		5	5	3	4	5	5	5
	M&S C4A		5	5	3	5	5	5	5
Water 耐水		30 g/l	5	5	5	5	5	5	5
Hot Water 耐熱水		30 g/l	5	5	5	5	5	5	5
Sea Water 耐海水		30 g/l	5	5	5	5	5	5	5
Post Mercerizing 後絲光		30 g/l	3G	-	4	-			
Acid Hydrolysis 酸水解		30 g/l	3Y	5	5	5	5	5	5
Perspiration 耐汗	Acid 酸	30 g/l	4-5	5	5	5	5	5	5
	Alkali 鹼	30 g/l	4-5	5	5	5	5	5	5

Dyeing Depth 染色濃度		5 g/l	10 g/l	30 g/l	60 g/l	
Rubbing 耐磨擦	Dry 乾	5	5	5	5	
	Wet 溼	4-5	4-5	4	3-4	
		Color Change 變褪色	Color Change 變褪色	Color Change 變褪色	Color Change 變褪色	
Bleach 耐漂白	Chlorinated Water 耐氯水(20ppm)	-	-	2	-	
	Peroxide Bleaching 雙氧水漂白	-	-	2	-	
Hot-Pressing 耐熱壓	Dry 乾	Immediately	-	4-5	-	
		4 hours after	-	5	-	
	Wet 溼	Immediately	-	-	4-5	-
		4 hours after	-	-	4-5	-
M&S C10A (UK-TO) 多次水洗		-	-	4	-	
Saliva (DIN) 耐唾液		-	-	4-5	-	
Dry Cleaning 耐乾洗		-	-	4-5	-	

Lightfastness 耐晒牢度表

Lightfastness 耐晒牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色 20 AFU	Grade 級數 ISO Blue Scale (藍色票)	
Artificial Light 耐日光 (Xenon-Arc Lamp)			5 g/l	3	3-4	
			10 g/l	3-4	3-4	
			30 g/l	4	4	
			60 g/l	4-5	5	
Perspiration Light 耐汗日光	Acid 酸		5 g/l	3	2	
			10 g/l	3-4	2	
			30 g/l	4	3	
			60 g/l	4-5	3-4	
	Alkali 鹼			5 g/l	3	2
				10 g/l	3-4	2-3
				30 g/l	4	3
				60 g/l	4-5	3-4
M&S C9A (Detergent Light)			10 g/l	-	-	
			30 g/l	-	4-5	

Dyeing Properties 染料特性

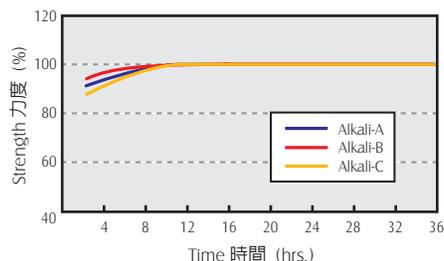
	Characteristics 特性	Evaluation 評級
Fixation Rate 固著率(%)	CPB 冷壓染 (30g/l)	> 80 %
	PDPS 連染 (30g/l)	> 85 %
	Emoistfix (30g/l)	> 75 %
Solubility 溶解度(g/l)	25°C Water 水	100
	50°C Water + 50g/l Salt 水 + 鹽 50g/l	100
Solubility in Alkali 耐鹼溶解度(g/l)	Alkali-A 鹼劑A	100
	Alkali-A + Urea 100g/l 鹼劑 A + 尿素 100g/l	100
	Alkali-B 鹼劑 B	100
	Alkali-B + Urea 100g/l 鹼劑 B + 尿素 100g/l	100
	Alkali-C 鹼劑 C	100
Stripping 脫色性	Alkali 鹼處理	×
	Reduction 還原處理	△
	Reduction-Oxidization 還原處理後再氧化處理	○
	Oxidization-Reduction 氧化處理後再還原處理	△
Color Constancy 色恆性	Tungsten Lamp 鎢絲燈	R
	TL84 Lamp	R
Effect of Metallic Ions 金屬離子的影響	Fe ⁺⁺ 鐵離子	4-5
	Cu ⁺⁺ 銅離子	4-5
Acid Spotting 酸滴	Hydrochloric Acid 鹽酸	4
	Acetic Acid 醋酸	4-5
Alkali Spotting 鹼滴	Ammonia Water 氨水	4-5
	Soda Ash Solution 純鹼	3-4
Shade Change After Fixing Treatment 固色後變色性	Polyamide 聚乙醯胺	4Y
	Quaternary Ammonium Salt 四級胺鹽	5
Resin Finishing 樹脂加工	Melamine 三聚氰胺	4-5
	Glyoxal 乙二醛	4-5
Discharge Ability 拔染性	Neutral 中性	1
	Alkaline 鹼性	1-2

× : un-suitable, △ : moderate, ○ : suitable, Dyeing properties are based on 30g/l dye.

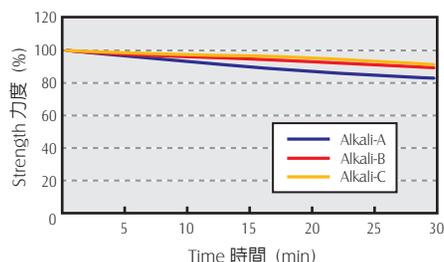
Dyeing Process to Recommend 染程推薦

	Very Good 非常好	Moderate 適用
Exhaustion Process 浸染	✓	
Cold Pad-Batch (CPB)	✓	
Pad dyeing		✓
Pad-Dry Chemical Pad-Steam (PDPS)	✓	
Process		✓
Pad-Dry Baking (PDB)	✓	
壓染		✓
Pad-Steam (PS)	✓	
Emoistfix	✓	
Discharge Printing 拔染印花		

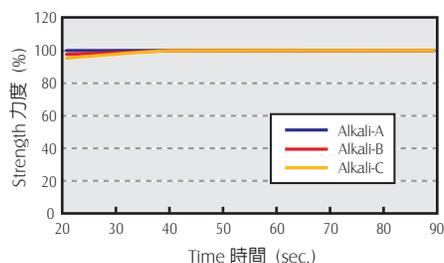
Dependency of Batching Time 捲置時間依存性(CPB)
(Dyeing temperature at 25°C)



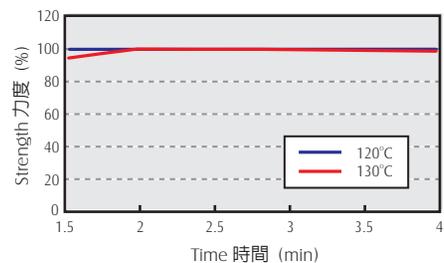
Stability of Padding liquor 染液安定性(CPB)
(Dyeing temperature at 25°C)



Dependency of Steaming Time 蒸處時間依存性(PD/PS)
(Saturated steam at 102°C)



Dependency of Fixation Time 固著時間依存性(Emoistfix)
(Substrate:130x70/32x20 1/3 twill cotton)



Everzol Blue C-R S/P



Fastness Before Fixing Treatment 固色前牢度表

Fastness 牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色	Staining 污染				
					Acetate 醋酸纖維	Cotton 棉	Nylon 尼龍	Polyester 聚酯	Acrylic 壓克力
Washing 耐水洗	ISO CO2	30 g/l	5	5	5	5	5	5	4-5
	ISO CO3		5	5	5	4-5	5	5	4-5
	ISO CO4		4	3-4	4	2-3	4-5	4-5	2-3
	ISO CO6-C1S		5	5	4-5	4-5	5	5	4-5
	ISO CO6-C2S		5	5	5	4-5	5	5	5
	M&S C4A		5	5	5	5	5	5	5
Water 耐水		30 g/l	5	5	5	5	5	5	5
Hot Water 耐熱水		30 g/l	5	5	4-5	5	5	5	5
Sea Water 耐海水		30 g/l	5	5	5	5	5	5	5
Post Mercerizing 後絲光		30 g/l	3R	-	2-3	-			
Acid Hydrolysis 酸水解		30 g/l	4-5	4-5	4-5	4-5	4-5	4-5	4-5
Perspiration 耐汗	Acid 酸	30 g/l	5	5	5	5	5	5	5
	Alkali 鹼	30 g/l	5	5	5	5	5	5	5

Dyeing Depth 染色濃度		5 g/l	10 g/l	30 g/l	60 g/l	
Rubbing 耐磨擦	Dry 乾	5	5	5	5	
	Wet 溼	4-5	4	3-4	3	
		Color Change 變褪色	Color Change 變褪色	Color Change 變褪色	Color Change 變褪色	
Bleach 耐漂白	Chlorinated Water 耐氯水(20ppm)	-	-	2	-	
	Peroxide Bleaching 雙氧水漂白	-	-	4	-	
Hot-Pressing 耐熱壓	Dry 乾	Immediately	-	4-5	-	
		4 hours after	-	5	-	
	Wet 溼	Immediately	-	-	4-5	-
		4 hours after	-	-	4-5	-
M&S C10A (UK-TO) 多次水洗		-	-	4-5	-	
Saliva (DIN) 耐唾液		-	-	5	-	
Dry Cleaning 耐乾洗		-	-	4-5	-	

Lightfastness 耐晒牢度表

Lightfastness 耐晒牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色 20 AFU	Grade 級數 ISO Blue Scale (藍色票)	
Artificial Light 耐日光 (Xenon-Arc Lamp)			5 g/l	4-5	4-5	
			10 g/l	5	5	
			30 g/l	5	5-6	
			60 g/l	5	6	
Perspiration Light 耐汗日光	Acid 酸		5 g/l	3-4	4-5	
			10 g/l	4	5	
			30 g/l	4-5	5-6	
			60 g/l	4-5	6	
	Alkali 鹼			5 g/l	3-4	4-5
				10 g/l	4	5
				30 g/l	4-5	5-6
				60 g/l	4-5	6
M&S C9A (Detergent Light)			10 g/l	-	-	
			30 g/l	-	>4-5	

Everzol Blue C-BB 133%

Dyeing Properties 染料特性

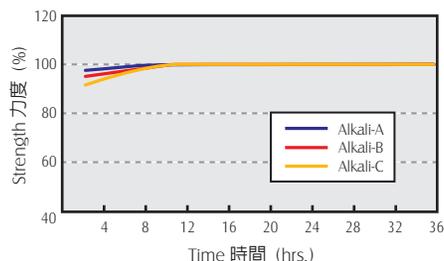
	Characteristics 特性	Evaluation 評級
Fixation Rate 固著率(%)	CPB 冷壓染 (30g/l)	> 85 %
	PDPS 連染 (30g/l)	> 85 %
	Emoistfix (30g/l)	> 80 %
Solubility 溶解度(g/l)	25°C Water 水	100
	50°C Water + 50g/l Salt 水 + 鹽 50g/l	100
Solubility in Alkali 耐鹼溶解度(g/l)	Alkali-A 鹼劑A	100
	Alkali-A + Urea 100g/l 鹼劑 A + 尿素 100g/l	100
	Alkali-B 鹼劑 B	100
	Alkali-B + Urea 100g/l 鹼劑 B + 尿素 100g/l	100
	Alkali-C 鹼劑 C	100
Stripping 脫色性	Alkali 鹼處理	×
	Reduction 還原處理	○
	Reduction-Oxidization 還原處理後再氧化處理	○
	Oxidization-Reduction 氧化處理後再還原處理	○
Color Constancy 色恆性	Tungsten Lamp 鎢絲燈	R
	TL84 Lamp	R
Effect of Metallic Ions 金屬離子的影響	Fe ⁺⁺ 鐵離子	4-5
	Cu ⁺⁺ 銅離子	4-5
Acid Spotting 酸滴	Hydrochloric Acid 鹽酸	4-5
	Acetic Acid 醋酸	4(Y)
Alkali Spotting 鹼滴	Ammonia Water 氨水	3-4(Y)
	Soda Ash Solution 純鹼	4-5
Shade Change After Fixing Treatment 固色後變色性	Polyamide 聚乙醯胺	4(Y)
	Quaternary Ammonium Salt 四級胺鹽	4(Y)
Resin Finishing 樹脂加工	Melamine 三聚氰胺	4-5
	Glyoxal 乙二醛	4-5
Discharge Ability 拔染性	Neutral 中性	2-3
	Alkaline 鹼性	3

× : un-suitable, △ : moderate, ○ : suitable, Dyeing properties are based on 30g/l dye.

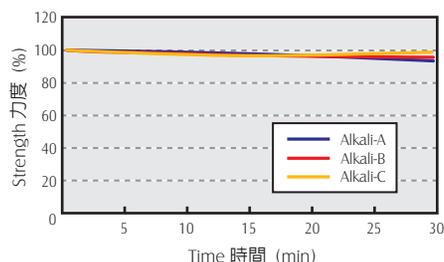
Dyeing Process to Recommend 染程推薦

	Very Good 非常好	Moderate 適用
Exhaustion Process 浸染		✓
Pad dyeing	Cold Pad-Batch (CPB)	✓
	Pad-Dry Chemical Pad-Steam (PDPS)	✓
Process	Pad-Dry Baking (PDB)	✓
壓染	Pad-Steam (PS)	✓
	Emoistfix	✓
Discharge Printing 拔染印花		✓

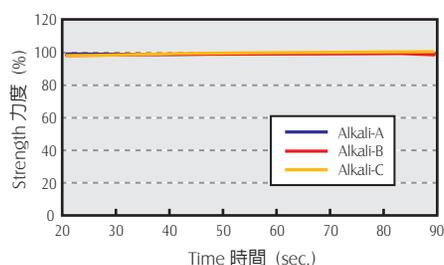
Dependency of Batching Time 捲置時間依存性(CPB)
(Dyeing temperature at 25°C)



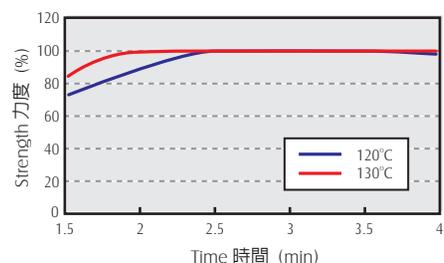
Stability of Padding liquor 染液安定性(CPB)
(Dyeing temperature at 25°C)



Dependency of Steaming Time 蒸處時間依存性(PD/PS)
(Saturated steam at 102°C)



Dependency of Fixation Time 固著時間依存性(Emoistfix)
(Substrate:130x70/32x20 1/3 twill cotton)



Everzol Blue C-BB 133%



Fastness Before Fixing Treatment 固色前牢度表

Fastness 牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色	Staining 污染				
					Acetate 醋酸纖維	Cotton 棉	Nylon 尼龍	Polyester 聚酯	Acrylic 壓克力
Washing 耐水洗	ISO CO2	30 g/l	5	5	5	5	5	5	5
	ISO CO3		5	5	5	5	5	5	5
	ISO CO4		4-5	5	4	5	5	5	3-4
	ISO CO6-C1S		5	5	5	5	5	5	5
	ISO CO6-C2S		5	5	4-5	5	5	5	5
	M&S C4A		5	5	5	5	5	5	5
Water 耐水		30 g/l	4-5	5	5	5	5	5	5
Hot Water 耐熱水		30 g/l	4-5	5	5	5	5	5	5
Sea Water 耐海水		30 g/l	4-5	5	5	5	5	5	5
Post Mercerizing 後絲光		30 g/l	3	-	5	-			
Acid Hydrolysis 酸水解		30 g/l	4-5	5	5	5	5	5	5
Perspiration 耐汗	Acid 酸	30 g/l	4	5	5	4-5	5	5	5
	Alkali 鹼	30 g/l	4	5	5	5	5	5	5

Dyeing Depth 染色濃度		5 g/l	10 g/l	30 g/l	60 g/l	
Rubbing 耐磨擦	Dry 乾	5	5	5	5	
	Wet 溼	4	4	3-4	3	
		Color Change 變褪色	Color Change 變褪色	Color Change 變褪色	Color Change 變褪色	
Bleach 耐漂白	Chlorinated Water 耐氯水(20ppm)	-	2-3	-	-	
	Peroxide Bleaching 雙氧水漂白	-	4	-	-	
Hot-Pressing 耐熱壓	Dry 乾	Immediately	4-5	-	-	
		4 hours after	-	-	-	
	Wet 溼	Immediately	-	4	-	-
		4 hours after	-	4-5	-	-
M&S C10A (UK-TO) 多次水洗		-	4	-	-	
Saliva (DIN) 耐唾液		-	4-5	-	-	
Dry Cleaning 耐乾洗		-	4-5	-	-	

Lightfastness 耐晒牢度表

Lightfastness 耐晒牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色 20 AFU	Grade 級數 ISO Blue Scale (藍色票)	
Artificial Light 耐日光 (Xenon-Arc Lamp)			5 g/l	4-5	4	
			10 g/l	4-5	5	
			30 g/l	5	5-6	
			60 g/l	5	6	
Perspiration Light 耐汗日光	Acid 酸		5 g/l	2-3	3	
			10 g/l	2-3	3-4	
			30 g/l	3	4-5	
			60 g/l	3-4	5	
	Alkali 鹼			5 g/l	2-3	3
				10 g/l	2-3	3-4
				30 g/l	3	4
				60 g/l	3-4	4-5
M&S C9A (Detergent Light)			10 g/l	-	4-5	
			30 g/l	-	-	

Dyeing Properties 染料特性

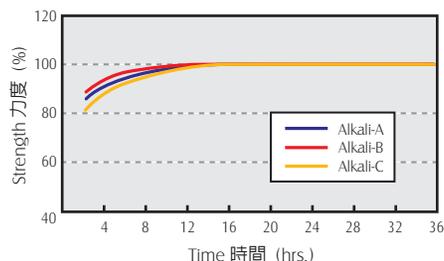
	Characteristics 特性	Evaluation 評級
Fixation Rate 固著率(%)	CPB 冷壓染 (30g/l)	> 85 %
	PDPS 連染 (30g/l)	> 75 %
	Emoistfix (30g/l)	> 75 %
Solubility 溶解度(g/l)	25°C Water 水	100
	50°C Water + 50g/l Salt 水 + 鹽 50g/l	20
Solubility in Alkali 耐鹼溶解度(g/l)	Alkali-A 鹼劑A	80
	Alkali-A + Urea 100g/l 鹼劑 A + 尿素 100g/l	100
	Alkali-B 鹼劑 B	50
	Alkali-B + Urea 100g/l 鹼劑 B + 尿素 100g/l	70
	Alkali-C 鹼劑 C	50
	Alkali-C + Urea 100g/l 鹼劑 C + 尿素 100g/l	70
Stripping 脫色性	Alkali 鹼處理	×
	Reduction 還原處理	×
	Reduction-Oxidization 還原處理後再氧化處理	×
	Oxidization-Reduction 氧化處理後再還原處理	×
Color Constancy 色恆性	Tungsten Lamp 鎢絲燈	G
	TL84 Lamp	B(G)
Effect of Metallic Ions 金屬離子的影響	Fe ⁺⁺ 鐵離子	4
	Cu ⁺⁺ 銅離子	4-5
Acid Spotting 酸滴	Hydrochloric Acid 鹽酸	1
	Acetic Acid 醋酸	4-5
Alkali Spotting 鹼滴	Ammonia Water 氨水	4-5
	Soda Ash Solution 純鹼	2-3
Shade Change After Fixing Treatment 固色後變色性	Polyamide 聚乙醯胺	4-5
	Quaternary Ammonium Salt 四級胺鹽	5
Resin Finishing 樹脂加工	Melamine 三聚氰胺	5
	Glyoxal 乙二醛	4-5
Discharge Ability 拔染性	Neutral 中性	2
	Alkaline 鹼性	2-3

× : un-suitable, △ : moderate, ○ : suitable, Dyeing properties are based on 30g/l depth.

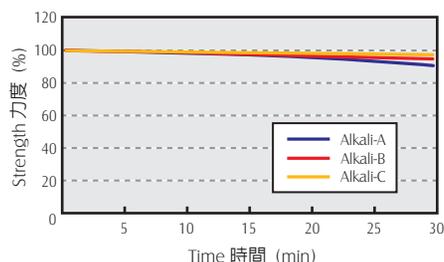
Dyeing Process to Recommend 染程推薦

	Very Good 非常好	Moderate 適用
Exhaustion Process 浸染	✓	
Cold Pad-Batch (CPB)	✓	
Pad dyeing		✓
Pad-Dry Chemical Pad-Steam (PDPS)	✓	
Process		✓
Pad-Dry Baking (PDB)	✓	
壓染		✓
Pad-Steam (PS)	✓	
Emoistfix	✓	
Discharge Printing 拔染印花		✓

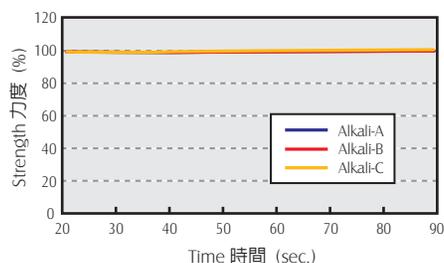
Dependency of Batching Time 捲置時間依存性(CPB)
(Dyeing temperature at 25°C)



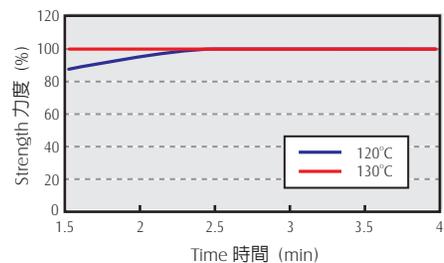
Stability of Padding liquor 染液安定性(CPB)
(Dyeing temperature at 25°C)



Dependency of Steaming Time 蒸處時間依存性(PD/PS)
(Saturated steam at 102°C)



Dependency of Fixation Time 固著時間依存性(Emoistfix)
(Substrate:130x70/32x20 1/3 twill cotton)



Everzol Blue C-BRF



Fastness Before Fixing Treatment 固色前牢度表

Fastness 牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色	Staining 污染				
					Acetate 醋酸纖維	Cotton 棉	Nylon 尼龍	Polyester 聚酯	Acrylic 壓克力
Washing 耐水洗	ISO CO2	30 g/l	4-5	5	3-4	5	5	5	5
	ISO CO3		4-5	5	3-4	5	5	5	5
	ISO CO4		4-5	5	2-3	5	5	5	2-3
	ISO CO6-C1S		4-5	5	3-4	5	5	5	5
	ISO CO6-C2S		4-5	5	3-4	5	5	5	5
	M&S C4A		4-5	5	4	5	5	5	5
Water 耐水		30 g/l	4-5	5	5	4-5	5	5	5
Hot Water 耐熱水		30 g/l	4-5	3-4	5	3	5	5	5
Sea Water 耐海水		30 g/l	4-5	5	5	5	5	5	5
Post Mercerizing 後絲光		30 g/l	4	-	5	-			
Acid Hydrolysis 酸水解		30 g/l	4-5	4-5	4-5	4-5	5	4-5	5
Perspiration 耐汗	Acid 酸	30 g/l	4-5	5	5	4	5	5	5
	Alkali 鹼	30 g/l	4-5	5	5	4	4-5	4-5	4-5

Dyeing Depth 染色濃度		5 g/l	10 g/l	30 g/l	60 g/l
Rubbing 耐磨擦	Dry 乾	5	5	5	4-5
	Wet 溼	3-4	3-4	3	2-3
		Color Change 變褪色	Color Change 變褪色	Color Change 變褪色	Color Change 變褪色
Bleach 耐漂白	Chlorinated Water 耐氯水(20ppm)	-	-	3-4	-
	Peroxide Bleaching 雙氧水漂白	-	-	2	-
Hot-Pressing 耐熱壓	Dry 乾	Immediately	-	4-5	-
		4 hours after	-	5	-
	Wet 溼	Immediately	-	4	-
		4 hours after	-	4-5	-
M&S C10A (UK-TO) 多次水洗		-	-	4-5	-
Saliva (DIN) 耐唾液		-	-	4-5	-
Dry Cleaning 耐乾洗		-	-	4-5	-

Lightfastness 耐晒牢度表

Lightfastness 耐晒牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色 20 AFU	Grade 級數 ISO Blue Scale (藍色票)	
Artificial Light 耐日光 (Xenon-Arc Lamp)			5 g/l	4-5	6	
			10 g/l	4-5	6	
			30 g/l	4-5	>6	
			60 g/l	4-5	>6	
Perspiration Light 耐汗日光	Acid 酸		5 g/l	4	5-6	
			10 g/l	4	6	
			30 g/l	4-5	6	
			60 g/l	>4-5	6	
	Alkali 鹼			5 g/l	4	5
				10 g/l	4	5-6
				30 g/l	4-5	5-6
				60 g/l	>4-5	6
M&S C9A (Detergent Light)			10 g/l	-	-	
			30 g/l	-	4-5	

Dyeing Properties 染料特性

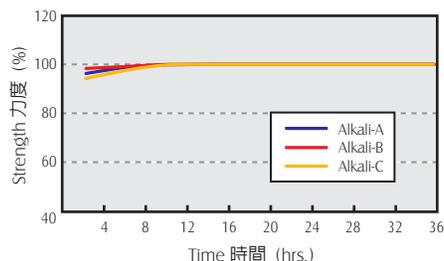
	Characteristics 特性	Evaluation 評級
Fixation Rate 固著率(%)	CPB 冷壓染 (30g/l)	> 85 %
	PDPS 連染 (30g/l)	> 95 %
	Emoistfix (30g/l)	> 95 %
Solubility 溶解度(g/l)	25°C Water 水	100
	50°C Water + 50g/l Salt 水 + 鹽 50g/l	100
Solubility in Alkali 耐鹼溶解度(g/l)	Alkali-A 鹼劑A	45
	Alkali-A + Urea 100g/l 鹼劑 A + 尿素 100g/l	45
	Alkali-B 鹼劑 B	80
	Alkali-B + Urea 100g/l 鹼劑 B + 尿素 100g/l	80
	Alkali-C 鹼劑 C	100
	Alkali-C + Urea 100g/l 鹼劑 C + 尿素 100g/l	100
Stripping 脫色性	Alkali 鹼處理	×
	Reduction 還原處理	△
	Reduction-Oxidization 還原處理後再氧化處理	△
	Oxidization-Reduction 氧化處理後再還原處理	×
Color Constancy 色恆性	Tungsten Lamp 鎢絲燈	R
	TL84 Lamp	R
Effect of Metallic Ions 金屬離子的影響	Fe ⁺⁺ 鐵離子	1
	Cu ⁺⁺ 銅離子	1-2
Acid Spotting 酸滴	Hydrochloric Acid 鹽酸	2-3
	Acetic Acid 醋酸	2
Alkali Spotting 鹼滴	Ammonia Water 氨水	2-3
	Soda Ash Solution 純鹼	4-5
Shade Change After Fixing Treatment 固色後變色性	Polyamide 聚乙醯胺	4-5
	Quaternary Ammonium Salt 四級胺鹽	4-5
Resin Finishing 樹脂加工	Melamine 三聚氰胺	4-5
	Glyoxal 乙二醛	4-5
Discharge Ability 拔染性	Neutral 中性	4
	Alkaline 鹼性	4-5

× : un-suitable, △ : moderate, ○ : suitable, Dyeing properties are based on 30g/l dye.

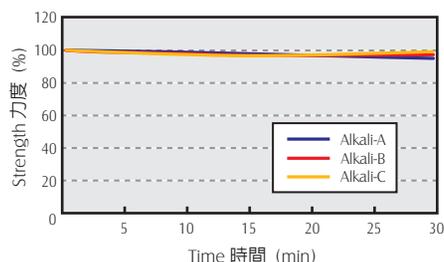
Dyeing Process to Recommend 染程推薦

	Very Good 非常好	Moderate 適用
Exhaustion Process 浸染	✓	
Cold Pad-Batch (CPB)	✓	
Pad dyeing		✓
Pad-Dry Chemical Pad-Steam (PDPS)	✓	
Process		✓
Pad-Dry Baking (PDB)	✓	
壓染		✓
Pad-Steam (PS)	✓	
Emoistfix	✓	
Discharge Printing 拔染印花	✓	

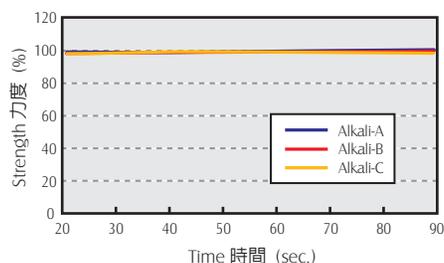
Dependency of Batching Time 捲置時間依存性(CPB)
(Dyeing temperature at 25°C)



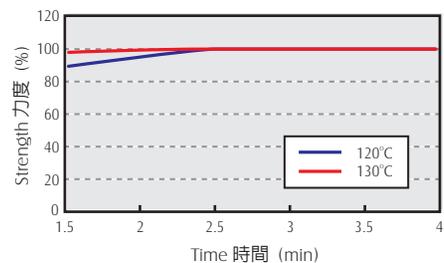
Stability of Padding liquor 染液安定性(CPB)
(Dyeing temperature at 25°C)



Dependency of Steaming Time 蒸處時間依存性(PD/PS)
(Saturated steam at 102°C)



Dependency of Fixation Time 固著時間依存性(Emoistfix)
(Substrate:130x70/32x20 1/3 twill cotton)



Everzol Navy C-GG 133%



Fastness Before Fixing Treatment 固色前牢度表

Fastness 牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色	Staining 污染				
					Acetate 醋酸纖維	Cotton 棉	Nylon 尼龍	Polyester 聚酯	Acrylic 壓克力
Washing 耐水洗	ISO CO2	30 g/l	5	5	5	5	5	5	5
	ISO CO3		5	5	5	5	5	5	5
	ISO CO4		5	4-5	3-4	5	5	5	3-4
	ISO CO6-C1S		5	5	4-5	5	5	5	5
	ISO CO6-C2S		5	5	5	5	5	5	5
	M&S C4A		5	5	5	5	5	5	5
Water 耐水		30 g/l	5	5	5	5	5	5	5
Hot Water 耐熱水		30 g/l	4-5	5	4-5	5	5	5	5
Sea Water 耐海水		30 g/l	5	5	5	5	5	5	5
Post Mercerizing 後絲光		30 g/l	2-3B	-	3	-			
Acid Hydrolysis 酸水解		30 g/l	4-5	5	4-5	4-5	4-5	4-5	4-5
Perspiration 耐汗	Acid 酸	30 g/l	4-5	5	5	5	5	5	5
	Alkali 鹼	30 g/l	4-5	5	4	5	5	5	5

Dyeing Depth 染色濃度		5 g/l	10 g/l	30 g/l	60 g/l
Rubbing 耐磨擦	Dry 乾	5	5	5	4-5
	Wet 溼	3-4	3-4	3	2-3
		Color Change 變褪色	Color Change 變褪色	Color Change 變褪色	Color Change 變褪色
Bleach 耐漂白	Chlorinated Water 耐氯水(20ppm)	-	-	3-4	-
	Peroxide Bleaching 雙氧水漂白	-	-	4	-
Hot-Pressing 耐熱壓	Dry 乾	Immediately	-	4-5	-
		4 hours after	-	4-5	-
	Wet 溼	Immediately	-	4	-
		4 hours after	-	4-5	-
M&S C10A (UK-TO) 多次水洗		-	-	4-5	-
Saliva (DIN) 耐唾液		-	-	5	-
Dry Cleaning 耐乾洗		-	-	4-5	-

Lightfastness 耐晒牢度表

Lightfastness 耐晒牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色 20 AFU	Grade 級數 ISO Blue Scale (藍色票)	
Artificial Light 耐日光 (Xenon-Arc Lamp)			5 g/l	3	3-4	
			10 g/l	3	4	
			30 g/l	4	4-5	
			60 g/l	4-5	5-6	
Perspiration Light 耐汗日光	Acid 酸		5 g/l	2-3	3-4	
			10 g/l	3	4	
			30 g/l	3-4	4-5	
			60 g/l	4	5-6	
	Alkali 鹼			5 g/l	2-3	3-4
				10 g/l	3	4
				30 g/l	3-4	4-5
				60 g/l	4	5-6
M&S C9A (Detergent Light)			10 g/l	-	-	
			30 g/l	-	>4-5	

Dyeing Properties 染料特性

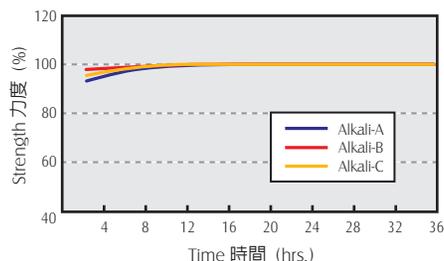
	Characteristics 特性	Evaluation 評級
Fixation Rate 固著率(%)	CPB 冷壓染 (30g/l)	> 95 %
	PDPS 連染 (30g/l)	> 95 %
	Emoistfix (30g/l)	> 90 %
Solubility 溶解度(g/l)	25°C Water 水	150
	50°C Water + 50g/l Salt 水 + 鹽 50g/l	100
Solubility in Alkali 耐鹼溶解度(g/l)	Alkali-A 鹼劑A	30
	Alkali-A + Urea 100g/l 鹼劑 A + 尿素 100g/l	40
	Alkali-B 鹼劑 B	100
	Alkali-B + Urea 100g/l 鹼劑 B + 尿素 100g/l	100
	Alkali-C 鹼劑 C	100
Alkali-C + Urea 100g/l 鹼劑 C + 尿素 100g/l		100
		100
Stripping 脫色性	Alkali 鹼處理	×
	Reduction 還原處理	×
	Reduction-Oxidization 還原處理後再氧化處理	△
	Oxidization-Reduction 氧化處理後再還原處理	×
Color Constancy 色恆性	Tungsten Lamp 鎢絲燈	R
	TL84 Lamp	R
Effect of Metallic Ions 金屬離子的影響	Fe ⁺⁺ 鐵離子	5
	Cu ⁺⁺ 銅離子	5
Acid Spotting 酸滴	Hydrochloric Acid 鹽酸	4
	Acetic Acid 醋酸	4
Alkali Spotting 鹼滴	Ammonia Water 氨水	4-5
	Soda Ash Solution 純鹼	2-3
Shade Change After Fixing Treatment 固色後變色性	Polyamide 聚乙醯胺	4-5
	Quaternary Ammonium Salt 四級胺鹽	4-5
Resin Finishing 樹脂加工	Melamine 三聚氰胺	4-5
	Glyoxal 乙二醛	4-5
Discharge Ability 拔染性	Neutral 中性	4
	Alkaline 鹼性	4-5

× : un-suitable, △ : moderate, ○ : suitable, Dyeing properties are based on 30g/l dye.

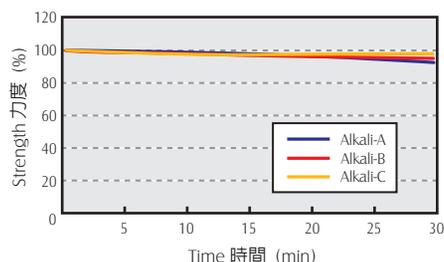
Dyeing Process to Recommend 染程推薦

	Very Good 非常好	Moderate 適用
Exhaustion Process 浸染	✓	
Cold Pad-Batch (CPB)	✓	
Pad dyeing Pad-Dry Chemical Pad-Steam (PDPS)	✓	
Process Pad-Dry Baking (PDB)	✓	
壓染 Pad-Steam (PS)	✓	
Emoistfix	✓	
Discharge Printing 拔染印花	✓	

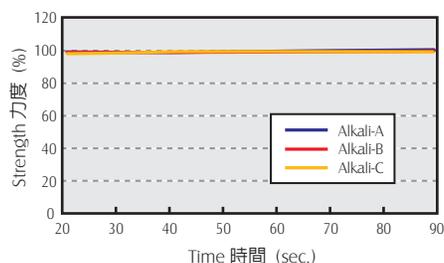
Dependency of Batching Time 捲置時間依存性(CPB)
(Dyeing temperature at 25°C)



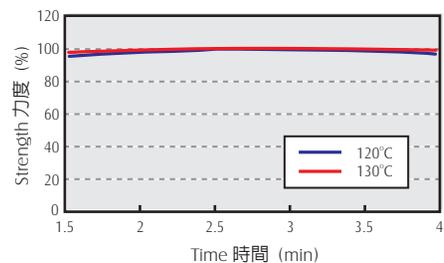
Stability of Padding liquor 染液安定性(CPB)
(Dyeing temperature at 25°C)



Dependency of Steaming Time 蒸處時間依存性(PD/PS)
(Saturated steam at 102°C)



Dependency of Fixation Time 固著時間依存性(Emoistfix)
(Substrate:130x70/32x20 1/3 twill cotton)



Everzol Navy C-GB H/C



Fastness Before Fixing Treatment 固色前牢度表

Fastness 牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色	Staining 污染				
					Acetate 醋酸纖維	Cotton 棉	Nylon 尼龍	Polyester 聚酯	Acrylic 壓克力
Washing 耐水洗	ISO CO2	30 g/l	5	5	5	5	5	5	5
	ISO CO3		5	5	5	5	5	5	5
	ISO CO4		5	5	4	5	5	5	3-4
	ISO CO6-C1S		5	5	4-5	5	5	5	5
	ISO CO6-C2S		5	5	5	5	5	5	5
	M&S C4A		5	5	5	5	5	5	5
Water 耐水		30 g/l	4-5	5	5	5	5	5	5
Hot Water 耐熱水		30 g/l	4-5	5	5	4-5	4-5	5	5
Sea Water 耐海水		30 g/l	4-5	5	5	5	5	5	5
Post Mercerizing 後絲光		30 g/l	4	-	3	-			
Acid Hydrolysis 酸水解		30 g/l	4-5	5	5	5	5	5	5
Perspiration 耐汗	Acid 酸	30 g/l	4-5	5	5	5	5	5	5
	Alkali 鹼	30 g/l	4-5	5	5	5	5	5	5

Dyeing Depth 染色濃度		5 g/l	10 g/l	30 g/l	60 g/l	
Rubbing 耐磨擦	Dry 乾	5	5	5	4-5	
	Wet 溼	3-4	3-4	3	2-3	
		Color Change 變褪色	Color Change 變褪色	Color Change 變褪色	Color Change 變褪色	
Bleach 耐漂白	Chlorinated Water 耐氯水(20ppm)	-	-	3	-	
	Peroxide Bleaching 雙氧水漂白	-	-	4-5	-	
Hot-Pressing 耐熱壓	Dry 乾	Immediately	-	4-5	-	
		4 hours after	-	5	-	
	Wet 溼	Immediately	-	-	4	-
		4 hours after	-	-	4-5	-
M&S C10A (UK-TO) 多次水洗		-	-	4-5	-	
Saliva (DIN) 耐唾液		-	-	5	-	
Dry Cleaning 耐乾洗		-	-	4-5	-	

Lightfastness 耐晒牢度表

Lightfastness 耐晒牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色 20 AFU	Grade 級數 ISO Blue Scale (藍色票)	
Artificial Light 耐日光 (Xenon-Arc Lamp)			5 g/l	3	3-4	
			10 g/l	3	3-4	
			30 g/l	4	4	
			60 g/l	4-5	5	
Perspiration Light 耐汗日光	Acid 酸		5 g/l	2-3	3-4	
			10 g/l	3	3-4	
			30 g/l	3-4	4	
			60 g/l	4	5	
	Alkali 鹼			5 g/l	2-3	3-4
				10 g/l	3	3-4
				30 g/l	3-4	4
				60 g/l	4	5
M&S C9A (Detergent Light)			10 g/l	-	-	
			30 g/l	-	4-5	

Dyeing Properties 染料特性

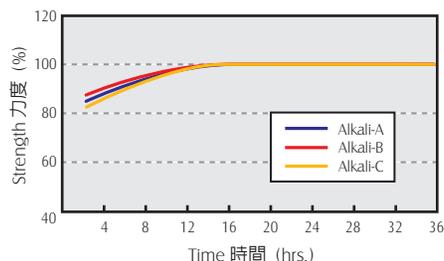
	Characteristics 特性	Evaluation 評級
Fixation Rate 固著率(%)	CPB 冷壓染 (30g/l)	> 90 %
	PDPS 連染 (30g/l)	> 90 %
	Emoistfix (30g/l)	> 85 %
Solubility 溶解度(g/l)	25°C Water 水	100
	50°C Water + 50g/l Salt 水 + 鹽 50g/l	100
Solubility in Alkali 耐鹼溶解度(g/l)	Alkali-A 鹼劑A	100
	Alkali-A + Urea 100g/l 鹼劑 A + 尿素 100g/l	100
	Alkali-B 鹼劑 B	100
	Alkali-B + Urea 100g/l 鹼劑 B + 尿素 100g/l	100
	Alkali-C 鹼劑 C	100
Stripping 脫色性	Alkali 鹼處理	×
	Reduction 還原處理	×
	Reduction-Oxidization 還原處理後再氧化處理	△
	Oxidization-Reduction 氧化處理後再還原處理	×
Color Constancy 色恆性	Tungsten Lamp 鎢絲燈	R
	TL84 Lamp	R
Effect of Metallic Ions 金屬離子的影響	Fe ⁺⁺ 鐵離子	4-5
	Cu ⁺⁺ 銅離子	3G
Acid Spotting 酸滴	Hydrochloric Acid 鹽酸	3-4
	Acetic Acid 醋酸	5
Alkali Spotting 鹼滴	Ammonia Water 氨水	4-5
	Soda Ash Solution 純鹼	4-5
Shade Change After Fixing Treatment 固色後變色性	Polyamide 聚乙醯胺	4-5
	Quaternary Ammonium Salt 四級胺鹽	5
Resin Finishing 樹脂加工	Melamine 三聚氰胺	4-5
	Glyoxal 乙二醛	5
Discharge Ability 拔染性	Neutral 中性	2-3
	Alkaline 鹼性	2

× : un-suitable, △ : moderate, ○ : suitable, Dyeing properties are based on 30g/l dye.

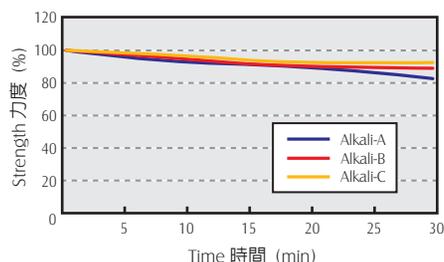
Dyeing Process to Recommend 染程推薦

	Very Good 非常好	Moderate 適用
Exhaustion Process 浸染	✓	
Cold Pad-Batch (CPB)	✓	
Pad dyeing		✓
Pad-Dry Chemical Pad-Steam (PDPS)	✓	
Process		✓
Pad-Dry Baking (PDB)	✓	
壓染		✓
Pad-Steam (PS)		✓
Emoistfix	✓	
Discharge Printing 拔染印花		

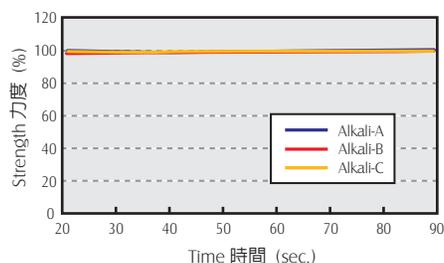
Dependency of Batching Time 捲置時間依存性(CPB)
(Dyeing temperature at 25°C)



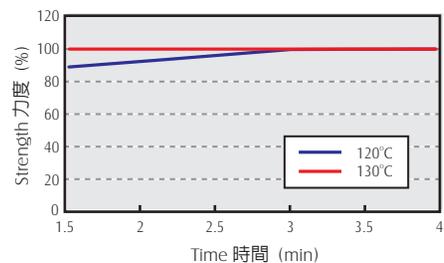
Stability of Padding liquor 染液安定性(CPB)
(Dyeing temperature at 25°C)



Dependency of Steaming Time 蒸處時間依存性(PD/PS)
(Saturated steam at 102°C)



Dependency of Fixation Time 固著時間依存性(Emoistfix)
(Substrate:130x70/32x20 1/3 twill cotton)



Everzol Navy C-FB



Fastness Before Fixing Treatment 固色前牢度表

Fastness 牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色	Staining 污染				
					Acetate 醋酸纖維	Cotton 棉	Nylon 尼龍	Polyester 聚酯	Acrylic 壓克力
Washing 耐水洗	ISO CO2	30 g/l	5	5	5	5	5	5	5
	ISO CO3		5	5	5	5	5	5	
	ISO CO4		5	5	4	5	5	5	4
	ISO CO6-C1S		5	5	4-5	5	5	5	5
	ISO CO6-C2S		5	5	4-5	5	5	5	5
	M&S C4A		5	5	5	5	5	5	5
Water 耐水		30 g/l	5	5	4	3-4	5	4-5	4
Hot Water 耐熱水		30 g/l	5	5	5	5	5	5	5
Sea Water 耐海水		30 g/l	5	5	4	5	5	5	5
Post Mercerizing 後絲光		30 g/l	2-3R	-	3	-			
Acid Hydrolysis 酸水解		30 g/l	4-5	5	3-4	3-4	5	5	3-4
Perspiration 耐汗	Acid 酸	30 g/l	5	5	4	4-5	5	5	5
	Alkali 鹼	30 g/l	5	5	4	4-5	5	5	5

Dyeing Depth 染色濃度		5 g/l	10 g/l	30 g/l	60 g/l	
Rubbing 耐磨擦	Dry 乾	5	5	4-5	4-5	
	Wet 溼	4	3-4	3	2-3	
		Color Change 變褪色	Color Change 變褪色	Color Change 變褪色	Color Change 變褪色	
Bleach 耐漂白	Chlorinated Water 耐氯水(20ppm)	-	-	3-4	-	
	Peroxide Bleaching 雙氧水漂白	-	-	4	-	
Hot-Pressing 耐熱壓	Dry 乾	Immediately	-	4-5	-	
		4 hours after	-	5	-	
	Wet 溼	Immediately	-	-	4-5	-
		4 hours after	-	-	4-5	-
M&S C10A (UK-TO) 多次水洗		-	-	4-5	-	
Saliva (DIN) 耐唾液		-	-	4-5	-	
Dry Cleaning 耐乾洗		-	-	4-5	-	

Lightfastness 耐晒牢度表

Lightfastness 耐晒牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色 20 AFU	Grade 級數 ISO Blue Scale (藍色票)	
Artificial Light 耐日光 (Xenon-Arc Lamp)			5 g/l	2-3	3-4	
			10 g/l	3-4	3-4	
			30 g/l	4	4-5	
			60 g/l	4-5	5-6	
Perspiration Light 耐汗日光	Acid 酸		5 g/l	2-3	3	
			10 g/l	2-3	3-4	
			30 g/l	3-4	4-5	
			60 g/l	4	5-6	
	Alkali 鹼			5 g/l	2-3	4
				10 g/l	2-3	4-5
				30 g/l	3-4	5-6
				60 g/l	4	5-6
M&S C9A (Detergent Light)			10 g/l	-	-	
			30 g/l	-	>4-5	

Dyeing Properties 染料特性

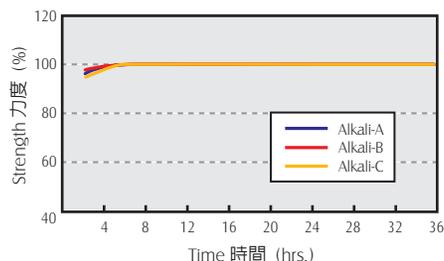
	Characteristics 特性	Evaluation 評級
Fixation Rate 固著率(%)	CPB 冷壓染 (30g/l)	> 95 %
	PDPS 連染 (30g/l)	> 95 %
	Emoistfix (30g/l)	> 95 %
Solubility 溶解度(g/l)	25°C Water 水	150
	50°C Water + 50g/l Salt 水 + 鹽 50g/l	150
Solubility in Alkali 耐鹼溶解度(g/l)	Alkali-A 鹼劑A	100
	Alkali-A + Urea 100g/l 鹼劑 A + 尿素 100g/l	100
	Alkali-B 鹼劑 B	100
	Alkali-B + Urea 100g/l 鹼劑 B + 尿素 100g/l	100
	Alkali-C 鹼劑 C	100
Stripping 脫色性	Alkali 鹼處理	×
	Reduction 還原處理	○
	Reduction-Oxidization 還原處理後再氧化處理	○
	Oxidization-Reduction 氧化處理後再還原處理	○
Color Constancy 色恆性	Tungsten Lamp 鎢絲燈	R
	TL84 Lamp	R
Effect of Metallic Ions 金屬離子的影響	Fe ⁺⁺ 鐵離子	5
	Cu ⁺⁺ 銅離子	4-5
Acid Spotting 酸滴	Hydrochloric Acid 鹽酸	3G
	Acetic Acid 醋酸	4-5
Alkali Spotting 鹼滴	Ammonia Water 氨水	4-5
	Soda Ash Solution 純鹼	3
Shade Change After Fixing Treatment 固色後變色性	Polyamide 聚乙醯胺	4-5Y
	Quaternary Ammonium Salt 四級胺鹽	5
Resin Finishing 樹脂加工	Melamine 三聚氰胺	4-5
	Glyoxal 乙二醛	4-5
Discharge Ability 拔染性	Neutral 中性	4
	Alkaline 鹼性	4

× : un-suitable, △ : moderate, ○ : suitable, Dyeing properties are based on 30g/l depth.

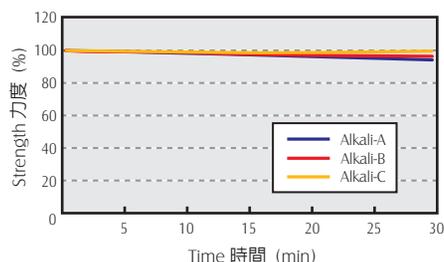
Dyeing Process to Recommend 染程推薦

	Very Good 非常好	Moderate 適用
Exhaustion Process 浸染	✓	
Cold Pad-Batch (CPB)	✓	
Pad dyeing		✓
Pad-Dry Chemical Pad-Steam (PDPS)	✓	
Process		✓
Pad-Dry Baking (PDB)	✓	
壓染		✓
Pad-Steam (PS)	✓	
Emoistfix	✓	
Discharge Printing 拔染印花	✓	

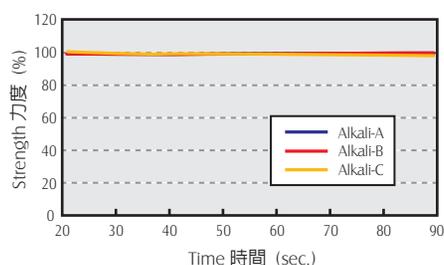
Dependency of Batching Time 捲置時間依存性(CPB)
(Dyeing temperature at 25°C)



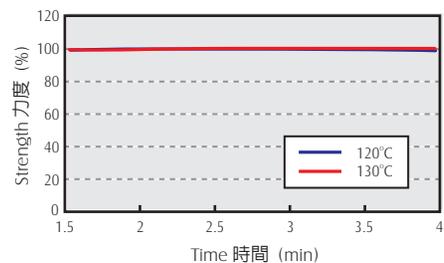
Stability of Padding liquor 染液安定性(CPB)
(Dyeing temperature at 25°C)



Dependency of Steaming Time 蒸處時間依存性(PD/PS)
(Saturated steam at 102°C)



Dependency of Fixation Time 固著時間依存性(Emoistfix)
(Substrate:130x70/32x20 1/3 twill cotton)



Everzol Black C-B 133%



Fastness Before Fixing Treatment 固色前牢度表

Fastness 牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色	Staining 污染				
					Acetate 醋酸纖維	Cotton 棉	Nylon 尼龍	Polyester 聚酯	Acrylic 壓克力
Washing 耐水洗	ISO CO2	30 g/l	5	5	5	5	5	5	5
	ISO CO3		5	5	5	5	5	5	5
	ISO CO4		5	5	4	5	5	5	3-4
	ISO CO6-C1S		5	5	4-5	5	5	5	5
	ISO CO6-C2S		5	5	4-5	5	5	5	5
	M&S C4A		5	5	5	5	5	5	5
Water 耐水		30 g/l	5	5	5	5	5	5	5
Hot Water 耐熱水		30 g/l	4-5	5	4-5	5	5	5	5
Sea Water 耐海水		30 g/l	5	5	5	5	5	5	5
Post Mercerizing 後絲光		30 g/l	2-3R	-	4	-			
Acid Hydrolysis 酸水解		30 g/l	4	4-5	4-5	4-5	5	4-5	4-5
Perspiration 耐汗	Acid 酸	30 g/l	4-5	5	5	5	5	5	5
	Alkali 鹼	30 g/l	5	5	5	5	5	5	5

Dyeing Depth 染色濃度		5 g/l	10 g/l	30 g/l	60 g/l	
Rubbing 耐磨擦	Dry 乾	5	5	5	4-5	
	Wet 溼	4	3-4	3	2-3	
		Color Change 變褪色	Color Change 變褪色	Color Change 變褪色	Color Change 變褪色	
Bleach 耐漂白	Chlorinated Water 耐氯水(20ppm)	-	-	2-3	-	
	Peroxide Bleaching 雙氧水漂白	-	-	4-5	-	
Hot-Pressing 耐熱壓	Dry 乾	Immediately	-	4	-	
		4 hours after	-	-	4-5	-
	Wet 溼	Immediately	-	-	4	-
		4 hours after	-	-	4-5	-
M&S C10A (UK-TO) 多次水洗		-	-	4	-	
Saliva (DIN) 耐唾液		-	-	5	-	
Dry Cleaning 耐乾洗		-	-	4-5	-	

Lightfastness 耐晒牢度表

Lightfastness 耐晒牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色 20 AFU	Grade 級數 ISO Blue Scale (藍色票)	
Artificial Light 耐日光 (Xenon-Arc Lamp)			5 g/l	2-3	3-4	
			10 g/l	3-4	4	
			30 g/l	4	4	
			60 g/l	4-5	5	
Perspiration Light 耐汗日光	Acid 酸		5 g/l	2-3	2-3	
			10 g/l	2-3	3	
			30 g/l	3-4	3-4	
			60 g/l	4	5	
	Alkali 鹼			1 g/l	2-3	3
				10 g/l	2-3	3-4
				30 g/l	3-4	4
				60 g/l	4	5
M&S C9A (Detergent Light)			10 g/l	-	-	
			60 g/l	-	4-5	

Dyeing Properties 染料特性

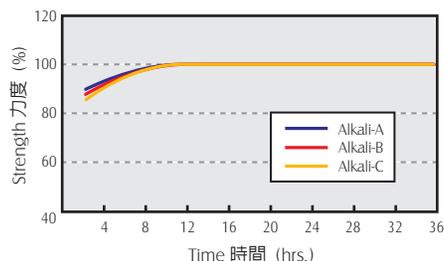
	Characteristics 特性	Evaluation 評級
Fixation Rate 固著率(%)	CPB 冷壓染 (30g/l)	> 75 %
	PDPS 連染 (30g/l)	> 80 %
	Emoistfix (30g/l)	-
Solubility 溶解度(g/l)	25°C Water 水	100
	50°C Water + 50g/l Salt 水 + 鹽 50g/l	100
Solubility in Alkali 耐鹼溶解度(g/l)	Alkali-A 鹼劑A	50
	Alkali-A + Urea 100g/l 鹼劑 A + 尿素 100g/l	70
	Alkali-B 鹼劑 B	100
	Alkali-B + Urea 100g/l 鹼劑 B + 尿素 100g/l	100
	Alkali-C 鹼劑 C	100
Alkali-C + Urea 100g/l 鹼劑 C + 尿素 100g/l		100
		100
Stripping 脫色性	Alkali 鹼處理	×
	Reduction 還原處理	×
	Reduction-Oxidization 還原處理後再氧化處理	○
	Oxidization-Reduction 氧化處理後再還原處理	○
Color Constancy 色恆性	Tungsten Lamp 鎢絲燈	R
	TL84 Lamp	R(B)
Effect of Metallic Ions 金屬離子的影響	Fe ⁺⁺ 鐵離子	4-5
	Cu ⁺⁺ 銅離子	4-5
Acid Spotting 酸滴	Hydrochloric Acid 鹽酸	4-5
	Acetic Acid 醋酸	2
Alkali Spotting 鹼滴	Ammonia Water 氨水	4-5
	Soda Ash Solution 純鹼	1-2
Shade Change After Fixing Treatment 固色後變色性	Polyamide 聚乙醯胺	4
	Quaternary Ammonium Salt 四級胺鹽	4-5
Resin Finishing 樹脂加工	Melamine 三聚氰胺	4-5
	Glyoxal 乙二醛	4
Discharge Ability 拔染性	Neutral 中性	4
	Alkaline 鹼性	4-5

× : un-suitable, △ : moderate, ○ : suitable, Dyeing properties are based on 30g/l dye.

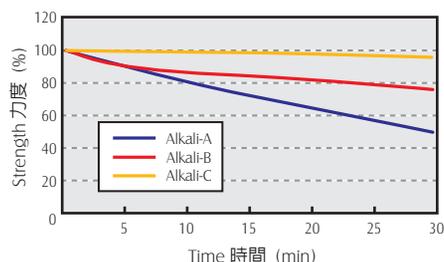
Dyeing Process to Recommend 染程推薦

	Very Good 非常好	Moderate 適用
Exhaustion Process 浸染	✓	
Cold Pad-Batch (CPB)	✓	
Pad dyeing	✓	
Pad-Dry Chemical Pad-Steam (PDPS)	✓	
Process		✓
Pad-Dry Baking (PDB)		✓
壓染		✓
Pad-Steam (PS)		✓
Emoistfix		✓
Discharge Printing 拔染印花	✓	

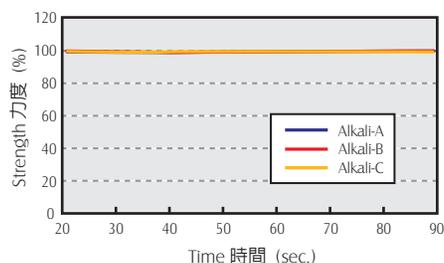
Dependency of Batching Time 捲置時間依存性(CPB)
(Dyeing temperature at 25°C)



Stability of Padding liquor 染液安定性(CPB)
(Dyeing temperature at 25°C)



Dependency of Steaming Time 蒸處時間依存性(PD/PS)
(Saturated steam at 102°C)



Everzol Black C-RL



Fastness Before Fixing Treatment 固色前牢度表

Fastness 牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色	Staining 污染				
					Acetate 醋酸纖維	Cotton 棉	Nylon 尼龍	Polyester 聚酯	Acrylic 壓克力
Washing 耐水洗	ISO CO2	10 g/l	4-5	5	5	5	5	5	5
	ISO CO3		4-5	5	5	5	5	5	5
	ISO CO4		4-5	5	4-5	5	5	5	4-5
	ISO CO6-C1S		5	5	4-5	4-5	5	5	5
	ISO CO6-C2S		5	5	5	5	5	5	5
	M&S C4A		5	5	5	5	5	5	5
Water 耐水		10 g/l	5	5	5	5	5	5	5
Hot Water 耐熱水		10 g/l	5	5	4-5	5	5	5	5
Sea Water 耐海水		10 g/l	5	5	5	5	5	5	5
Post Mercerizing 後絲光		10 g/l	3(RY)	-	4-5	-			
Acid Hydrolysis 酸水解		10 g/l	5	5	5	4-5	5	5	5
Perspiration 耐汗	Acid 酸	10 g/l	5	5	5	5	5	5	5
	Alkali 鹼	10 g/l	5	5	5	5	5	5	5

Dyeing Depth 染色濃度		1 g/l	5 g/l	10 g/l	30 g/l	
Rubbing 耐磨擦	Dry 乾	5	5	5	5	
	Wet 溼	4-5	4-5	4-5	3-4	
		Color Change 變褪色	Color Change 變褪色	Color Change 變褪色	Color Change 變褪色	
Bleach 耐漂白	Chlorinated Water 耐氯水(20ppm)	-	-	1-2	-	
	Peroxide Bleaching 雙氧水漂白	-	-	2-3	-	
Hot-Pressing 耐熱壓	Dry 乾	Immediately	-	4-5Y	-	
		4 hours after	-	5	-	
	Wet 溼	Immediately	-	-	4Y	-
		4 hours after	-	-	5	-
M&S C10A (UK-TO) 多次水洗		-	-	2-3	-	
Saliva (DIN) 耐唾液		-	-	4-5	-	
Dry Cleaning 耐乾洗		-	-	4-5	-	

Lightfastness 耐晒牢度表

Lightfastness 耐晒牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色 20 AFU	Grade 級數 ISO Blue Scale (藍色票)	
Artificial Light 耐日光 (Xenon-Arc Lamp)			1 g/l	4	4-5	
			5 g/l	4-5	5	
			10 g/l	4-5	5-6	
			30 g/l	5	5-6	
Perspiration Light 耐汗日光	Acid 酸		1 g/l	2-3	3-4	
			5 g/l	3	4	
			10 g/l	3-4	4-5	
			30 g/l	4	5	
	Alkali 鹼			1 g/l	2-3	3
				5 g/l	3	3-4
				10 g/l	3-4	4
				30 g/l	4	4-5
M&S C9A (Detergent Light)			10 g/l	-	4-5	
			30 g/l	-	-	

Dyeing Properties 染料特性

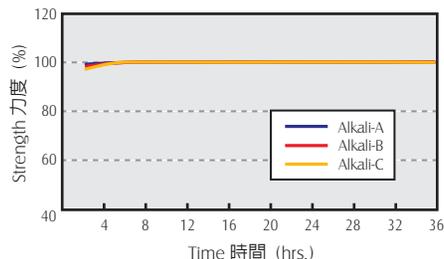
	Characteristics 特性	Evaluation 評級
Fixation Rate 固著率(%)	CPB 冷壓染 (30g/l)	> 95 %
	PDPS 連染 (30g/l)	> 95 %
	Emoistfix (30g/l)	> 95 %
Solubility 溶解度(g/l)	25°C Water 水	150
	50°C Water + 50g/l Salt 水 + 鹽 50g/l	150
Solubility in Alkali 耐鹼溶解度(g/l)	Alkali-A 鹼劑A	80
	Alkali-A + Urea 100g/l 鹼劑 A + 尿素 100g/l	100
	Alkali-B 鹼劑 B	100
	Alkali-B + Urea 100g/l 鹼劑 B + 尿素 100g/l	100
	Alkali-C 鹼劑 C	100
	Alkali-C + Urea 100g/l 鹼劑 C + 尿素 100g/l	100
Stripping 脫色性	Alkali 鹼處理	△
	Reduction 還原處理	○
	Reduction-Oxidization 還原處理後再氧化處理	○
	Oxidization-Reduction 氧化處理後再還原處理	○
Color Constancy 色恆性	Tungsten Lamp 鎢絲燈	R
	TL84 Lamp	R
Effect of Metallic Ions 金屬離子的影響	Fe ⁺⁺ 鐵離子	5
	Cu ⁺⁺ 銅離子	2
Acid Spotting 酸滴	Hydrochloric Acid 鹽酸	3
	Acetic Acid 醋酸	4
Alkali Spotting 鹼滴	Ammonia Water 氨水	4
	Soda Ash Solution 純鹼	2
Shade Change After Fixing Treatment 固色後變色性	Polyamide 聚乙醯胺	3-4Y
	Quaternary Ammonium Salt 四級胺鹽	3-4G
Resin Finishing 樹脂加工	Melamine 三聚氰胺	4-5
	Glyoxal 乙二醛	5
Discharge Ability 拔染性	Neutral 中性	4
	Alkaline 鹼性	4-5

× : un-suitable, △ : moderate, ○ : suitable, Dyeing properties are based on 60g/l dye.

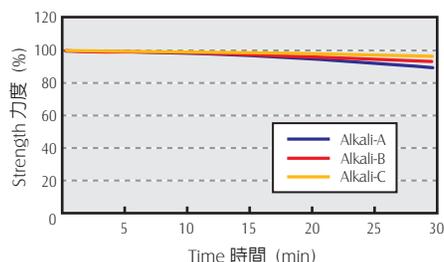
Dyeing Process to Recommend 染程推薦

	Very Good 非常好	Moderate 適用
Exhaustion Process 浸染	✓	
Cold Pad-Batch (CPB)	✓	
Pad dyeing		✓
Pad-Dry Chemical Pad-Steam (PDPS)	✓	
Process		✓
Pad-Dry Baking (PDB)	✓	
壓染		✓
Pad-Steam (PS)	✓	
Emoistfix		✓
Discharge Printing 拔染印花	✓	

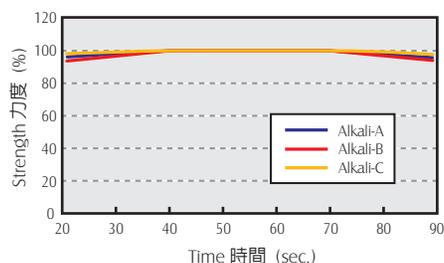
Dependency of Batching Time 捲置時間依存性(CPB)
(Dyeing temperature at 25°C)



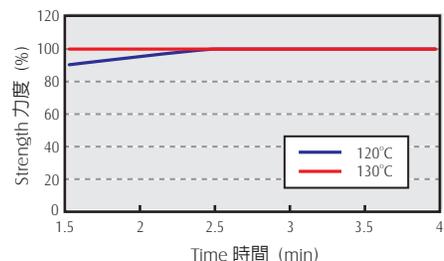
Stability of Padding liquor 染液安定性(CPB)
(Dyeing temperature at 25°C)



Dependency of Steaming Time 蒸處時間依存性(PD/PS)
(Saturated steam at 102°C)



Dependency of Fixation Time 固著時間依存性(Emoistfix)
(Substrate:130x70/32x20 1/3 twill cotton)



Everzol Black C-N 150%



Fastness Before Fixing Treatment 固色前牢度表

Fastness 牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色	Staining 污染				
					Acetate 醋酸纖維	Cotton 棉	Nylon 尼龍	Polyester 聚酯	Acrylic 壓克力
Washing 耐水洗	ISO CO2	60 g/l	5	5	4-5	5	5	5	5
	ISO CO3		5	5	4-5	4-5	5	5	5
	ISO CO4		5	5	4	4	5	5	3
	ISO CO6-C1S		5	5	4-5	5	5	5	5
	ISO CO6-C2S		5	5	4-5	5	5	5	5
	M&S C4A		5	5	5	5	5	5	5
Water 耐水		60 g/l	4-5	5	5	5	5	5	5
Hot Water 耐熱水		60 g/l	4-5	5	4-5	5	5	5	5
Sea Water 耐海水		60 g/l	4-5	5	5	5	5	5	5
Post Mercerizing 後絲光		60 g/l	2-3R	-	4-5	-			
Acid Hydrolysis 酸水解		60 g/l	3-4	5	5	5	5	5	5
Perspiration 耐汗	Acid 酸	60 g/l	4-5	5	5	5	5	5	5
	Alkali 鹼	60 g/l	4-5	5	5	5	5	5	5

Dyeing Depth 染色濃度		10 g/l	30 g/l	60 g/l	80 g/l	
Rubbing 耐磨擦	Dry 乾	5	5	5	5	
	Wet 溼	4	3-4	3	2-3	
		Color Change 變褪色	Color Change 變褪色	Color Change 變褪色	Color Change 變褪色	
Bleach 耐漂白	Chlorinated Water 耐氯水(20ppm)	-	-	3-4	-	
	Peroxide Bleaching 雙氧水漂白	-	-	4-5	-	
Hot-Pressing 耐熱壓	Dry 乾	Immediately	-	4	-	
		4 hours after	-	-	4-5	-
	Wet 溼	Immediately	-	-	4	-
		4 hours after	-	-	4-5	-
M&S C10A (UK-TO) 多次水洗		-	-	4	-	
Saliva (DIN) 耐唾液		-	-	5	-	
Dry Cleaning 耐乾洗		-	-	4-5	-	

Lightfastness 耐晒牢度表

Lightfastness 耐晒牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色 20 AFU	Grade 級數 ISO Blue Scale (藍色票)	
Artificial Light 耐日光 (Xenon-Arc Lamp)			10 g/l	3	3-4	
			30 g/l	3-4	4	
			60 g/l	4	4-5	
			80 g/l	4	5-6	
Perspiration Light 耐汗日光	Acid 酸		10 g/l	2-3	2-3	
			30 g/l	3	3-4	
			60 g/l	3-4	4	
			80 g/l	4	4-5	
	Alkali 鹼			10 g/l	2-3	3-4
				30 g/l	3	4
				60 g/l	3-4	4-5
				80 g/l	4	5-6
M&S C9A (Detergent Light)			10 g/l	-	-	
			60 g/l	-	>4-5	

Dyeing Properties 染料特性

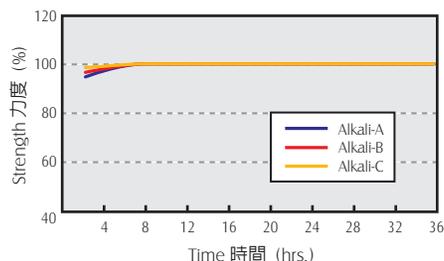
	Characteristics 特性	Evaluation 評級
Fixation Rate 固著率(%)	CPB 冷壓染 (30g/l)	> 95 %
	PDPS 連染 (30g/l)	> 95 %
	Emoistfix (30g/l)	> 95 %
Solubility 溶解度(g/l)	25°C Water 水	150
	50°C Water + 50g/l Salt 水 + 鹽 50g/l	150
Solubility in Alkali 耐鹼溶解度(g/l)	Alkali-A 鹼劑A	100
	Alkali-A + Urea 100g/l 鹼劑 A + 尿素 100g/l	100
	Alkali-B 鹼劑 B	100
	Alkali-B + Urea 100g/l 鹼劑 B + 尿素 100g/l	100
	Alkali-C 鹼劑 C	100
Stripping 脫色性	Alkali 鹼處理	△
	Reduction 還原處理	○
	Reduction-Oxidization 還原處理後再氧化處理	○
	Oxidization-Reduction 氧化處理後再還原處理	○
Color Constancy 色恆性	Tungsten Lamp 鎢絲燈	R
	TL84 Lamp	R
Effect of Metallic Ions 金屬離子的影響	Fe ⁺⁺ 鐵離子	4
	Cu ⁺⁺ 銅離子	4
Acid Spotting 酸滴	Hydrochloric Acid 鹽酸	2-3
	Acetic Acid 醋酸	4
Alkali Spotting 鹼滴	Ammonia Water 氨水	5
	Soda Ash Solution 純鹼	3
Shade Change After Fixing Treatment 固色後變色性	Polyamide 聚乙醯胺	5
	Quaternary Ammonium Salt 四級胺鹽	5
Resin Finishing 樹脂加工	Melamine 三聚氰胺	4-5
	Glyoxal 乙二醛	4-5
Discharge Ability 拔染性	Neutral 中性	4
	Alkaline 鹼性	4-5

× : un-suitable, △ : moderate, ○ : suitable, Dyeing properties are based on 60g/l dye.

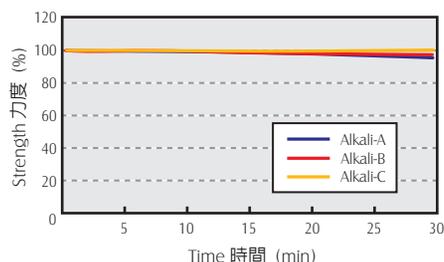
Dyeing Process to Recommend 染程推薦

	Very Good 非常好	Moderate 適用
Exhaustion Process 浸染	✓	
Cold Pad-Batch (CPB)	✓	
Pad dyeing		✓
Pad-Dry Chemical Pad-Steam (PDPS)	✓	
Process		✓
Pad-Dry Baking (PDB)	✓	
壓染		✓
Pad-Steam (PS)	✓	
Emoistfix	✓	
Discharge Printing 拔染印花	✓	

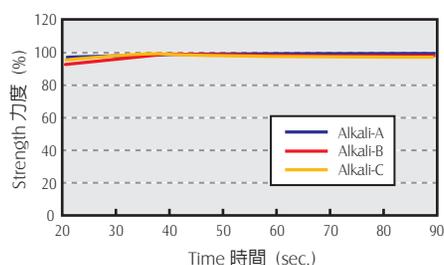
Dependency of Batching Time 捲置時間依存性(CPB)
(Dyeing temperature at 25°C)



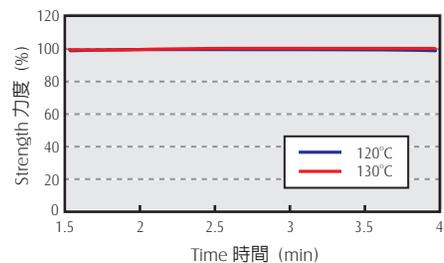
Stability of Padding liquor 染液安定性(CPB)
(Dyeing temperature at 25°C)



Dependency of Steaming Time 蒸處時間依存性(PD/PS)
(Saturated steam at 102°C)



Dependency of Fixation Time 固著時間依存性(Emoistfix)
(Substrate:130x70/32x20 1/3 twill cotton)



Everzol Black C-GSP



Fastness Before Fixing Treatment 固色前牢度表

Fastness 牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色	Staining 污染				
					Acetate 醋酸纖維	Cotton 棉	Nylon 尼龍	Polyester 聚酯	Acrylic 壓克力
Washing 耐水洗	ISO CO2	60 g/l	5	5	4-5	4-5	5	5	5
	ISO CO3		5	5	4-5	4-5	5	5	4-5
	ISO CO4		5	4-5	4	3-4	5	5	2-3
	ISO CO6-C1S		5	5	4-5	4-5	5	5	4
	ISO CO6-C2S		5	5	4-5	4-5	5	5	5
	M&S C4A		5	5	5	5	5	5	5
Water 耐水		60 g/l	4-5	5	5	5	5	5	5
Hot Water 耐熱水		60 g/l	4-5	5	5	5	5	5	5
Sea Water 耐海水		60 g/l	4-5	5	5	5	5	5	5
Post Mercerizing 後絲光		60 g/l	2-3R	-	4-5	-			
Acid Hydrolysis 酸水解		60 g/l	4-5	5	5	4	5	5	5
Perspiration 耐汗	Acid 酸	60 g/l	4-5	5	5	5	5	5	5
	Alkali 鹼	60 g/l	4-5	5	5	5	5	5	5

Dyeing Depth 染色濃度		10 g/l	30 g/l	60 g/l	80 g/l	
Rubbing 耐磨擦	Dry 乾	5	5	5	4-5	
	Wet 溼	4	3-4	3	2-3	
		Color Change 變褪色	Color Change 變褪色	Color Change 變褪色	Color Change 變褪色	
Bleach 耐漂白	Chlorinated Water 耐氯水(20ppm)	-	-	3-4	-	
	Peroxide Bleaching 雙氧水漂白	-	-	5	-	
Hot-Pressing 耐熱壓	Dry 乾	Immediately	-	4	-	
		4 hours after	-	-	4-5	-
	Wet 溼	Immediately	-	-	3-4	-
		4 hours after	-	-	4	-
M&S C10A (UK-TO) 多次水洗		-	-	4	-	
Saliva (DIN) 耐唾液		-	-	5	-	
Dry Cleaning 耐乾洗		-	-	4-5	-	

Lightfastness 耐晒牢度表

Lightfastness 耐晒牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色 20 AFU	Grade 級數 ISO Blue Scale (藍色票)	
Artificial Light 耐日光 (Xenon-Arc Lamp)			10 g/l	3	4	
			30 g/l	3-4	4-5	
			60 g/l	4	5	
			80 g/l	4-5	6	
Perspiration Light 耐汗日光	Acid 酸		10 g/l	2-3	3	
			30 g/l	3	4	
			60 g/l	3-4	5	
			80 g/l	4	5-6	
	Alkali 鹼			10 g/l	2-3	3-4
				30 g/l	3	4-5
				60 g/l	3-4	5-6
				80 g/l	4	6
M&S C9A (Detergent Light)			10 g/l	-	-	
			60 g/l	-	>4-5	

Dyeing Properties 染料特性

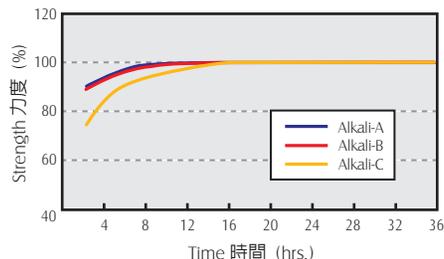
	Characteristics 特性	Evaluation 評級
Fixation Rate 固著率(%)	CPB 冷壓染 (30g/l)	> 85 %
	PDPS 連染 (30g/l)	> 80 %
	Emoistfix (30g/l)	> 95 %
Solubility 溶解度(g/l)	25°C Water 水	120
	50°C Water + 50g/l Salt 水 + 鹽 50g/l	120
Solubility in Alkali 耐鹼溶解度(g/l)	Alkali-A 鹼劑A	100
	Alkali-A + Urea 100g/l 鹼劑 A + 尿素 100g/l	100
	Alkali-B 鹼劑 B	100
	Alkali-B + Urea 100g/l 鹼劑 B + 尿素 100g/l	100
	Alkali-C 鹼劑 C	100
Stripping 脫色性	Alkali 鹼處理	×
	Reduction 還原處理	△
	Reduction-Oxidization 還原處理後再氧化處理	×
	Oxidization-Reduction 氧化處理後再還原處理	△
Color Constancy 色恆性	Tungsten Lamp 鎢絲燈	3Y
	TL84 Lamp	3Y
Effect of Metallic Ions 金屬離子的影響	Fe ⁺⁺ 鐵離子	4-5
	Cu ⁺⁺ 銅離子	4G
Acid Spotting 酸滴	Hydrochloric Acid 鹽酸	3-4
	Acetic Acid 醋酸	5
Alkali Spotting 鹼滴	Ammonia Water 氨水	3
	Soda Ash Solution 純鹼	5
Shade Change After Fixing Treatment 固色後變色性	Polyamide 聚乙醯胺	5
	Quaternary Ammonium Salt 四級胺鹽	5
Resin Finishing 樹脂加工	Melamine 三聚氰胺	5
	Glyoxal 乙二醛	5
Discharge Ability 拔染性	Neutral 中性	4
	Alkaline 鹼性	3

× : un-suitable, △ : moderate, ○ : suitable, Dyeing properties are based on 60g/l depth.

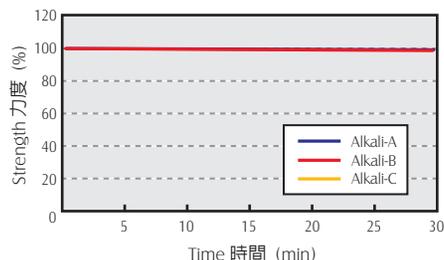
Dyeing Process to Recommend 染程推薦

	Very Good 非常好	Moderate 適用
Exhaustion Process 浸染	✓	
Cold Pad-Batch (CPB)	✓	
Pad dyeing		✓
Pad-Dry Chemical Pad-Steam (PDPS)	✓	
Process		✓
Pad-Dry Baking (PDB)	✓	
壓染		✓
Pad-Steam (PS)	✓	
Emoistfix	✓	
Discharge Printing 拔染印花		✓

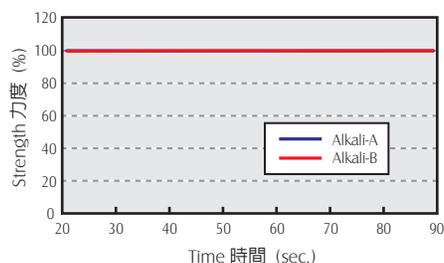
Dependency of Batching Time 捲置時間依存性(CPB)
(Dyeing temperature at 25°C)



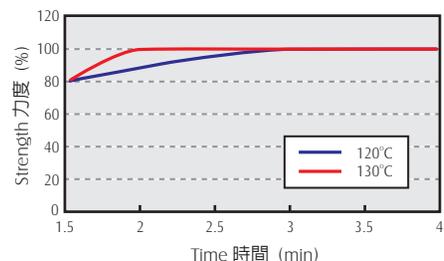
Stability of Padding liquor 染液安定性(CPB)
(Dyeing temperature at 25°C)



Dependency of Steaming Time 蒸處時間依存性(PD/PS)
(Saturated steam at 102°C)



Dependency of Fixation Time 固著時間依存性(Emoistfix)
(Substrate:130x70/32x20 1/3 twill cotton)



Everzol Yellow LX



Fastness Before Fixing Treatment 固色前牢度表

Fastness 牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色	Staining 污染				
					Acetate 醋酸纖維	Cotton 棉	Nylon 尼龍	Polyester 聚酯	Acrylic 壓克力
Washing 耐水洗	ISO CO2	30 g/l	4-5	5	5	5	5	5	5
	ISO CO3		4-5	5	5	5	5	5	
	ISO CO4		4-5	5	4-5	4-5	5	4-5	4
	ISO CO6-C1S		4-5	5	5	5	5	5	5
	ISO CO6-C2S		4-5	5	5	5	5	5	5
	M&S C4A		4-5	5	5	5	5	5	5
Water 耐水		10 g/l	5	5	5	5	5	5	5
Hot Water 耐熱水		30 g/l	4-5	5	5	5	5	5	5
Sea Water 耐海水		10 g/l	5	5	5	5	5	5	5
Post Mercerizing 後絲光		10 g/l	4R	-	4-5	-			
Acid Hydrolysis 酸水解		10 g/l	4-5	5	4-5	5	5	5	5
Perspiration 耐汗	Acid 酸	10 g/l	5	5	5	5	5	5	5
	Alkali 鹼	10 g/l	5	5	5	5	5	5	5

Dyeing Depth 染色濃度		5 g/l	10 g/l	30 g/l	60 g/l	
Rubbing 耐磨擦	Dry 乾	-	5	-	-	
	Wet 溼	-	4	-	-	
		Color Change 變褪色	Color Change 變褪色	Color Change 變褪色	Color Change 變褪色	
Bleach 耐漂白	Chlorinated Water 耐氯水(20ppm)	2-3	2-3	3	3	
	Peroxide Bleaching 雙氧水漂白	-	4	-	-	
Hot-Pressing 耐熱壓	Dry 乾	Immediately	4	-	-	
		4 hours after	-	4-5	-	-
	Wet 溼	Immediately	-	4	-	-
		4 hours after	-	4-5	-	-
M&S C10A (UK-TO) 多次水洗		4-5	4-5	4-5	4-5	
Saliva (DIN) 耐唾液		-	5	-	-	
Dry Cleaning 耐乾洗		-	5	-	-	

Lightfastness 耐晒牢度表

Lightfastness 耐晒牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色 20 AFU	Grade 級數 ISO Blue Scale (藍色票)
Artificial Light 耐日光 (Xenon-Arc Lamp)			5 g/l	4-5	5-6
			10 g/l	4-5	5-6
			30 g/l	4-5	5-6
			60 g/l	4-5	5-6
Perspiration Light 耐汗日光	Acid 酸		5 g/l	4-5	5-6
			10 g/l	5	6
			30 g/l	5	6
			60 g/l	5	6
	Alkali 鹼		5 g/l	4	5
			10 g/l	4-5	5
			30 g/l	4-5	5-6
			60 g/l	4-5	5-6
M&S C9A (Detergent Light)			10 g/l	4-5	-
			30 g/l	-	-

Dyeing Properties 染料特性

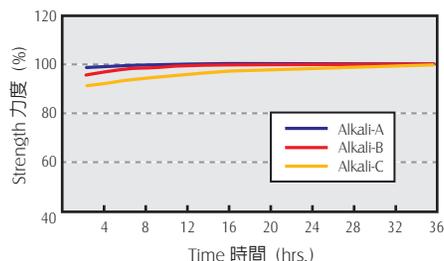
	Characteristics 特性	Evaluation 評級
Fixation Rate 固著率(%)	CPB 冷壓染 (30g/l)	> 90 %
	PDPS 連染 (30g/l)	> 75 %
	Emoistfix (30g/l)	> 80 %
Solubility 溶解度(g/l)	25°C Water 水	100
	50°C Water + 50g/l Salt 水 + 鹽 50g/l	100
Solubility in Alkali 耐鹼溶解度(g/l)	Alkali-A 鹼劑A	80
	Alkali-A + Urea 100g/l 鹼劑 A + 尿素 100g/l	80
	Alkali-B 鹼劑 B	80
	Alkali-B + Urea 100g/l 鹼劑 B + 尿素 100g/l	80
	Alkali-C 鹼劑 C	80
Stripping 脫色性	Alkali 鹼處理	△
	Reduction 還原處理	△
Color Constancy 色恆性	Tungsten Lamp 鎢絲燈	Y
	TL84 Lamp	Y
Effect of Metallic Ions 金屬離子的影響	Fe ⁺⁺ 鐵離子	4
	Cu ⁺⁺ 銅離子	1
Acid Spotting 酸滴	Hydrochloric Acid 鹽酸	4-5(B)
	Acetic Acid 醋酸	5
Alkali Spotting 鹼滴	Ammonia Water 氨水	2
	Soda Ash Solution 純鹼	1
Shade Change After Fixing Treatment 固色後變色性	Polyamide 聚乙醯胺	4
	Quaternary Ammonium Salt 四級胺鹽	5
Resin Finishing 樹脂加工	Melamine 三聚氰胺	4
	Glyoxal 乙二醛	2-3
Discharge Ability 拔染性	Neutral 中性	4
	Alkaline 鹼性	4

× : un-suitable, △ : moderate, ○ : suitable, Dyeing properties are based on 30g/l dye.

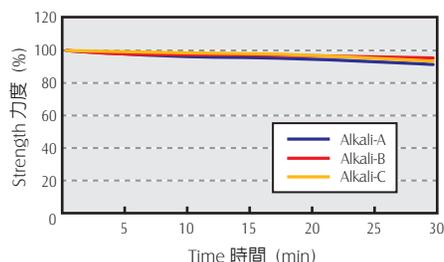
Dyeing Process to Recommend 染程推薦

	Very Good 非常好	Moderate 適用
Exhaustion Process 浸染	✓	
Cold Pad-Batch (CPB)	✓	
Pad dyeing		✓
Pad-Dry Chemical Pad-Steam (PDPS)	✓	
Process		✓
Pad-Dry Baking (PDB)	✓	
壓染		✓
Pad-Steam (PS)	✓	
Emoistfix	✓	
Discharge Printing 拔染印花	✓	

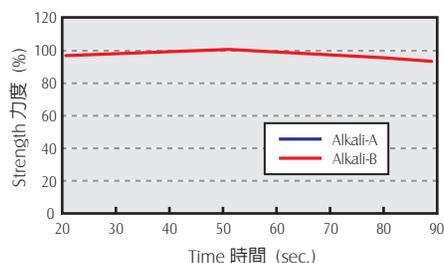
Dependency of Batching Time 捲置時間依存性(CPB) (Dyeing temperature at 25°C)



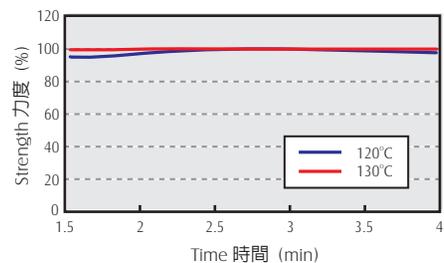
Stability of Padding liquor 染液安定性(CPB) (Dyeing temperature at 25°C)



Dependency of Steaming Time 蒸處時間依存性(PD/PS) (Saturated steam at 102°C)



Dependency of Fixation Time 固著時間依存性(Emoistfix) (Substrate:130x70/32x20 1/3 twill cotton)



Everzol Red LF-B



Fastness Before Fixing Treatment 固色前牢度表

Fastness 牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色	Staining 污染				
					Acetate 醋酸纖維	Cotton 棉	Nylon 尼龍	Polyester 聚酯	Acrylic 壓克力
Washing 耐水洗	ISO CO2	10 g/l	4	5	4-5	5	5	5	5
	ISO CO3		4	5	4	5	5	5	5
	ISO CO4		4	5	3-4	5	5	5	3-4
	ISO CO6-C1S		4	5	3-4	5	5	5	5
	ISO CO6-C2S		4	5	3-4	5	5	5	5
	M&S C4A		4-5	5	4-5	5	5	5	5
Water 耐水		10 g/l	4-5	5	5	4-5	5	5	5
Hot Water 耐熱水		10 g/l	4-5	5	4-5	5	5	5	5
Sea Water 耐海水		10 g/l	4-5	5	5	5	5	5	5
Post Mercerizing 後絲光		10 g/l	3-4	-	4-5	-			
Acid Hydrolysis 酸水解		10 g/l	4-5	5	5	5	5	5	5
Perspiration 耐汗	Acid 酸	10 g/l	5	5	5	5	5	5	5
	Alkali 鹼	10 g/l	5	5	5	5	5	5	5

Dyeing Depth 染色濃度		1 g/l	5 g/l	10 g/l	30 g/l	
Rubbing 耐磨擦	Dry 乾	-	-	5	-	
	Wet 溼	-	-	4	-	
		Color Change 變褪色	Color Change 變褪色	Color Change 變褪色	Color Change 變褪色	
Bleach 耐漂白	Chlorinated Water 耐氯水(20ppm)	1	1	1-2	1-2	
	Peroxide Bleaching 雙氧水漂白	-	-	5	-	
Hot-Pressing 耐熱壓	Dry 乾	Immediately	-	4-5	-	
		4 hours after	-	-	4-5	-
	Wet 溼	Immediately	-	-	4-5	-
		4 hours after	-	-	4-5	-
M&S C10A (UK-TO) 多次水洗		4	4	4	4	
Saliva (DIN) 耐唾液		-	-	5	-	
Dry Cleaning 耐乾洗		-	-	4-5	-	

Lightfastness 耐晒牢度表

Lightfastness 耐晒牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色 20 AFU	Grade 級數 ISO Blue Scale (藍色票)	
Artificial Light 耐日光 (Xenon-Arc Lamp)			1 g/l	4	4-5	
			5 g/l	4-5	5	
			10 g/l	4-5	5-6	
			30 g/l	4-5	5-6	
Perspiration Light 耐汗日光	Acid 酸		1 g/l	3	4-5	
			5 g/l	3-4	5	
			10 g/l	4	5-6	
			30 g/l	4-5	5-6	
	Alkali 鹼			1 g/l	3-4	3-4
				5 g/l	4	4
				10 g/l	4	4-5
				30 g/l	4-5	5
M&S C9A (Detergent Light)			10 g/l	4-5	-	
			30 g/l	-	-	

Dyeing Properties 染料特性

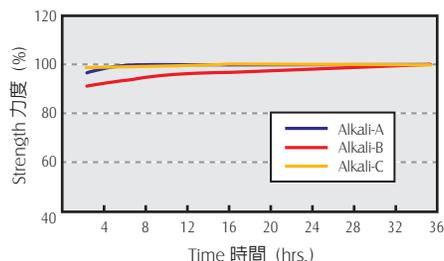
	Characteristics 特性	Evaluation 評級
Fixation Rate 固著率(%)	CPB 冷壓染 (30g/l)	> 80 %
	PDPS 連染 (30g/l)	> 80 %
	Emoistfix (30g/l)	> 80 %
Solubility 溶解度(g/l)	25°C Water 水	150
	50°C Water + 50g/l Salt 水 + 鹽 50g/l	100
Solubility in Alkali 耐鹼溶解度(g/l)	Alkali-A 鹼劑A	70
	Alkali-A + Urea 100g/l 鹼劑 A + 尿素 100g/l	70
	Alkali-B 鹼劑 B	80
	Alkali-B + Urea 100g/l 鹼劑 B + 尿素 100g/l	80
	Alkali-C 鹼劑 C	80
Stripping 脫色性	Alkali 鹼處理	○
	Reduction 還原處理	×
Color Constancy 色恆性	Tungsten Lamp 鎢絲燈	Y
	TL84 Lamp	Y
Effect of Metallic Ions 金屬離子的影響	Fe ⁺⁺ 鐵離子	4-5
	Cu ⁺⁺ 銅離子	1B
Acid Spotting 酸滴	Hydrochloric Acid 鹽酸	3
	Acetic Acid 醋酸	4-5
Alkali Spotting 鹼滴	Ammonia Water 氨水	3
	Soda Ash Solution 純鹼	3
Shade Change After Fixing Treatment 固色後變色性	Polyamide 聚乙醯胺	4-5
	Quaternary Ammonium Salt 四級胺鹽	5
Resin Finishing 樹脂加工	Melamine 三聚氰胺	4-5
	Glyoxal 乙二醛	4-5
Discharge Ability 拔染性	Neutral 中性	4
	Alkaline 鹼性	4-5

× : un-suitable, △ : moderate, ○ : suitable, Dyeing properties are based on 30g/l dye.

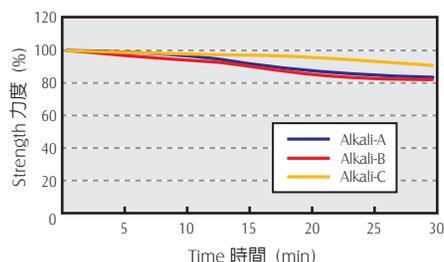
Dyeing Process to Recommend 染程推薦

	Very Good 非常好	Moderate 適用
Exhaustion Process 浸染	✓	
Cold Pad-Batch (CPB)	✓	
Pad dyeing Pad-Dry Chemical Pad-Steam (PDPS)	✓	
Process Pad-Dry Baking (PDB)	✓	
壓染 Pad-Steam (PS)	✓	
Emoistfix	✓	
Discharge Printing 拔染印花	✓	

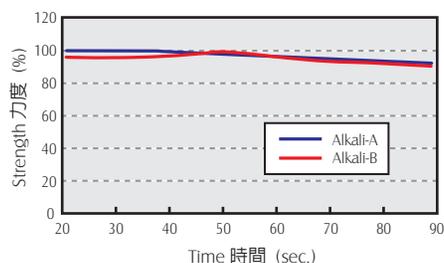
Dependency of Batching Time 捲置時間依存性(CPB)
(Dyeing temperature at 25°C)



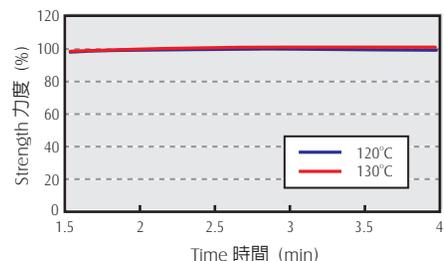
Stability of Padding liquor 染液安定性(CPB)
(Dyeing temperature at 25°C)



Dependency of Steaming Time 蒸處時間依存性(PD/PS)
(Saturated steam at 102°C)



Dependency of Fixation Time 固著時間依存性(Emoistfix)
(Substrate:130x70/32x20 1/3 twill cotton)



Everzol Red LF-2B



Fastness Before Fixing Treatment 固色前牢度表

Fastness 牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色	Staining 污染				
					Acetate 醋酸纖維	Cotton 棉	Nylon 尼龍	Polyester 聚酯	Acrylic 壓克力
Washing 耐水洗	ISO CO2	10 g/l	4	5	4-5	5	5	5	5
	ISO CO3		4	5	4-5	5	5	5	5
	ISO CO4		4	5	4-5	4-5	5	5	3-4
	ISO CO6-C1S		4	5	4-5	5	5	5	5
	ISO CO6-C2S		4	5	4-5	5	5	5	5
	M&S C4A		4-5	5	4-5	5	5	5	5
Water 耐水		10 g/l	4-5	5	5	4-5	5	5	5
Hot Water 耐熱水		10 g/l	4-5	5	4-5	5	5	5	5
Sea Water 耐海水		10 g/l	5	5	5	5	5	5	5
Post Mercerizing 後絲光		10 g/l	3-4B	-	4-5	-			
Acid Hydrolysis 酸水解		10 g/l	5	5	5	5	5	5	5
Perspiration 耐汗	Acid 酸	10 g/l	5	5	5	5	5	5	5
	Alkali 鹼	10 g/l	5	5	5	5	5	5	5

Dyeing Depth 染色濃度		1 g/l	5 g/l	10 g/l	30 g/l	
Rubbing 耐磨擦	Dry 乾	5	5	5	5	
	Wet 溼	4-5	4-5	4-5	3-4	
		Color Change 變褪色	Color Change 變褪色	Color Change 變褪色	Color Change 變褪色	
Bleach 耐漂白	Chlorinated Water 耐氯水(20ppm)	1	1	2	2	
	Peroxide Bleaching 雙氧水漂白	-	-	3-4	-	
Hot-Pressing 耐熱壓	Dry 乾	Immediately	-	2-3	-	
		4 hours after	-	4-5	-	
	Wet 溼	Immediately	-	-	3	-
		4 hours after	-	-	4-5	-
M&S C10A (UK-TO) 多次水洗		4-5	4-5	4	4	
Saliva (DIN) 耐唾液		-	-	4-5	-	
Dry Cleaning 耐乾洗		-	-	4-5	-	

Lightfastness 耐晒牢度表

Lightfastness 耐晒牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色 20 AFU	Grade 級數 ISO Blue Scale (藍色票)	
Artificial Light 耐日光 (Xenon-Arc Lamp)			1 g/l	4-5	5	
			5 g/l	4-5	5-6	
			10 g/l	4-5	5-6	
			30 g/l	4-5	5-6	
Perspiration Light 耐汗日光	Acid 酸		1 g/l	3-4	5	
			5 g/l	4	5-6	
			10 g/l	4-5	5-6	
			30 g/l	4-5	5-6	
	Alkali 鹼			1 g/l	4	4-5
				5 g/l	4	5
				10 g/l	4-5	5
				30 g/l	4-5	5-6
M&S C9A (Detergent Light)			10 g/l	4-5	-	
			30 g/l	-	-	

Dyeing Properties 染料特性

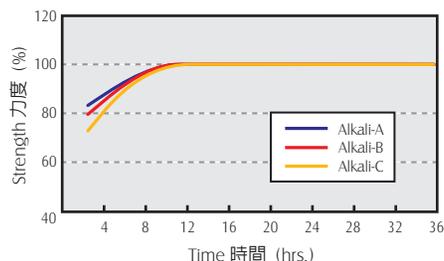
	Characteristics 特性	Evaluation 評級
Fixation Rate 固著率(%)	CPB 冷壓染 (30g/l)	> 90 %
	PDPS 連染 (30g/l)	> 75 %
	Emoistfix (30g/l)	> 75 %
Solubility 溶解度(g/l)	25°C Water 水	100
	50°C Water + 50g/l Salt 水 + 鹽 50g/l	20
Solubility in Alkali 耐鹼溶解度(g/l)	Alkali-A 鹼劑A	80
	Alkali-A + Urea 100g/l 鹼劑 A + 尿素 100g/l	100
	Alkali-B 鹼劑 B	70
	Alkali-B + Urea 100g/l 鹼劑 B + 尿素 100g/l	80
	Alkali-C 鹼劑 C	70
	Alkali-C + Urea 100g/l 鹼劑 C + 尿素 100g/l	80
Stripping 脫色性	Alkali 鹼處理	×
	Reduction 還原處理	×
	Reduction-Oxidization 還原處理後再氧化處理	×
	Oxidization-Reduction 氧化處理後再還原處理	×
Color Constancy 色恆性	Tungsten Lamp 鎢絲燈	G
	TL84 Lamp	B(G)
Effect of Metallic Ions 金屬離子的影響	Fe ⁺⁺ 鐵離子	4
	Cu ⁺⁺ 銅離子	4-5
Acid Spotting 酸滴	Hydrochloric Acid 鹽酸	1
	Acetic Acid 醋酸	4-5
Alkali Spotting 鹼滴	Ammonia Water 氨水	4-5
	Soda Ash Solution 純鹼	2-3
Shade Change After Fixing Treatment 固色後變色性	Polyamide 聚乙醯胺	4-5
	Quaternary Ammonium Salt 四級胺鹽	5
Resin Finishing 樹脂加工	Melamine 三聚氰胺	5
	Glyoxal 乙二醛	4-5
Discharge Ability 拔染性	Neutral 中性	2
	Alkaline 鹼性	2-3

× : un-suitable, △ : moderate, ○ : suitable, Dyeing properties are based on 30g/l depth.

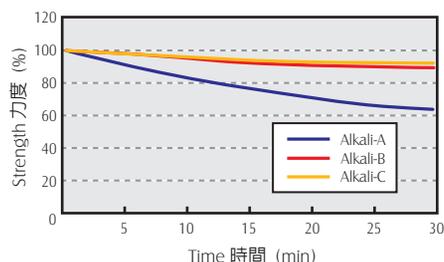
Dyeing Process to Recommend 染程推薦

	Very Good 非常好	Moderate 適用
Exhaustion Process 浸染	✓	
Cold Pad-Batch (CPB)	✓	
Pad dyeing		✓
Pad-Dry Chemical Pad-Steam (PDPS)	✓	
Process		✓
Pad-Dry Baking (PDB)	✓	
壓染		✓
Pad-Steam (PS)	✓	
Emoistfix	✓	
Discharge Printing 拔染印花		✓

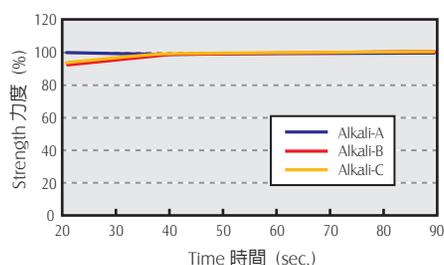
Dependency of Batching Time 捲置時間依存性(CPB)
(Dyeing temperature at 25°C)



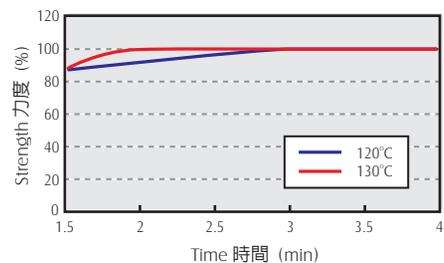
Stability of Padding liquor 染液安定性(CPB)
(Dyeing temperature at 25°C)



Dependency of Steaming Time 蒸處時間依存性(PD/PS)
(Saturated steam at 102°C)



Dependency of Fixation Time 固著時間依存性(Emoistfix)
(Substrate:130x70/32x20 1/3 twill cotton)



Everzol Blue C-LX



Fastness Before Fixing Treatment 固色前牢度表

Fastness 牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色	Staining 污染				
					Acetate 醋酸纖維	Cotton 棉	Nylon 尼龍	Polyester 聚酯	Acrylic 壓克力
Washing 耐水洗	ISO CO2	10 g/l	4-5	5	4-5	5	5	5	5
	ISO CO3		5	5	4-5	5	5	5	5
	ISO CO4		4-5	5	3-4	5	5	5	4
	ISO CO6-C1S		4-5	5	4-5	5	5	5	5
	ISO CO6-C2S		4-5	5	4-5	5	5	5	5
	M&S C4A		5	5	4-5	5	5	5	5
Water 耐水		10 g/l	5	5	5	5	5	5	5
Hot Water 耐熱水		10 g/l	5	4-5	5	4	5	5	5
Sea Water 耐海水		10 g/l	4-5	5	5	5	5	5	5
Post Mercerizing 後絲光		10 g/l	4-5	-	5	-			
Acid Hydrolysis 酸水解		10 g/l	4-5	4-5	4-5	4-5	5	5	5
Perspiration 耐汗	Acid 酸	10 g/l	5	5	5	4-5	5	5	5
	Alkali 鹼	10 g/l	5	5	5	4-5	5	5	5

Dyeing Depth 染色濃度		5 g/l	10 g/l	30 g/l	60 g/l	
Rubbing 耐磨擦	Dry 乾	-	5	-	-	
	Wet 溼	-	3-4	-	-	
		Color Change 變褪色	Color Change 變褪色	Color Change 變褪色	Color Change 變褪色	
Bleach 耐漂白	Chlorinated Water 耐氯水(20ppm)	-	2-3	-	-	
	Peroxide Bleaching 雙氧水漂白	-	2-3	-	-	
Hot-Pressing 耐熱壓	Dry 乾	Immediately	-	4-5	-	
		4 hours after	-	5	-	
	Wet 溼	Immediately	-	4	-	-
		4 hours after	-	4-5	-	-
M&S C10A (UK-TO) 多次水洗		-	4-5	-	-	
Saliva (DIN) 耐唾液		-	5	-	-	
Dry Cleaning 耐乾洗		-	5	-	-	

Lightfastness 耐晒牢度表

Lightfastness 耐晒牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色 20 AFU	Grade 級數 ISO Blue Scale (藍色票)
Artificial Light 耐日光 (Xenon-Arc Lamp)			5 g/l	4-5	6
			10 g/l	4-5	6
			30 g/l	4-5	>6
			60 g/l	-	-
Perspiration Light 耐汗日光	Acid 酸	5 g/l	4	4-5	
		10 g/l	4	5	
		30 g/l	4-5	5-6	
		60 g/l	>4-5	6	
	Alkali 鹼	5 g/l	4	4	
		10 g/l	4	4-5	
		30 g/l	4-5	5	
		60 g/l	>4-5	5-6	
M&S C9A (Detergent Light)			10 g/l	-	-
			30 g/l	-	4-5

Dyeing Properties 染料特性

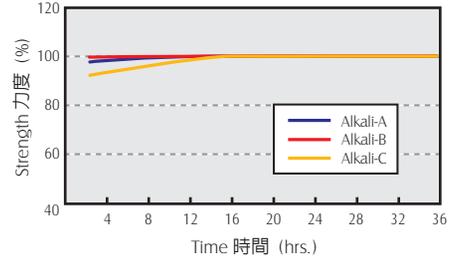
	Characteristics 特性	Evaluation 評級
Fixation Rate 固著率(%)	CPB 冷壓染 (30g/l)	> 80 %
	PDPS 連染 (30g/l)	> 75 %
	Emoistfix (30g/l)	> 70 %
Solubility 溶解度(g/l)	25°C Water 水	150
	50°C Water + 50g/l Salt 水 + 鹽 50g/l	100
Solubility in Alkali 耐鹼溶解度(g/l)	Alkali-A 鹼劑A	60
	Alkali-A + Urea 100g/l 鹼劑 A + 尿素 100g/l	80
	Alkali-B 鹼劑 B	80
	Alkali-B + Urea 100g/l 鹼劑 B + 尿素 100g/l	80
	Alkali-C 鹼劑 C	80
Stripping 脫色性	Alkali 鹼處理	○
	Reduction 還原處理	×
Color Constancy 色恆性	Tungsten Lamp 鎢絲燈	R
	TL84 Lamp	R
Effect of Metallic Ions 金屬離子的影響	Fe ⁺⁺ 鐵離子	4-5G(Y)
	Cu ⁺⁺ 銅離子	4-5G(Y)
Acid Spotting 酸滴	Hydrochloric Acid 鹽酸	1
	Acetic Acid 醋酸	5
Alkali Spotting 鹼滴	Ammonia Water 氨水	5
	Soda Ash Solution 純鹼	1
Shade Change After Fixing Treatment 固色後變色性	Polyamide 聚乙醯胺	5
	Quaternary Ammonium Salt 四級胺鹽	4-5
Resin Finishing 樹脂加工	Melamine 三聚氰胺	4-5
	Glyoxal 乙二醛	5
Discharge Ability 拔染性	Neutral 中性	1
	Alkaline 鹼性	1

× : un-suitable, △ : moderate, ○ : suitable, Dyeing properties are based on 30g/l dye.

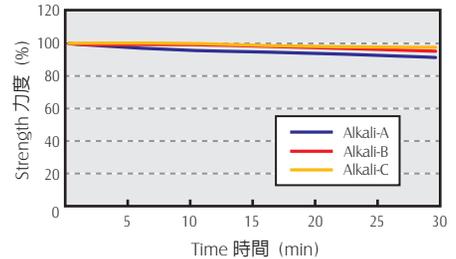
Dyeing Process to Recommend 染程推薦

	Very Good 非常好	Moderate 適用
Exhaustion Process 浸染		√
Cold Pad-Batch (CPB)	√	
Pad dyeing		√
Pad-Dry Chemical Pad-Steam (PDPS)	√	
Process		√
Pad-Dry Baking (PDB)	√	
壓染		√
Pad-Steam (PS)	√	
Emoistfix	√	
Discharge Printing 拔染印花		

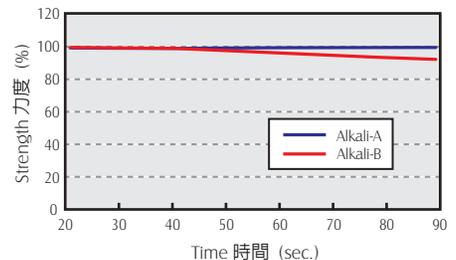
Dependency of Batching Time 捲置時間依存性(CPB)
(Dyeing temperature at 25°C)



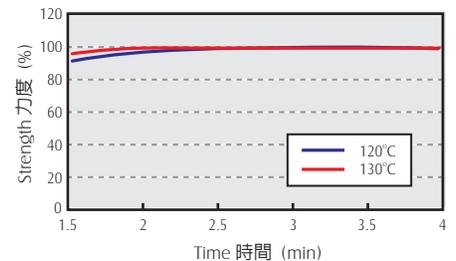
Stability of Padding liquor 染液安定性(CPB)
(Dyeing temperature at 25°C)



Dependency of Steaming Time 蒸處時間依存性(PD/PS)
(Saturated steam at 102°C)



Dependency of Fixation Time 固著時間依存性(Emoistfix)
(Substrate:130x70/32x20 1/3 twill cotton)



Everzol Dark Blue LF



Fastness Before Fixing Treatment 固色前牢度表

Fastness 牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色	Staining 污染				
					Acetate 醋酸纖維	Cotton 棉	Nylon 尼龍	Polyester 聚酯	Acrylic 壓克力
Washing 耐水洗	ISO CO2	10 g/l	4-5	5	5	5	5	5	5
	ISO CO3		4-5	5	4	5	5	5	4-5
	ISO CO4		4	5	4-5	3-4	5	5	2
	ISO CO6-C1S		4-5	5	4-5	5	5	5	4-5
	ISO CO6-C2S		4-5	5	4-5	5	5	5	4-5
	M&S C4A		4-5	5	5	5	5	5	5
Water 耐水		10 g/l	4-5	5	5	4-5	5	5	5
Hot Water 耐熱水		10 g/l	4-5	5	5	5	5	5	4-5
Sea Water 耐海水		10 g/l	4-5	5	5	5	5	5	5
Post Mercerizing 後絲光		10 g/l	4-5	-	4-5	-			
Acid Hydrolysis 酸水解		10 g/l	4-5	5	4-5	4-5	5	5	5
Perspiration 耐汗	Acid 酸	30 g/l	4-5	5	4-5	4-5	5	5	5
	Alkali 鹼	30 g/l	4-5	5	4-5	4-5	5	5	5

Dyeing Depth 染色濃度		1 g/l	5 g/l	10 g/l	30 g/l	
Rubbing 耐磨擦	Dry 乾	-	-	5	-	
	Wet 溼	-	-	3-4	-	
		Color Change 變褪色	Color Change 變褪色	Color Change 變褪色	Color Change 變褪色	
Bleach 耐漂白	Chlorinated Water 耐氯水(20ppm)	1	1-2	1-2	2	
	Peroxide Bleaching 雙氧水漂白	-	-	3-4	-	
Hot-Pressing 耐熱壓	Dry 乾	Immediately	-	3-4R	-	
		4 hours after	-	-	5	
	Wet 溼	Immediately	-	-	3-4R	-
		4 hours after	-	-	4-5	-
M&S C10A (UK-TO) 多次水洗		3	3-4	3-4	3-4	
Saliva (DIN) 耐唾液		-	-	4-5	-	
Dry Cleaning 耐乾洗		-	-	4-5	-	

Lightfastness 耐晒牢度表

Lightfastness 耐晒牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色 20 AFU	Grade 級數 ISO Blue Scale (藍色票)	
Artificial Light 耐日光 (Xenon-Arc Lamp)			1 g/l	3-4	4	
			5 g/l	4	4-5	
			10 g/l	4	5	
			30 g/l	4-5	5-6	
Perspiration Light 耐汗日光	Acid 酸		1 g/l	3	4-5	
			5 g/l	3-4	5	
			10 g/l	4	5	
			30 g/l	4-5	5-6	
	Alkali 鹼			1 g/l	3	3-4
				5 g/l	3-4	4
				10 g/l	4	4-5
				30 g/l	4-5	5
M&S C9A (Detergent Light)			10 g/l	4-5	-	
			30 g/l	-	-	

Dyeing Properties 染料特性

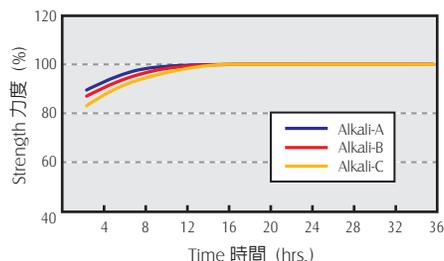
	Characteristics 特性	Evaluation 評級
Fixation Rate 固著率(%)	CPB 冷壓染 (30g/l)	> 90 %
	PDPS 連染 (30g/l)	> 90 %
	Emoistfix (30g/l)	> 85 %
Solubility 溶解度(g/l)	25°C Water 水	75
	50°C Water + 50g/l Salt 水 + 鹽 50g/l	75
Solubility in Alkali 耐鹼溶解度(g/l)	Alkali-A 鹼劑A	100
	Alkali-A + Urea 100g/l 鹼劑 A + 尿素 100g/l	100
	Alkali-B 鹼劑 B	100
	Alkali-B + Urea 100g/l 鹼劑 B + 尿素 100g/l	100
	Alkali-C 鹼劑 C	100
Stripping 脫色性	Alkali 鹼處理	×
	Reduction 還原處理	×
	Reduction-Oxidization 還原處理後再氧化處理	△
	Oxidization-Reduction 氧化處理後再還原處理	△
Color Constancy 色恆性	Tungsten Lamp 鎢絲燈	R
	TL84 Lamp	R
Effect of Metallic Ions 金屬離子的影響	Fe ⁺⁺ 鐵離子	4-5
	Cu ⁺⁺ 銅離子	4
Acid Spotting 酸滴	Hydrochloric Acid 鹽酸	4-5
	Acetic Acid 醋酸	4-5
Alkali Spotting 鹼滴	Ammonia Water 氨水	5
	Soda Ash Solution 純鹼	3
Shade Change After Fixing Treatment 固色後變色性	Polyamide 聚乙醯胺	4-5
	Quaternary Ammonium Salt 四級胺鹽	4-5
Resin Finishing 樹脂加工	Melamine 三聚氰胺	5
	Glyoxal 乙二醛	5
Discharge Ability 拔染性	Neutral 中性	3
	Alkaline 鹼性	2-3

× : un-suitable, △ : moderate, ○ : suitable, Dyeing properties are based on 30g/l dye.

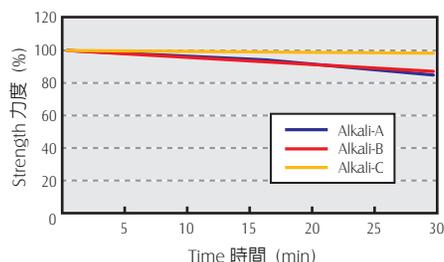
Dyeing Process to Recommend 染程推薦

	Very Good 非常好	Moderate 適用
Exhaustion Process 浸染	✓	
Cold Pad-Batch (CPB)	✓	
Pad dyeing		✓
Pad-Dry Chemical Pad-Steam (PDPS)	✓	
Process		✓
Pad-Dry Baking (PDB)	✓	
壓染		✓
Pad-Steam (PS)	✓	
Emoistfix	✓	
Discharge Printing 拔染印花		

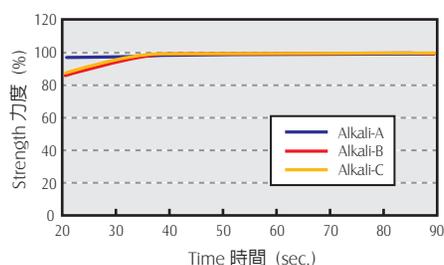
Dependency of Batching Time 捲置時間依存性(CPB)
(Dyeing temperature at 25°C)



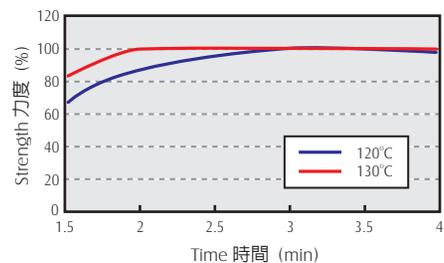
Stability of Padding liquor 染液安定性(CPB)
(Dyeing temperature at 25°C)



Dependency of Steaming Time 蒸處時間依存性(PD/PS)
(Saturated steam at 102°C)



Dependency of Fixation Time 固著時間依存性(Emoistfix)
(Substrate:130x70/32x20 1/3 twill cotton)



Everzol Yellow ED-R



Fastness Before Fixing Treatment 固色前牢度表

Fastness 牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色	Staining 污染				
					Acetate 醋酸纖維	Cotton 棉	Nylon 尼龍	Polyester 聚酯	Acrylic 壓克力
Washing 耐水洗	ISO CO2	30 g/l	5	5	4-5	5	5	5	5
	ISO CO3		5	5	5	5	5	5	
	ISO CO4		5	5	4-5	5	5	5	4-5
	ISO CO6-C1S		5	5	4-5	5	5	5	5
	ISO CO6-C2S		5	5	4-5	5	5	5	5
	M&S C4A		5	5	4-5	5	5	5	5
Water 耐水		30 g/l	4-5	5	5	5	5	5	5
Hot Water 耐熱水		30 g/l	4-5	5	5	5	5	5	5
Sea Water 耐海水		30 g/l	4	5	4-5	5	5	5	5
Post Mercerizing 後絲光		30 g/l	4	-	4-5	-			
Acid Hydrolysis 酸水解		30 g/l	4-5	5	4-5	4	5	5	4-5
Perspiration 耐汗	Acid 酸	30 g/l	4-5	5	4-5	5	5	5	5
	Alkali 鹼	30 g/l	4-5	5	4-5	5	5	5	5

Dyeing Depth 染色濃度		5 g/l	10 g/l	30 g/l	60 g/l	
Rubbing 耐磨擦	Dry 乾	5	5	4-5	4-5	
	Wet 溼	4	3-4	3	2-3	
		Color Change 變褪色	Color Change 變褪色	Color Change 變褪色	Color Change 變褪色	
Bleach 耐漂白	Chlorinated Water 耐氯水(20ppm)	-	-	2-3	-	
	Peroxide Bleaching 雙氧水漂白	-	-	4-5	-	
Hot-Pressing 耐熱壓	Dry 乾	Immediately	-	5	-	
		4 hours after	-	-	5	-
	Wet 溼	Immediately	-	-	4-5	-
		4 hours after	-	-	5	-
M&S C10A (UK-TO) 多次水洗		-	-	4-5	-	
Saliva (DIN) 耐唾液		-	-	5	-	
Dry Cleaning 耐乾洗		-	-	4-5	-	

Lightfastness 耐晒牢度表

Lightfastness 耐晒牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色 20 AFU	Grade 級數 ISO Blue Scale (藍色票)
Artificial Light 耐日光 (Xenon-Arc Lamp)			5 g/l	4-5	5-6
			10 g/l	4-5	5-6
			30 g/l	4-5	5-6
			60 g/l	4-5	5-6
Perspiration Light 耐汗日光	Acid 酸		5 g/l	4	5-6
			10 g/l	4-5	5-6
			30 g/l	4-5	6
			60 g/l	4-5	6
	Alkali 鹼		5 g/l	4-5	5
			10 g/l	4-5	5-6
			30 g/l	4-5	5-6
			60 g/l	4-5	6
M&S C9A (Detergent Light)			10 g/l	-	-
			30 g/l	-	5

Dyeing Properties 染料特性

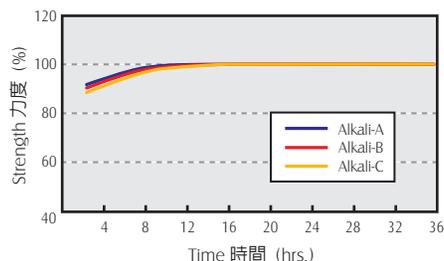
	Characteristics 特性	Evaluation 評級
Fixation Rate 固著率(%)	CPB 冷壓染 (30g/l)	> 90 %
	PDPS 連染 (30g/l)	> 90 %
	Emoistfix (30g/l)	> 70 %
Solubility 溶解度(g/l)	25°C Water 水	150
	50°C Water + 50g/l Salt 水 + 鹽 50g/l	100
Solubility in Alkali 耐鹼溶解度(g/l)	Alkali-A 鹼劑A	100
	Alkali-A + Urea 100g/l 鹼劑 A + 尿素 100g/l	100
	Alkali-B 鹼劑 B	100
	Alkali-B + Urea 100g/l 鹼劑 B + 尿素 100g/l	100
	Alkali-C 鹼劑 C	100
Stripping 脫色性	Alkali 鹼處理	×
	Reduction 還原處理	×
	Reduction-Oxidization 還原處理後再氧化處理	△
	Oxidization-Reduction 氧化處理後再還原處理	△
Color Constancy 色恆性	Tungsten Lamp 鎢絲燈	G
	TL84 Lamp	G
Effect of Metallic Ions 金屬離子的影響	Fe ⁺⁺ 鐵離子	4-5
	Cu ⁺⁺ 銅離子	4
Acid Spotting 酸滴	Hydrochloric Acid 鹽酸	4
	Acetic Acid 醋酸	4
Alkali Spotting 鹼滴	Ammonia Water 氨水	5
	Soda Ash Solution 純鹼	4
Shade Change After Fixing Treatment 固色後變色性	Polyamide 聚乙醯胺	4-5
	Quaternary Ammonium Salt 四級胺鹽	4-5
Resin Finishing 樹脂加工	Melamine 三聚氰胺	5
	Glyoxal 乙二醛	5
Discharge Ability 拔染性	Neutral 中性	4-5
	Alkaline 鹼性	3

× : un-suitable, △ : moderate, ○ : suitable, Dyeing properties are based on 30g/l dye.

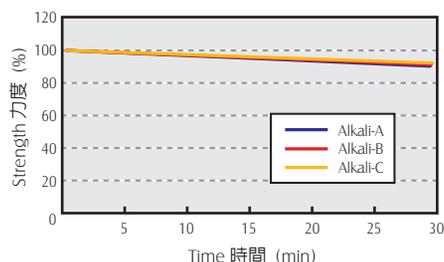
Dyeing Process to Recommend 染程推薦

	Very Good 非常好	Moderate 適用
Exhaustion Process 浸染	✓	
Cold Pad-Batch (CPB)	✓	
Pad dyeing		✓
Pad-Dry Chemical Pad-Steam (PDPS)	✓	
Process		✓
Pad-Dry Baking (PDB)	✓	
壓染		✓
Pad-Steam (PS)	✓	
Emoistfix	✓	
Discharge Printing 拔染印花	✓	

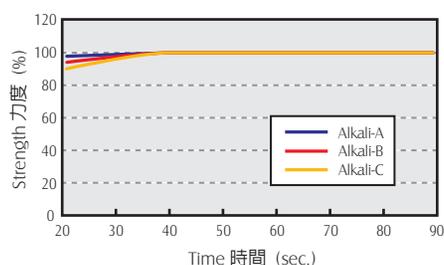
Dependency of Batching Time 捲置時間依存性(CPB)
(Dyeing temperature at 25°C)



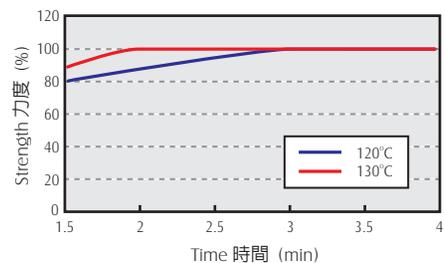
Stability of Padding liquor 染液安定性(CPB)
(Dyeing temperature at 25°C)



Dependency of Steaming Time 蒸處時間依存性(PD/PS)
(Saturated steam at 102°C)



Dependency of Fixation Time 固著時間依存性(Emoistfix)
(Substrate:130x70/32x20 1/3 twill cotton)



Everzol Yellow ED



Fastness Before Fixing Treatment 固色前牢度表

Fastness 牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色	Staining 污染				
					Acetate 醋酸纖維	Cotton 棉	Nylon 尼龍	Polyester 聚酯	Acrylic 壓克力
Washing 耐水洗	ISO CO2	30 g/l	5	5	4-5	5	5	5	5
	ISO CO3		5	5	4-5	5	5	5	5
	ISO CO4		5	4-5	4	5	5	5	4-5
	ISO CO6-C1S		5	5	4	5	5	5	5
	ISO CO6-C2S		5	5	4-5	5	5	5	5
	M&S C4A		5	5	5	5	5	5	5
Water 耐水		30 g/l	4-5	5	5	5	5	5	5
Hot Water 耐熱水		30 g/l	4-5	5	5	5	5	5	5
Sea Water 耐海水		30 g/l	4-5	5	4-5	5	5	5	5
Post Mercerizing 後絲光		30 g/l	3-4	-	4-5	-			
Acid Hydrolysis 酸水解		30 g/l	4	5	4-5	4	5	5	4
Perspiration 耐汗	Acid 酸	30 g/l	4-5	5	4	5	5	5	5
	Alkali 鹼	30 g/l	4-5	5	4	4-5	5	5	5

Dyeing Depth 染色濃度		5 g/l	10 g/l	30 g/l	60 g/l	
Rubbing 耐磨擦	Dry 乾	5	5	4-5	4-5	
	Wet 溼	4	3-4	3	2-3	
		Color Change 變褪色	Color Change 變褪色	Color Change 變褪色	Color Change 變褪色	
Bleach 耐漂白	Chlorinated Water 耐氯水(20ppm)	-	-	2	-	
	Peroxide Bleaching 雙氧水漂白	-	-	4	-	
Hot-Pressing 耐熱壓	Dry 乾	Immediately	-	5	-	
		4 hours after	-	-	5	-
	Wet 溼	Immediately	-	-	5	-
		4 hours after	-	-	5	-
M&S C10A (UK-TO) 多次水洗		-	-	4-5	-	
Saliva (DIN) 耐唾液		-	-	5	-	
Dry Cleaning 耐乾洗		-	-	4-5	-	

Lightfastness 耐晒牢度表

Lightfastness 耐晒牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色 20 AFU	Grade 級數 ISO Blue Scale (藍色票)	
Artificial Light 耐日光 (Xenon-Arc Lamp)			5 g/l	4-5	5	
			10 g/l	4-5	5	
			30 g/l	4-5	5-6	
			60 g/l	4-5	5-6	
Perspiration Light 耐汗日光	Acid 酸		5 g/l	4	5	
			10 g/l	4	5	
			30 g/l	4	5-6	
			60 g/l	4	5-6	
	Alkali 鹼			5 g/l	4	4-5
				10 g/l	4	5
				30 g/l	4	5-6
				60 g/l	4	5-6
M&S C9A (Detergent Light)			10 g/l	-	-	
			30 g/l	-	5	

Dyeing Properties 染料特性

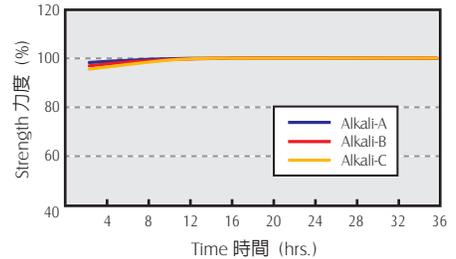
	Characteristics 特性	Evaluation 評級
Fixation Rate 固著率(%)	CPB 冷壓染 (30g/l)	> 90 %
	PDPS 連染 (30g/l)	> 75 %
	Emoistfix (30g/l)	> 80 %
Solubility 溶解度(g/l)	25°C Water 水	100
	50°C Water + 50g/l Salt 水 + 鹽 50g/l	100
Solubility in Alkali 耐鹼溶解度(g/l)	Alkali-A 鹼劑A	60
	Alkali-A + Urea 100g/l 鹼劑 A + 尿素 100g/l	60
	Alkali-B 鹼劑 B	60
	Alkali-B + Urea 100g/l 鹼劑 B + 尿素 100g/l	80
	Alkali-C 鹼劑 C	60
	Alkali-C + Urea 100g/l 鹼劑 C + 尿素 100g/l	80
Stripping 脫色性	Alkali 鹼處理	×
	Reduction 還原處理	×
	Reduction-Oxidization 還原處理後再氧化處理	△
	Oxidization-Reduction 氧化處理後再還原處理	△
Color Constancy 色恆性	Tungsten Lamp 鎢絲燈	Y
	TL84 Lamp	Y
Effect of Metallic Ions 金屬離子的影響	Fe ⁺⁺ 鐵離子	4-5
	Cu ⁺⁺ 銅離子	2-3G
Acid Spotting 酸滴	Hydrochloric Acid 鹽酸	2-3
	Acetic Acid 醋酸	2-3
Alkali Spotting 鹼滴	Ammonia Water 氨水	4-5
	Soda Ash Solution 純鹼	4-5
Shade Change After Fixing Treatment 固色後變色性	Polyamide 聚乙醯胺	4-5
	Quaternary Ammonium Salt 四級胺鹽	4-5
Resin Finishing 樹脂加工	Melamine 三聚氰胺	2-3
	Glyoxal 乙二醛	2-3
Discharge Ability 拔染性	Neutral 中性	4-5
	Alkaline 鹼性	4-5

× : un-suitable, △ : moderate, ○ : suitable, Dyeing properties are based on 30g/l dye.

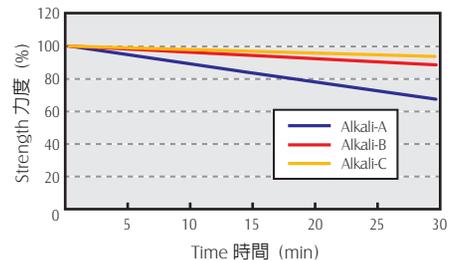
Dyeing Process to Recommend 染程推薦

	Very Good 非常好	Moderate 適用
Exhaustion Process 浸染	✓	
Cold Pad-Batch (CPB)	✓	
Pad dyeing		✓
Pad-Dry Chemical Pad-Steam (PDPS)	✓	
Process		✓
Pad-Dry Baking (PDB)	✓	
壓染		✓
Pad-Steam (PS)	✓	
Emoistfix		✓
Discharge Printing 拔染印花	✓	

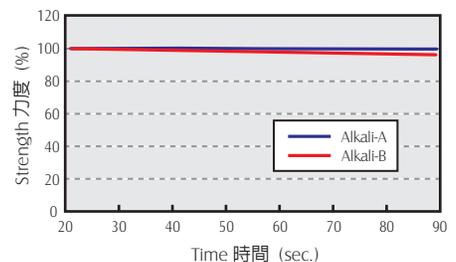
Dependency of Batching Time 捲置時間依存性(CPB)
(Dyeing temperature at 25°C)



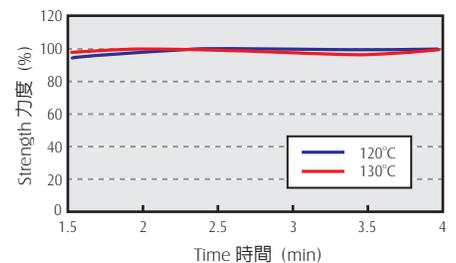
Stability of Padding liquor 染液安定性(CPB)
(Dyeing temperature at 25°C)



Dependency of Steaming Time 蒸處時間依存性(PD/PS)
(Saturated steam at 102°C)



Dependency of Fixation Time 固著時間依存性(Emoistfix)
(Substrate:130x70/32x20 1/3 twill cotton)



Everzol Yellow ED-S



Fastness Before Fixing Treatment 固色前牢度表

Fastness 牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色	Staining 污染				
					Acetate 醋酸纖維	Cotton 棉	Nylon 尼龍	Polyester 聚酯	Acrylic 壓克力
Washing 耐水洗	ISO CO2	30 g/l	4-5	5	5	5	5	4-5	5
	ISO CO3		4-5	5	5	5	5	4-5	4-5
	ISO CO4		4-5	5	4	4-5	5	5	2
	ISO CO6-C1S		4-5	5	5	5	5	4-5	5
	ISO CO6-C2S		4-5	5	5	5	5	4-5	5
	M&S C4A		4-5	5	5	5	5	5	5
Water 耐水		30 g/l	4-5	5	5	5	5	5	5
Hot Water 耐熱水		30 g/l	4-5	5	5	4-5	5	5	5
Sea Water 耐海水		30 g/l	4-5	5	5	5	5	5	5
Post Mercerizing 後絲光		30 g/l	3-4	-	2	-			
Acid Hydrolysis 酸水解		30 g/l	4-5	5	5	5	5	5	5
Perspiration 耐汗	Acid 酸	30 g/l	4-5	5	5	5	5	5	5
	Alkali 鹼	30 g/l	4-5	5	5	5	5	5	5

Dyeing Depth 染色濃度		5 g/l	10 g/l	30 g/l	60 g/l	
Rubbing 耐磨擦	Dry 乾	5	5	4-5	4-5	
	Wet 溼	4	3-4	3	2-3	
		Color Change 變褪色	Color Change 變褪色	Color Change 變褪色	Color Change 變褪色	
Bleach 耐漂白	Chlorinated Water 耐氯水(20ppm)	-	-	3	-	
	Peroxide Bleaching 雙氧水漂白	-	-	4	-	
Hot-Pressing 耐熱壓	Dry 乾	Immediately	-	4	-	
		4 hours after	-	-	4-5	-
	Wet 溼	Immediately	-	-	4	-
		4 hours after	-	-	4-5	-
M&S C10A (UK-TO) 多次水洗		-	-	4-5	-	
Saliva (DIN) 耐唾液		-	-	5	-	
Dry Cleaning 耐乾洗		-	-	4-5	-	

Lightfastness 耐晒牢度表

Lightfastness 耐晒牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色 20 AFU	Grade 級數 ISO Blue Scale (藍色票)	
Artificial Light 耐日光 (Xenon-Arc Lamp)			5 g/l	2-3	5	
			10 g/l	3	5-6	
			30 g/l	3-4	6	
			60 g/l	4	>6	
Perspiration Light 耐汗日光	Acid 酸		5 g/l	2	3-4	
			10 g/l	2-3	4	
			30 g/l	3-4	4-5	
			60 g/l	4	4-5	
	Alkali 鹼			5 g/l	2	4-5
				10 g/l	2-3	5
				30 g/l	3	5-6
				60 g/l	4	6
M&S C9A (Detergent Light)			10 g/l	-	-	
			30 g/l	-	4-5	

Dyeing Properties 染料特性

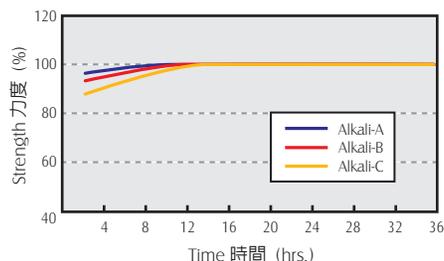
	Characteristics 特性	Evaluation 評級
Fixation Rate 固著率(%)	CPB 冷壓染 (30g/l)	> 90 %
	PDPS 連染 (30g/l)	> 90 %
	Emoistfix (30g/l)	> 85 %
Solubility 溶解度(g/l)	25°C Water 水	100
	50°C Water + 50g/l Salt 水 + 鹽 50g/l	100
Solubility in Alkali 耐鹼溶解度(g/l)	Alkali-A 鹼劑A	100
	Alkali-A + Urea 100g/l 鹼劑 A + 尿素 100g/l	100
	Alkali-B 鹼劑 B	100
	Alkali-B + Urea 100g/l 鹼劑 B + 尿素 100g/l	100
	Alkali-C 鹼劑 C	100
Stripping 脫色性	Alkali 鹼處理	△
	Reduction 還原處理	○
	Reduction-Oxidization 還原處理後再氧化處理	○
	Oxidization-Reduction 氧化處理後再還原處理	○
Color Constancy 色恆性	Tungsten Lamp 鎢絲燈	B
	TL84 Lamp	B
Effect of Metallic Ions 金屬離子的影響	Fe ⁺⁺ 鐵離子	4
	Cu ⁺⁺ 銅離子	2-3
Acid Spotting 酸滴	Hydrochloric Acid 鹽酸	4-5
	Acetic Acid 醋酸	4-5
Alkali Spotting 鹼滴	Ammonia Water 氨水	5
	Soda Ash Solution 純鹼	2-3
Shade Change After Fixing Treatment 固色後變色性	Polyamide 聚乙醯胺	4
	Quaternary Ammonium Salt 四級胺鹽	4
Resin Finishing 樹脂加工	Melamine 三聚氰胺	5
	Glyoxal 乙二醛	5
Discharge Ability 拔染性	Neutral 中性	2-3
	Alkaline 鹼性	1-2

× : un-suitable, △ : moderate, ○ : suitable, Dyeing properties are based on 30g/l dye.

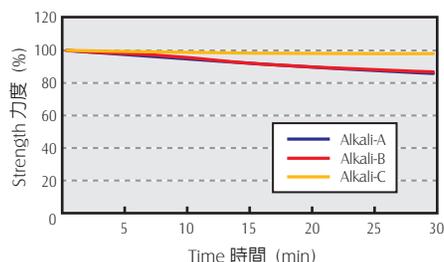
Dyeing Process to Recommend 染程推薦

	Very Good 非常好	Moderate 適用
Exhaustion Process 浸染	✓	
Cold Pad-Batch (CPB)	✓	
Pad dyeing		✓
Pad-Dry Chemical Pad-Steam (PDPS)	✓	
Process		✓
Pad-Dry Baking (PDB)	✓	
壓染		✓
Pad-Steam (PS)	✓	
Emoistfix	✓	
Discharge Printing 拔染印花		

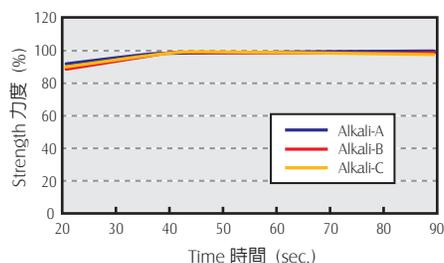
Dependency of Batching Time 捲置時間依存性(CPB)
(Dyeing temperature at 25°C)



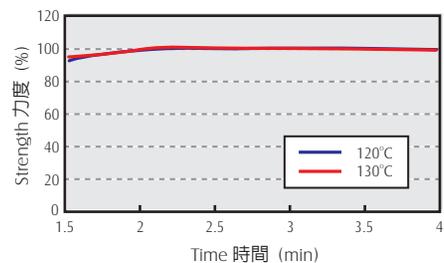
Stability of Padding liquor 染液安定性(CPB)
(Dyeing temperature at 25°C)



Dependency of Steaming Time 蒸處時間依存性(PD/PS)
(Saturated steam at 102°C)



Dependency of Fixation Time 固著時間依存性(Emoistfix)
(Substrate:130x70/32x20 1/3 twill cotton)



Everzol Red ED



Fastness Before Fixing Treatment 固色前牢度表

Fastness 牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色	Staining 污染				
					Acetate 醋酸纖維	Cotton 棉	Nylon 尼龍	Polyester 聚酯	Acrylic 壓克力
Washing 耐水洗	ISO CO2	30 g/l	5	5	4-5	5	5	5	5
	ISO CO3		5	5	4-5	5	5	5	5
	ISO CO4		5	4-5	4	5	5	5	4-5
	ISO CO6-C1S		5	5	4-5	5	5	5	5
	ISO CO6-C2S		5	5	4-5	5	5	5	5
	M&S C4A		5	5	4-5	5	5	5	5
Water 耐水		30 g/l	4-5	5	4-5	4-5	5	5	5
Hot Water 耐熱水		30 g/l	4-5	5	5	5	5	5	5
Sea Water 耐海水		30 g/l	4-5	5	4	5	5	4	4-5
Post Mercerizing 後絲光		30 g/l	3	-	4-5	-			
Acid Hydrolysis 酸水解		30 g/l	4-5	5	2-3	2-3	5	4-5	3
Perspiration 耐汗	Acid 酸	30 g/l	4-5	5	4	5	5	5	4-5
	Alkali 鹼	30 g/l	4-5	5	4	5	5	5	4-5

Dyeing Depth 染色濃度		5 g/l	10 g/l	30 g/l	60 g/l	
Rubbing 耐磨擦	Dry 乾	5	5	4-5	4-5	
	Wet 溼	3-4	3	3	2-3	
		Color Change 變褪色	Color Change 變褪色	Color Change 變褪色	Color Change 變褪色	
Bleach 耐漂白	Chlorinated Water 耐氯水(20ppm)	-	-	3-4	-	
	Peroxide Bleaching 雙氧水漂白	-	-	4	-	
Hot-Pressing 耐熱壓	Dry 乾	Immediately	-	4	-	
		4 hours after	-	-	5	-
	Wet 溼	Immediately	-	-	4	-
		4 hours after	-	-	5	-
M&S C10A (UK-TO) 多次水洗		-	-	4-5	-	
Saliva (DIN) 耐唾液		-	-	5	-	
Dry Cleaning 耐乾洗		-	-	4-5	-	

Lightfastness 耐晒牢度表

Lightfastness 耐晒牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色 20 AFU	Grade 級數 ISO Blue Scale (藍色票)	
Artificial Light 耐日光 (Xenon-Arc Lamp)			5 g/l	3	4	
			10 g/l	3-4	4-5	
			30 g/l	4	5	
			60 g/l	4-5	5-6	
Perspiration Light 耐汗日光	Acid 酸		5 g/l	2-3	3-4	
			10 g/l	3	4	
			30 g/l	3-4	4-5	
			60 g/l	4	5	
	Alkali 鹼			5 g/l	2-3	3
				10 g/l	3	3-4
				30 g/l	4	4-5
				60 g/l	4	5
M&S C9A (Detergent Light)			10 g/l	-	-	
			30 g/l	-	4	

Dyeing Properties 染料特性

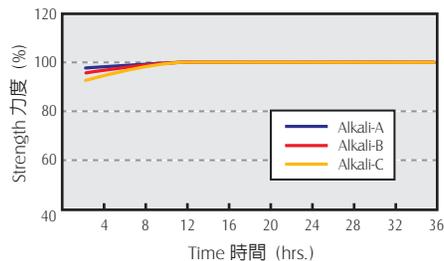
	Characteristics 特性	Evaluation 評級
Fixation Rate 固著率(%)	CPB 冷壓染 (30g/l)	> 95 %
	PDPS 連染 (30g/l)	> 95 %
	Emoistfix (30g/l)	> 95 %
Solubility 溶解度(g/l)	25°C Water 水	150
	50°C Water + 50g/l Salt 水 + 鹽 50g/l	150
Solubility in Alkali 耐鹼溶解度(g/l)	Alkali-A 鹼劑A	100
	Alkali-A + Urea 100g/l 鹼劑 A + 尿素 100g/l	100
	Alkali-B 鹼劑 B	100
	Alkali-B + Urea 100g/l 鹼劑 B + 尿素 100g/l	100
	Alkali-C 鹼劑 C	100
Stripping 脫色性	Alkali 鹼處理	×
	Reduction 還原處理	△
	Reduction-Oxidization 還原處理後再氧化處理	○
	Oxidization-Reduction 氧化處理後再還原處理	○
Color Constancy 色恆性	Tungsten Lamp 鎢絲燈	B
	TL84 Lamp	Y
Effect of Metallic Ions 金屬離子的影響	Fe ⁺⁺ 鐵離子	4-5
	Cu ⁺⁺ 銅離子	1-2B
Acid Spotting 酸滴	Hydrochloric Acid 鹽酸	4
	Acetic Acid 醋酸	4
Alkali Spotting 鹼滴	Ammonia Water 氨水	5
	Soda Ash Solution 純鹼	1B
Shade Change After Fixing Treatment 固色後變色性	Polyamide 聚乙醯胺	3
	Quaternary Ammonium Salt 四級胺鹽	3
Resin Finishing 樹脂加工	Melamine 三聚氰胺	5
	Glyoxal 乙二醛	5
Discharge Ability 拔染性	Neutral 中性	2-3
	Alkaline 鹼性	1-2

× : un-suitable, △ : moderate, ○ : suitable, Dyeing properties are based on 30g/l dye.

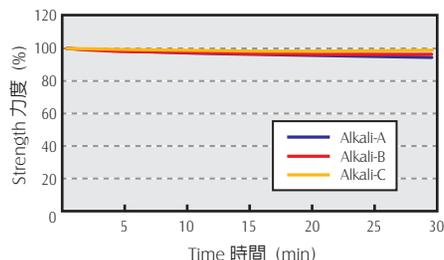
Dyeing Process to Recommend 染程推薦

	Very Good 非常好	Moderate 適用
Exhaustion Process 浸染	✓	
Cold Pad-Batch (CPB)	✓	
Pad dyeing Pad-Dry Chemical Pad-Steam (PDPS)	✓	
Process Pad-Dry Baking (PDB)	✓	
壓染 Pad-Steam (PS)	✓	
Emoistfix	✓	
Discharge Printing 拔染印花		

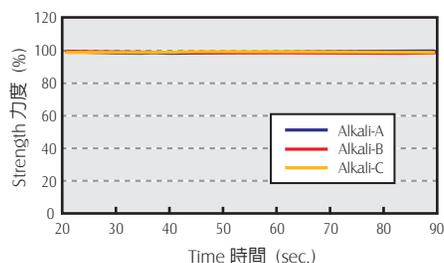
Dependency of Batching Time 捲置時間依存性(CPB) (Dyeing temperature at 25°C)



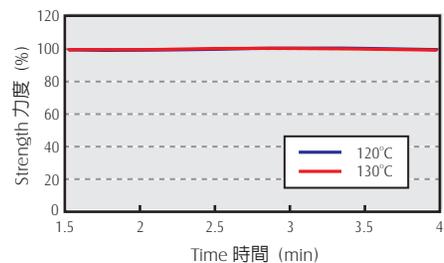
Stability of Padding liquor 染液安定性(CPB) (Dyeing temperature at 25°C)



Dependency of Steaming Time 蒸處時間依存性(PD/PS) (Saturated steam at 102°C)



Dependency of Fixation Time 固著時間依存性(Emoistfix) (Substrate:130x70/32x20 1/3 twill cotton)



Everzol Red ED-2B



Fastness Before Fixing Treatment 固色前牢度表

Fastness 牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色	Staining 污染				
					Acetate 醋酸纖維	Cotton 棉	Nylon 尼龍	Polyester 聚酯	Acrylic 壓克力
Washing 耐水洗	ISO CO2	30 g/l	5	5	4-5	5	5	5	5
	ISO CO3		5	5	4-5	5	5	4-5	5
	ISO CO4		5	5	4	5	5	5	4-5
	ISO CO6-C1S		5	5	4	5	5	5	5
	ISO CO6-C2S		5	5	4-5	5	5	5	5
	M&S C4A		5	5	4-5	5	5	5	5
Water 耐水		30 g/l	4-5	5	5	4-5	5	5	5
Hot Water 耐熱水		30 g/l	4-5	5	5	5	5	5	5
Sea Water 耐海水		30 g/l	4	5	4-5	5	5	4-5	5
Post Mercerizing 後絲光		30 g/l	2-3	-	4-5	-			
Acid Hydrolysis 酸水解		30 g/l	3-4	5	4	3	5	5	3-4
Perspiration 耐汗	Acid 酸	30 g/l	4-5	5	4-5	5	5	5	5
	Alkali 鹼	30 g/l	4-5	5	4	5	5	5	5

Dyeing Depth 染色濃度		5 g/l	10 g/l	30 g/l	60 g/l	
Rubbing 耐磨擦	Dry 乾	5	5	4-5	4-5	
	Wet 溼	3-4	3	2-3	2-3	
		Color Change 變褪色	Color Change 變褪色	Color Change 變褪色	Color Change 變褪色	
Bleach 耐漂白	Chlorinated Water 耐氯水(20ppm)	-	-	3	-	
	Peroxide Bleaching 雙氧水漂白	-	-	3-4	-	
Hot-Pressing 耐熱壓	Dry 乾	Immediately	-	4	-	
		4 hours after	-	-	5	-
	Wet 溼	Immediately	-	-	4-5	-
		4 hours after	-	-	4-5	-
M&S C10A (UK-TO) 多次水洗		-	-	3-4	-	
Saliva (DIN) 耐唾液		-	-	5	-	
Dry Cleaning 耐乾洗		-	-	4-5	-	

Lightfastness 耐晒牢度表

Lightfastness 耐晒牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色 20 AFU	Grade 級數 ISO Blue Scale (藍色票)	
Artificial Light 耐日光 (Xenon-Arc Lamp)			5 g/l	3	4	
			10 g/l	3-4	4-5	
			30 g/l	4	5	
			60 g/l	4-5	5-6	
Perspiration Light 耐汗日光	Acid 酸		5 g/l	2-3	4	
			10 g/l	3	4	
			30 g/l	4	4-5	
			60 g/l	4	5	
	Alkali 鹼			5 g/l	2-3	3
				10 g/l	3	3
				30 g/l	3-4	4
				60 g/l	3-4	4-5
M&S C9A (Detergent Light)			10 g/l	-	-	
			30 g/l	-	4	

Dyeing Properties 染料特性

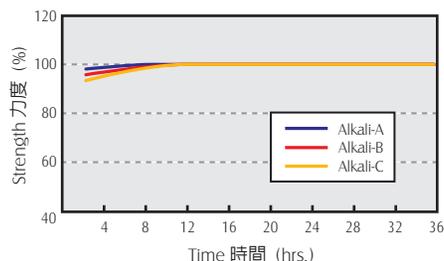
	Characteristics 特性	Evaluation 評級
Fixation Rate 固著率(%)	CPB 冷壓染 (30g/l)	> 95 %
	PDPS 連染 (30g/l)	> 90 %
	Emoistfix (30g/l)	> 90 %
Solubility 溶解度(g/l)	25°C Water 水	150
	50°C Water + 50g/l Salt 水 + 鹽 50g/l	100
Solubility in Alkali 耐鹼溶解度(g/l)	Alkali-A 鹼劑A	100
	Alkali-A + Urea 100g/l 鹼劑 A + 尿素 100g/l	100
	Alkali-B 鹼劑 B	100
	Alkali-B + Urea 100g/l 鹼劑 B + 尿素 100g/l	100
	Alkali-C 鹼劑 C	100
Stripping 脫色性	Alkali 鹼處理	×
	Reduction 還原處理	△
	Reduction-Oxidization 還原處理後再氧化處理	○
	Oxidization-Reduction 氧化處理後再還原處理	○
Color Constancy 色恆性	Tungsten Lamp 鎢絲燈	B
	TL84 Lamp	B
Effect of Metallic Ions 金屬離子的影響	Fe ⁺⁺ 鐵離子	4-5
	Cu ⁺⁺ 銅離子	1-2B
Acid Spotting 酸滴	Hydrochloric Acid 鹽酸	4-5
	Acetic Acid 醋酸	4-5
Alkali Spotting 鹼滴	Ammonia Water 氨水	5
	Soda Ash Solution 純鹼	1B
Shade Change After Fixing Treatment 固色後變色性	Polyamide 聚乙醯胺	3
	Quaternary Ammonium Salt 四級胺鹽	3
Resin Finishing 樹脂加工	Melamine 三聚氰胺	5
	Glyoxal 乙二醛	5
Discharge Ability 拔染性	Neutral 中性	2-3
	Alkaline 鹼性	1-2

× : un-suitable, △ : moderate, ○ : suitable, Dyeing properties are based on 30g/l dye.

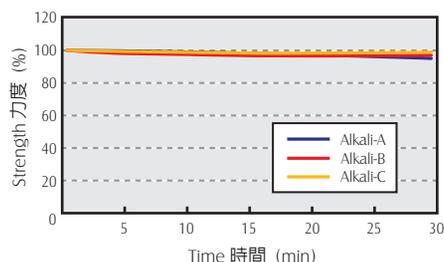
Dyeing Process to Recommend 染程推薦

	Very Good 非常好	Moderate 適用
Exhaustion Process 浸染	✓	
Cold Pad-Batch (CPB)	✓	
Pad dyeing		✓
Pad-Dry Chemical Pad-Steam (PDPS)	✓	
Process		✓
Pad-Dry Baking (PDB)	✓	
壓染		✓
Pad-Steam (PS)	✓	
Emoistfix	✓	
Discharge Printing 拔染印花		

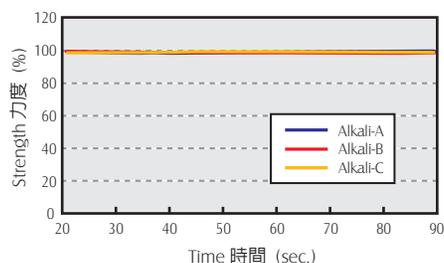
Dependency of Batching Time 捲置時間依存性(CPB)
(Dyeing temperature at 25°C)



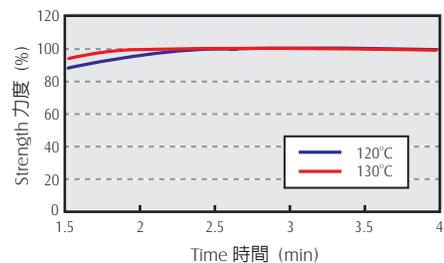
Stability of Padding liquor 染液安定性(CPB)
(Dyeing temperature at 25°C)



Dependency of Steaming Time 蒸處時間依存性(PD/PS)
(Saturated steam at 102°C)



Dependency of Fixation Time 固著時間依存性(Emoistfix)
(Substrate:130x70/32x20 1/3 twill cotton)



Everzol Red ED-3B



Fastness Before Fixing Treatment 固色前牢度表

Fastness 牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色	Staining 污染				
					Acetate 醋酸纖維	Cotton 棉	Nylon 尼龍	Polyester 聚酯	Acrylic 壓克力
Washing 耐水洗	ISO CO2	30 g/l	5	5	4-5	5	5	4-5	5
	ISO CO3		5	5	4-5	5	5	5	5
	ISO CO4		5	5	4	5	5	5	4-5
	ISO CO6-C1S		5	5	4-5	5	5	5	5
	ISO CO6-C2S		5	5	4-5	5	5	5	5
	M&S C4A		5	5	4-5	5	5	5	5
Water 耐水		30 g/l	4-5	5	4-5	4-5	5	5	5
Hot Water 耐熱水		30 g/l	4-5	5	5	5	5	5	5
Sea Water 耐海水		30 g/l	3-4	5	4-5	5	5	4-5	5
Post Mercerizing 後絲光		30 g/l	2	-	4-5	-			
Acid Hydrolysis 酸水解		30 g/l	4-5	5	2-3	2-3	5	4-5	3
Perspiration 耐汗	Acid 酸	30 g/l	4-5	5	4	5	5	4-5	4-5
	Alkali 鹼	30 g/l	4-5	5	4	4-5	4-5	4-5	4-5

Dyeing Depth 染色濃度		5 g/l	10 g/l	30 g/l	60 g/l	
Rubbing 耐磨擦	Dry 乾	5	5	4-5	4-5	
	Wet 溼	4	3-4	3	2-3	
		Color Change 變褪色	Color Change 變褪色	Color Change 變褪色	Color Change 變褪色	
Bleach 耐漂白	Chlorinated Water 耐氯水(20ppm)	-	-	4	-	
	Peroxide Bleaching 雙氧水漂白	-	-	3-4	-	
Hot-Pressing 耐熱壓	Dry 乾	Immediately	-	3-4	-	
		4 hours after	-	5	-	
	Wet 溼	Immediately	-	-	4-5	-
		4 hours after	-	-	4-5	-
M&S C10A (UK-TO) 多次水洗		-	-	3-4	-	
Saliva (DIN) 耐唾液		-	-	5	-	
Dry Cleaning 耐乾洗		-	-	4-5	-	

Lightfastness 耐晒牢度表

Lightfastness 耐晒牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色 20 AFU	Grade 級數 ISO Blue Scale (藍色票)
Artificial Light 耐日光 (Xenon-Arc Lamp)			5 g/l	3-4	4-5
			10 g/l	4	4-5
			30 g/l	4	5
			60 g/l	4-5	5-6
Perspiration Light 耐汗日光		Acid 酸	5 g/l	2	3-4
			10 g/l	2-3	4
			30 g/l	3-4	4
			60 g/l	4	5
		Alkali 鹼	5 g/l	2-3	2
			10 g/l	3	3
			30 g/l	3-4	3-4
			60 g/l	4	4-5
M&S C9A (Detergent Light)			10 g/l	-	-
			30 g/l	-	3-4

Dyeing Properties 染料特性

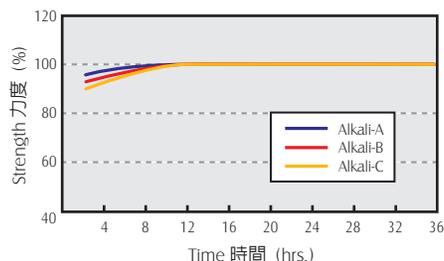
	Characteristics 特性	Evaluation 評級
Fixation Rate 固著率(%)	CPB 冷壓染 (30g/l)	> 95 %
	PDPS 連染 (30g/l)	> 90 %
	Emoistfix (30g/l)	> 90 %
Solubility 溶解度(g/l)	25°C Water 水	150
	50°C Water + 50g/l Salt 水 + 鹽 50g/l	100
Solubility in Alkali 耐鹼溶解度(g/l)	Alkali-A 鹼劑A	100
	Alkali-A + Urea 100g/l 鹼劑 A + 尿素 100g/l	100
	Alkali-B 鹼劑 B	100
	Alkali-B + Urea 100g/l 鹼劑 B + 尿素 100g/l	100
	Alkali-C 鹼劑 C	100
Stripping 脫色性	Alkali 鹼處理	×
	Reduction 還原處理	×
	Reduction-Oxidization 還原處理後再氧化處理	×
	Oxidization-Reduction 氧化處理後再還原處理	○
Color Constancy 色恆性	Tungsten Lamp 鎢絲燈	Y
	TL84 Lamp	Y
Effect of Metallic Ions 金屬離子的影響	Fe ⁺⁺ 鐵離子	4-5
	Cu ⁺⁺ 銅離子	1
Acid Spotting 酸滴	Hydrochloric Acid 鹽酸	3-4
	Acetic Acid 醋酸	4-5
Alkali Spotting 鹼滴	Ammonia Water 氨水	4-5
	Soda Ash Solution 純鹼	2-3B
Shade Change After Fixing Treatment 固色後變色性	Polyamide 聚乙醯胺	4-5
	Quaternary Ammonium Salt 四級胺鹽	4
Resin Finishing 樹脂加工	Melamine 三聚氰胺	3-4
	Glyoxal 乙二醛	3-4
Discharge Ability 拔染性	Neutral 中性	2-3
	Alkaline 鹼性	3

× : un-suitable, △ : moderate, ○ : suitable, Dyeing properties are based on 30g/l dye.

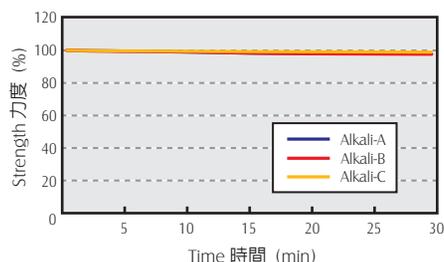
Dyeing Process to Recommend 染程推薦

	Very Good 非常好	Moderate 適用
Exhaustion Process 浸染		√
Cold Pad-Batch (CPB)	√	
Pad dyeing		√
Pad-Dry Chemical Pad-Steam (PDPS)	√	
Process		√
Pad-Dry Baking (PDB)	√	
壓染		√
Pad-Steam (PS)	√	
Emoistfix	√	
Discharge Printing 拔染印花		

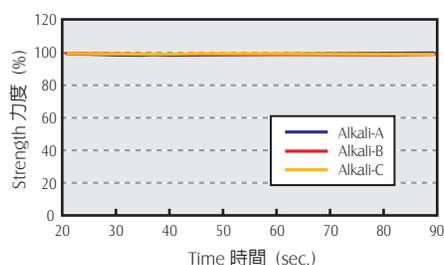
Dependency of Batching Time 捲置時間依存性(CPB)
(Dyeing temperature at 25°C)



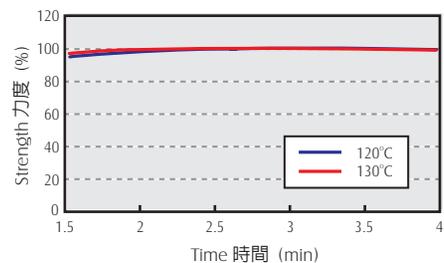
Stability of Padding liquor 染液安定性(CPB)
(Dyeing temperature at 25°C)



Dependency of Steaming Time 蒸處時間依存性(PD/PS)
(Saturated steam at 102°C)



Dependency of Fixation Time 固著時間依存性(Emoistfix)
(Substrate:130x70/32x20 1/3 twill cotton)



Everzol Red ED-7B



Fastness Before Fixing Treatment 固色前牢度表

Fastness 牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色	Staining 污染					
					Acetate 醋酸纖維	Cotton 棉	Nylon 尼龍	Polyester 聚酯	Acrylic 壓克力	Wool 羊毛
Washing 耐水洗	ISO CO2	30 g/l	30 g/l	4-5	5	4-5	5	5	5	5
	ISO CO3			4-5	5	4	5	5	5	5
	ISO CO4			4-5	5	3	5	5	5	3-4
	ISO CO6-C1S			4-5	5	4	5	5	5	5
	ISO CO6-C2S			4-5	5	5	5	5	5	5
	M&S C4A			4-5	5	5	5	5	5	5
Water 耐水			30 g/l	5	5	5	5	5	5	5
Hot Water 耐熱水			30 g/l	5	5	5	5	5	5	5
Sea Water 耐海水			30 g/l	5	5	5	5	5	5	5
Post Mercerizing 後絲光			30 g/l	4B	-	2-3	-			
Acid Hydrolysis 酸水解			30 g/l	5	5	5	5	5	5	5
Perspiration 耐汗	Acid 酸		30 g/l	5	5	5	5	5	5	5
	Alkali 鹼		30 g/l	5	5	5	5	5	5	5

Dyeing Depth 染色濃度		5 g/l	10 g/l	30 g/l	60 g/l
Rubbing 耐磨擦	Dry 乾	-	-	4-5	-
	Wet 溼	-	-	2-3	-
		Color Change 變褪色	Color Change 變褪色	Color Change 變褪色	Color Change 變褪色
Bleach 耐漂白	Chlorinated Water 耐氯水(20ppm)	-	-	4-5	-
	Peroxide Bleaching 雙氧水漂白	-	-	4-5	-
Hot-Pressing 耐熱壓	Dry 乾	Immediately	-	3-4	-
		4 hours after	-	4	-
	Wet 溼	Immediately	-	3-4	-
		4 hours after	-	4	-
M&S C10A (UK-TO) 多次水洗		-	-	4	-
Saliva (DIN) 耐唾液		-	-	5	-
Dry Cleaning 耐乾洗		-	-	-	-

Lightfastness 耐晒牢度表

Lightfastness 耐晒牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色 20 AFU	Grade 級數 ISO Blue Scale (藍色票)	
Artificial Light 耐日光 (Xenon-Arc Lamp)			5 g/l	3	4-5	
			10 g/l	3-4	5	
			30 g/l	4	5-6	
			60 g/l	4-5	6	
Perspiration Light 耐汗日光	Acid 酸		5 g/l	3-4	4-5	
			10 g/l	4	5	
			30 g/l	4-5	5	
			60 g/l	>4-5	6	
	Alkali 鹼			5 g/l	3-4	4
				10 g/l	4	4-5
				30 g/l	4	5-6
				60 g/l	4-5	6
M&S C9A (Detergent Light)			10 g/l	-	-	
			30 g/l	-	4-5	

Dyeing Properties 染料特性

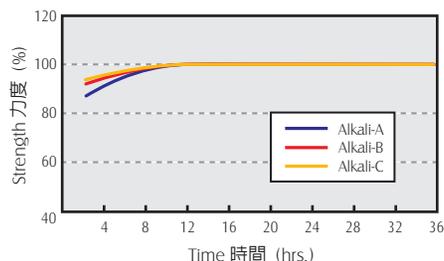
	Characteristics 特性	Evaluation 評級
Fixation Rate 固著率(%)	CPB 冷壓染 (30g/l)	> 95 %
	PDPS 連染 (30g/l)	> 90 %
	Emoistfix (30g/l)	> 90 %
Solubility 溶解度(g/l)	25°C Water 水	100
	50°C Water + 50g/l Salt 水 + 鹽 50g/l	100
Solubility in Alkali 耐鹼溶解度(g/l)	Alkali-A 鹼劑A	100
	Alkali-A + Urea 100g/l 鹼劑 A + 尿素 100g/l	100
	Alkali-B 鹼劑 B	100
	Alkali-B + Urea 100g/l 鹼劑 B + 尿素 100g/l	100
	Alkali-C 鹼劑 C	100
Stripping 脫色性	Alkali 鹼處理	×
	Reduction 還原處理	△
	Reduction-Oxidization 還原處理後再氧化處理	△
	Oxidization-Reduction 氧化處理後再還原處理	△
Color Constancy 色恆性	Tungsten Lamp 鎢絲燈	Y
	TL84 Lamp	Y
Effect of Metallic Ions 金屬離子的影響	Fe ⁺⁺ 鐵離子	4-5
	Cu ⁺⁺ 銅離子	2-3B
Acid Spotting 酸滴	Hydrochloric Acid 鹽酸	3-4
	Acetic Acid 醋酸	4
Alkali Spotting 鹼滴	Ammonia Water 氨水	4
	Soda Ash Solution 純鹼	4
Shade Change After Fixing Treatment 固色後變色性	Polyamide 聚乙醯胺	4-5
	Quaternary Ammonium Salt 四級胺鹽	4
Resin Finishing 樹脂加工	Melamine 三聚氰胺	4
	Glyoxal 乙二醛	4
Discharge Ability 拔染性	Neutral 中性	3-4
	Alkaline 鹼性	4

× : un-suitable, △ : moderate, ○ : suitable, Dyeing properties are based on 30g/l depth.

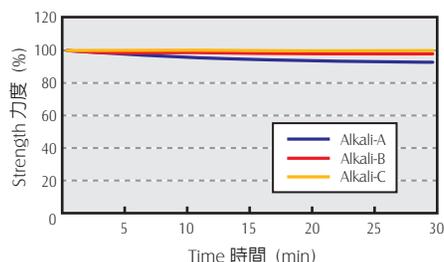
Dyeing Process to Recommend 染程推薦

	Very Good 非常好	Moderate 適用
Exhaustion Process 浸染		√
	Cold Pad-Batch (CPB)	√
Pad dyeing	Pad-Dry Chemical Pad-Steam (PDPS)	√
Process	Pad-Dry Baking (PDB)	√
壓染	Pad-Steam (PS)	√
	Emoistfix	√
Discharge Printing 拔染印花	√	

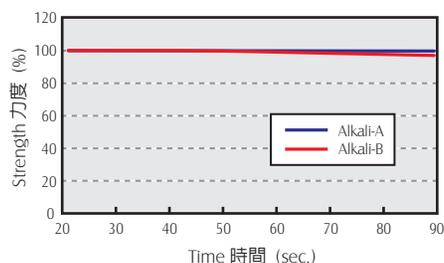
Dependency of Batching Time 捲置時間依存性(CPB)
(Dyeing temperature at 25°C)



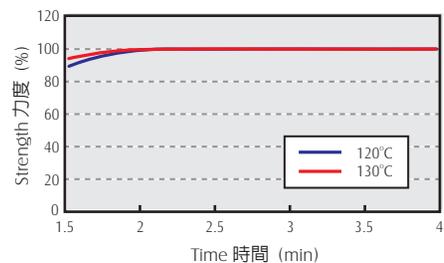
Stability of Padding liquor 染液安定性(CPB)
(Dyeing temperature at 25°C)



Dependency of Steaming Time 蒸處時間依存性(PD/PS)
(Saturated steam at 102°C)



Dependency of Fixation Time 固著時間依存性(Emoistfix)
(Substrate:130x70/32x20 1/3 twill cotton)



Everzol Red ED-S



Fastness Before Fixing Treatment 固色前牢度表

Fastness 牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色	Staining 污染				
					Acetate 醋酸纖維	Cotton 棉	Nylon 尼龍	Polyester 聚酯	Acrylic 壓克力
Washing 耐水洗	ISO CO2	30 g/l	4-5	5	4-5	5	5	5	5
	ISO CO3		4-5	5	4	5	5	5	5
	ISO CO4		4-5	5	2	4-5	5	5	3
	ISO CO6-C1S		4-5	5	4	5	5	5	5
	ISO CO6-C2S		4-5	5	4	5	5	5	5
	M&S C4A		4-5	5	4-5	5	5	5	5
Water 耐水		30 g/l	4-5	5	5	5	5	5	5
Hot Water 耐熱水		30 g/l	4-5	5	4-5	4	5	5	5
Sea Water 耐海水		30 g/l	4-5	5	5	5	5	5	5
Post Mercerizing 後絲光		30 g/l	2	-	2	-			
Acid Hydrolysis 酸水解		30 g/l	4-5	5	5	5	5	5	5
Perspiration 耐汗	Acid 酸	30 g/l	4-5	5	5	5	5	5	5
	Alkali 鹼	30 g/l	4-5	5	5	5	5	5	5

Dyeing Depth 染色濃度		5 g/l	10 g/l	30 g/l	60 g/l	
Rubbing 耐磨擦	Dry 乾	-	-	4-5	-	
	Wet 溼	-	-	2-3	-	
		Color Change 變褪色	Color Change 變褪色	Color Change 變褪色	Color Change 變褪色	
Bleach 耐漂白	Chlorinated Water 耐氯水(20ppm)	-	-	4-5	-	
	Peroxide Bleaching 雙氧水漂白	-	-	4-5	-	
Hot-Pressing 耐熱壓	Dry 乾	Immediately	-	4	-	
		4 hours after	-	4-5	-	
	Wet 溼	Immediately	-	-	2	-
		4 hours after	-	-	4-5	-
M&S C10A (UK-TO) 多次水洗		-	-	4-5	-	
Saliva (DIN) 耐唾液		-	-	5	-	
Dry Cleaning 耐乾洗		-	-	-	-	

Lightfastness 耐晒牢度表

Lightfastness 耐晒牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色 20 AFU	Grade 級數 ISO Blue Scale (藍色票)
Artificial Light 耐日光 (Xenon-Arc Lamp)			5 g/l	2-3	4
			10 g/l	3	4-5
			30 g/l	3-4	5
			60 g/l	4	6
Perspiration Light 耐汗日光	Acid 酸		5 g/l	2	3-4
			10 g/l	2-3	4
			30 g/l	3	5
			60 g/l	4	6
	Alkali 鹼		5 g/l	2	3-4
			10 g/l	2-3	4
			30 g/l	3-4	5
			60 g/l	4	6
M&S C9A (Detergent Light)			10 g/l	-	-
			30 g/l	-	4-5

Dyeing Properties 染料特性

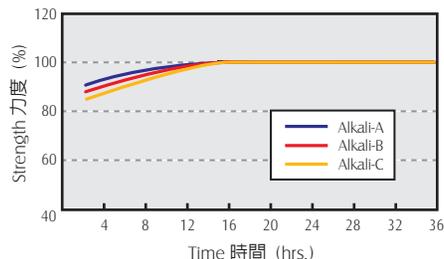
	Characteristics 特性	Evaluation 評級
Fixation Rate 固著率(%)	CPB 冷壓染 (30g/l)	> 90 %
	PDPS 連染 (30g/l)	> 60 %
	Emoistfix (30g/l)	> 80 %
Solubility 溶解度(g/l)	25°C Water 水	100
	50°C Water + 50g/l Salt 水 + 鹽 50g/l	100
Solubility in Alkali 耐鹼溶解度(g/l)	Alkali-A 鹼劑A	80
	Alkali-A + Urea 100g/l 鹼劑 A + 尿素 100g/l	100
	Alkali-B 鹼劑 B	100
	Alkali-B + Urea 100g/l 鹼劑 B + 尿素 100g/l	100
	Alkali-C 鹼劑 C	100
Stripping 脫色性	Alkali 鹼處理	×
	Reduction 還原處理	○
	Reduction-Oxidization 還原處理後再氧化處理	○
	Oxidization-Reduction 氧化處理後再還原處理	○
Color Constancy 色恆性	Tungsten Lamp 鎢絲燈	B
	TL84 Lamp	Y
Effect of Metallic Ions 金屬離子的影響	Fe ⁺⁺ 鐵離子	4-5
	Cu ⁺⁺ 銅離子	1B
Acid Spotting 酸滴	Hydrochloric Acid 鹽酸	4-5
	Acetic Acid 醋酸	4-5
Alkali Spotting 鹼滴	Ammonia Water 氨水	4-5
	Soda Ash Solution 純鹼	4-5
Shade Change After Fixing Treatment 固色後變色性	Polyamide 聚乙醯胺	4
	Quaternary Ammonium Salt 四級胺鹽	4
Resin Finishing 樹脂加工	Melamine 三聚氰胺	4-5
	Glyoxal 乙二醛	4-5
Discharge Ability 拔染性	Neutral 中性	1
	Alkaline 鹼性	1

× : un-suitable, △ : moderate, ○ : suitable, Dyeing properties are based on 30g/l dye.

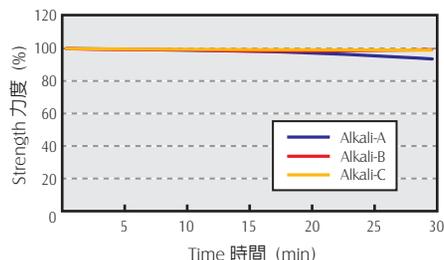
Dyeing Process to Recommend 染程推薦

	Very Good 非常好	Moderate 適用
Exhaustion Process 浸染	✓	
Cold Pad-Batch (CPB)	✓	
Pad dyeing Pad-Dry Chemical Pad-Steam (PDPS)	✓	
Process Pad-Dry Baking (PDB)	✓	
壓染 Pad-Steam (PS)	✓	
Emoistfix	✓	
Discharge Printing 拔染印花		

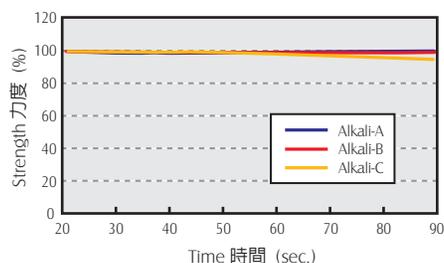
Dependency of Batching Time 捲置時間依存性(CPB) (Dyeing temperature at 25°C)



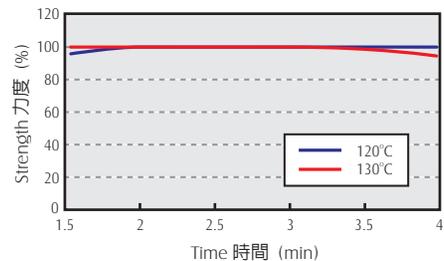
Stability of Padding liquor 染液安定性(CPB) (Dyeing temperature at 25°C)



Dependency of Steaming Time 蒸處時間依存性(PD/PS) (Saturated steam at 102°C)



Dependency of Fixation Time 固著時間依存性(Emoistfix) (Substrate:130x70/32x20 1/3 twill cotton)



Everzol Rubine ED



Fastness Before Fixing Treatment 固色前牢度表

Fastness 牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色	Staining 污染				
					Acetate 醋酸纖維	Cotton 棉	Nylon 尼龍	Polyester 聚酯	Acrylic 壓克力
Washing 耐水洗	ISO CO2	30 g/l	5	5	4	5	5	4-5	5
	ISO CO3		5	5	3-4	5	5	4-5	5
	ISO CO4		5	4	3	4-5	5	5	3
	ISO CO6-C1S		5	5	3-4	4-5	5	4-5	5
	ISO CO6-C2S		5	5	3-4	5	5	4	5
	M&S C4A		5	5	4	5	5	4-5	5
Water 耐水		30 g/l	4-5	5	4-5	4	5	5	5
Hot Water 耐熱水		30 g/l	4-5	5	4-5	3	5	5	5
Sea Water 耐海水		30 g/l	4-5	5	4-5	4-5	5	5	5
Post Mercerizing 後絲光		30 g/l	2-3B	-	4	-			
Acid Hydrolysis 酸水解		30 g/l	4-5	5	4-5	4	5	5	5
Perspiration 耐汗	Acid 酸	30 g/l	4-5	4-5	3-4	3	3-4	3-4	4-5
	Alkali 鹼	30 g/l	4-5	4-5	4	4	4-5	4-5	4-5

Dyeing Depth 染色濃度		5 g/l	10 g/l	30 g/l	60 g/l	
Rubbing 耐磨擦	Dry 乾	5	5	4-5	4-5	
	Wet 溼	3-4	3	2-3	2-3	
		Color Change 變褪色	Color Change 變褪色	Color Change 變褪色	Color Change 變褪色	
Bleach 耐漂白	Chlorinated Water 耐氯水(20ppm)	-	-	3-4	-	
	Peroxide Bleaching 雙氧水漂白	-	-	4-5	-	
Hot-Pressing 耐熱壓	Dry 乾	Immediately	-	2	-	
		4 hours after	-	4-5	-	
	Wet 溼	Immediately	-	-	2	-
		4 hours after	-	-	4-5	-
M&S C10A (UK-TO) 多次水洗		-	-	4-5	-	
Saliva (DIN) 耐唾液		-	-	4	-	
Dry Cleaning 耐乾洗		-	-	4-5	-	

Lightfastness 耐晒牢度表

Lightfastness 耐晒牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色 20 AFU	Grade 級數 ISO Blue Scale (藍色票)
Artificial Light 耐日光 (Xenon-Arc Lamp)			5 g/l	3	4
			10 g/l	3-4	4
			30 g/l	3-4	4-5
			60 g/l	4	4-5
Perspiration Light 耐汗日光		Acid 酸	5 g/l	2-3	3-4
			10 g/l	3	3-4
			30 g/l	3-4	4
			60 g/l	3-4	4
		Alkali 鹼	5 g/l	2-3	2-3
			10 g/l	3	2-3
			30 g/l	3-4	3-4
			60 g/l	3-4	3-4
M&S C9A (Detergent Light)			10 g/l	-	-
			30 g/l	-	4-5

Dyeing Properties 染料特性

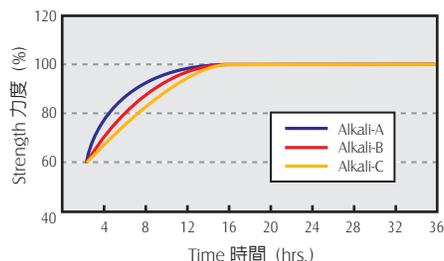
	Characteristics 特性	Evaluation 評級
Fixation Rate 固著率(%)	CPB 冷壓染 (30g/l)	> 90 %
	PDPS 連染 (30g/l)	> 90 %
	Emoistfix (30g/l)	> 90 %
Solubility 溶解度(g/l)	25°C Water 水	100
	50°C Water + 50g/l Salt 水 + 鹽 50g/l	100
Solubility in Alkali 耐鹼溶解度(g/l)	Alkali-A 鹼劑A	100
	Alkali-A + Urea 100g/l 鹼劑 A + 尿素 100g/l	100
	Alkali-B 鹼劑 B	100
	Alkali-B + Urea 100g/l 鹼劑 B + 尿素 100g/l	100
	Alkali-C 鹼劑 C	100
Stripping 脫色性	Alkali 鹼處理	×
	Reduction 還原處理	×
	Reduction-Oxidization 還原處理後再氧化處理	△
	Oxidization-Reduction 氧化處理後再還原處理	△
Color Constancy 色恆性	Tungsten Lamp 鎢絲燈	W
	TL84 Lamp	G
Effect of Metallic Ions 金屬離子的影響	Fe ⁺⁺ 鐵離子	4-5
	Cu ⁺⁺ 銅離子	5
Acid Spotting 酸滴	Hydrochloric Acid 鹽酸	2-3
	Acetic Acid 醋酸	4-5
Alkali Spotting 鹼滴	Ammonia Water 氨水	1-2
	Soda Ash Solution 純鹼	2
Shade Change After Fixing Treatment 固色後變色性	Polyamide 聚乙醯胺	3-4
	Quaternary Ammonium Salt 四級胺鹽	4-5
Resin Finishing 樹脂加工	Melamine 三聚氰胺	4-5
	Glyoxal 乙二醛	4-5
Discharge Ability 拔染性	Neutral 中性	1
	Alkaline 鹼性	1

× : un-suitable, △ : moderate, ○ : suitable, Dyeing properties are based on 30g/l dye.

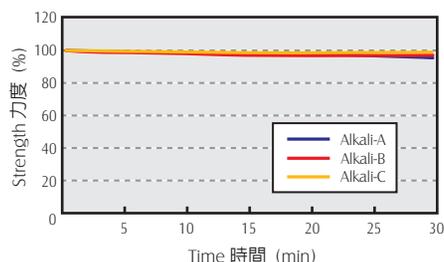
Dyeing Process to Recommend 染程推薦

	Very Good 非常好	Moderate 適用
Exhaustion Process 浸染	✓	
Cold Pad-Batch (CPB)	✓	
Pad dyeing		✓
Pad-Dry Chemical Pad-Steam (PDPS)	✓	
Process		✓
Pad-Dry Baking (PDB)	✓	
壓染		✓
Pad-Steam (PS)	✓	
Emoistfix	✓	
Discharge Printing 拔染印花		

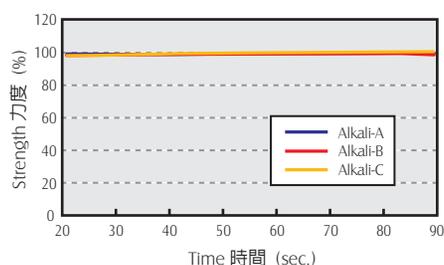
Dependency of Batching Time 捲置時間依存性(CPB)
(Dyeing temperature at 25°C)



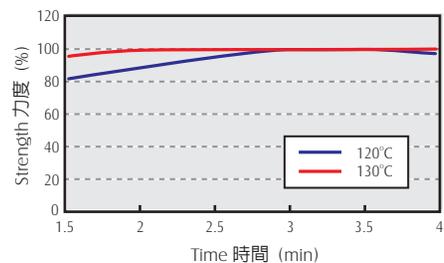
Stability of Padding liquor 染液安定性(CPB)
(Dyeing temperature at 25°C)



Dependency of Steaming Time 蒸處時間依存性(PD/PS)
(Saturated steam at 102°C)



Dependency of Fixation Time 固著時間依存性(Emoistfix)
(Substrate:130x70/32x20 1/3 twill cotton)



Everzol Blue ED-G



Fastness Before Fixing Treatment 固色前牢度表

Fastness 牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色	Staining 污染				
					Acetate 醋酸纖維	Cotton 棉	Nylon 尼龍	Polyester 聚酯	Acrylic 壓克力
Washing 耐水洗	ISO CO2	30 g/l	5	5	4	5	5	5	5
	ISO CO3		5	5	4-5	5	5	5	5
	ISO CO4		5	5	4	5	5	5	4-5
	ISO CO6-C1S		5	5	4	5	5	5	5
	ISO CO6-C2S		5	5	4	5	5	5	5
	M&S C4A		5	5	4-5	5	5	5	5
Water 耐水		30 g/l	5	5	4-5	4-5	5	5	5
Hot Water 耐熱水		30 g/l	5	5	5	5	5	5	5
Sea Water 耐海水		30 g/l	5	5	4-5	5	5	5	5
Post Mercerizing 後絲光		30 g/l	3G(B)	-	4-5	-			
Acid Hydrolysis 酸水解		30 g/l	4-5	5	3	2	5	5	4
Perspiration 耐汗	Acid 酸	30 g/l	4-5	5	4-5	4-5	5	5	5
	Alkali 鹼	30 g/l	5	5	4-5	5	5	5	5

Dyeing Depth 染色濃度		5 g/l	10 g/l	30 g/l	60 g/l	
Rubbing 耐磨擦	Dry 乾	5	5	5	4-5	
	Wet 溼	4	3-4	3	2-3	
		Color Change 變褪色	Color Change 變褪色	Color Change 變褪色	Color Change 變褪色	
Bleach 耐漂白	Chlorinated Water 耐氯水(20ppm)	-	-	1	-	
	Peroxide Bleaching 雙氧水漂白	-	-	3-4	-	
Hot-Pressing 耐熱壓	Dry 乾	Immediately	-	3-4	-	
		4 hours after	-	-	5	-
	Wet 溼	Immediately	-	-	3-4	-
		4 hours after	-	-	5	-
M&S C10A (UK-TO) 多次水洗		-	-	5	-	
Saliva (DIN) 耐唾液		-	-	4-5	-	
Dry Cleaning 耐乾洗		-	-	4-5	-	

Lightfastness 耐晒牢度表

Lightfastness 耐晒牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色 20 AFU	Grade 級數 ISO Blue Scale (藍色票)	
Artificial Light 耐日光 (Xenon-Arc Lamp)			5 g/l	4	4-5	
			10 g/l	4-5	5-6	
			30 g/l	4-5	6	
			60 g/l	4-5	6	
Perspiration Light 耐汗日光	Acid 酸		5 g/l	4	4	
			10 g/l	4	4-5	
			30 g/l	4-5	5	
			60 g/l	4-5	5-6	
	Alkali 鹼			5 g/l	4-5	4
				10 g/l	4-5	4-5
				30 g/l	4-5	5
				60 g/l	4-5	5-6
M&S C9A (Detergent Light)			10 g/l	-	-	
			30 g/l	-	4-5	

Dyeing Properties 染料特性

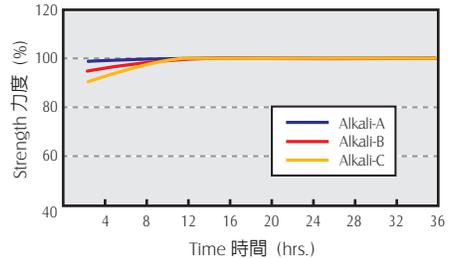
	Characteristics 特性	Evaluation 評級
Fixation Rate 固著率(%)	CPB 冷壓染 (30g/l)	> 95 %
	PDPS 連染 (30g/l)	> 90 %
	Emoistfix (30g/l)	> 90 %
Solubility 溶解度(g/l)	25°C Water 水	100
	50°C Water + 50g/l Salt 水 + 鹽 50g/l	20
Solubility in Alkali 耐鹼溶解度(g/l)	Alkali-A 鹼劑A	10
	Alkali-A + Urea 100g/l 鹼劑 A + 尿素 100g/l	10
	Alkali-B 鹼劑 B	20
	Alkali-B + Urea 100g/l 鹼劑 B + 尿素 100g/l	20
	Alkali-C 鹼劑 C	20
	Alkali-C + Urea 100g/l 鹼劑 C + 尿素 100g/l	30
Stripping 脫色性	Alkali 鹼處理	△
	Reduction 還原處理	×
	Reduction-Oxidization 還原處理後再氧化處理	×
	Oxidization-Reduction 氧化處理後再還原處理	×
Color Constancy 色恆性	Tungsten Lamp 鎢絲燈	R
	TL84 Lamp	R
Effect of Metallic Ions 金屬離子的影響	Fe ⁺⁺ 鐵離子	4
	Cu ⁺⁺ 銅離子	1-2
Acid Spotting 酸滴	Hydrochloric Acid 鹽酸	1-2
	Acetic Acid 醋酸	4-5
Alkali Spotting 鹼滴	Ammonia Water 氨水	4-5
	Soda Ash Solution 純鹼	3
Shade Change After Fixing Treatment 固色後變色性	Polyamide 聚乙醯胺	4-5
	Quaternary Ammonium Salt 四級胺鹽	4-5
Resin Finishing 樹脂加工	Melamine 三聚氰胺	4-5
	Glyoxal 乙二醛	4-5
Discharge Ability 拔染性	Neutral 中性	3
	Alkaline 鹼性	2-3

× : un-suitable, △ : moderate, ○ : suitable, Dyeing properties are based on 30g/l depth.

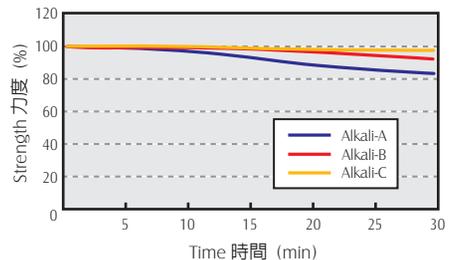
Dyeing Process to Recommend 染程推薦

	Very Good 非常好	Moderate 適用
Exhaustion Process 浸染	√	
Cold Pad-Batch (CPB)	√	
Pad dyeing		√
Pad-Dry Chemical Pad-Steam (PDPS)	√	
Process		√
Pad-Dry Baking (PDB)	√	
壓染		√
Pad-Steam (PS)	√	
Emoistfix	√	
Discharge Printing 拔染印花		√

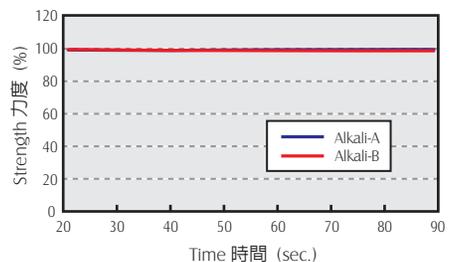
Dependency of Batching Time 捲置時間依存性(CPB)
(Dyeing temperature at 25°C)



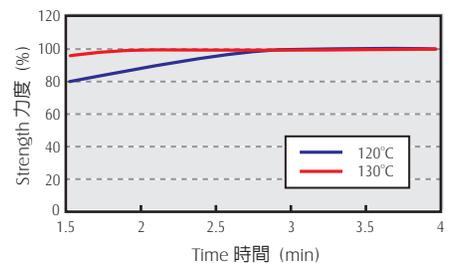
Stability of Padding liquor 染液安定性(CPB)
(Dyeing temperature at 25°C)



Dependency of Steaming Time 蒸處時間依存性(PD/PS)
(Saturated steam at 102°C)



Dependency of Fixation Time 固著時間依存性(Emoistfix)
(Substrate:130x70/32x20 1/3 twill cotton)



Everzol Blue L-ED



Fastness Before Fixing Treatment 固色前牢度表

Fastness 牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色	Staining 污染				
					Acetate 醋酸纖維	Cotton 棉	Nylon 尼龍	Polyester 聚酯	Acrylic 壓克力
Washing 耐水洗	ISO CO2	30 g/l	4-5	5	4-5	5	5	5	5
	ISO CO3		4-5	5	4	5	5	5	5
	ISO CO4		4-5	5	3	5	5	5	2-3
	ISO CO6-C1S		4-5	5	4	5	5	5	5
	ISO CO6-C2S		4-5	5	4	5	5	5	5
	M&S C4A		4-5	5	4-5	5	5	5	5
Water 耐水		30 g/l	4-5	5	5	5	5	5	5
Hot Water 耐熱水		30 g/l	4-5	5	4-5	4-5	5	5	5
Sea Water 耐海水		30 g/l	4-5	5	5	5	5	5	5
Post Mercerizing 後絲光		30 g/l	4R	-	4	-			
Acid Hydrolysis 酸水解		30 g/l	4-5	5	5	4-5	5	5	5
Perspiration 耐汗	Acid 酸	30 g/l	4-5	5	5	5	5	5	5
	Alkali 鹼	30 g/l	4-5	4-5	4-5	4-5	5	5	5

Dyeing Depth 染色濃度		5 g/l	10 g/l	30 g/l	60 g/l
Rubbing 耐磨擦	Dry 乾	5	5	5	4-5
	Wet 溼	4	3-4	3	2-3
		Color Change 變褪色	Color Change 變褪色	Color Change 變褪色	Color Change 變褪色
Bleach 耐漂白	Chlorinated Water 耐氯水(20ppm)	-	-	3	-
	Peroxide Bleaching 雙氧水漂白	-	-	2	-
Hot-Pressing 耐熱壓	Dry 乾	Immediately	-	4-5	-
		4 hours after	-	5	-
	Wet 溼	Immediately	-	4	-
		4 hours after	-	4-5	-
M&S C10A (UK-TO) 多次水洗		-	-	4-5	-
Saliva (DIN) 耐唾液		-	-	5	-
Dry Cleaning 耐乾洗		-	-	-	-

Lightfastness 耐晒牢度表

Lightfastness 耐晒牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色 20 AFU	Grade 級數 ISO Blue Scale (藍色票)
Artificial Light 耐日光 (Xenon-Arc Lamp)			5 g/l	2-3	4
			10 g/l	3	4-5
			30 g/l	3-4	5
			60 g/l	4-5	6
Perspiration Light 耐汗日光	Acid 酸	5 g/l	2	3-4	
		10 g/l	2-3	4	
		30 g/l	3	4-5	
		60 g/l	4	5	
	Alkali 鹼	5 g/l	2-3	3	
		10 g/l	3	3-4	
		30 g/l	3-4	4	
		60 g/l	4-5	4-5	
M&S C9A (Detergent Light)			10 g/l	-	-
			30 g/l	4-5	-

Dyeing Properties 染料特性

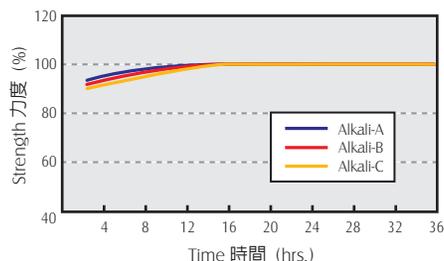
	Characteristics 特性	Evaluation 評級
Fixation Rate 固著率(%)	CPB 冷壓染 (30g/l)	> 90 %
	PDPS 連染 (30g/l)	> 85 %
	Emoistfix (30g/l)	> 80 %
Solubility 溶解度(g/l)	25°C Water 水	100
	50°C Water + 50g/l Salt 水 + 鹽 50g/l	100
Solubility in Alkali 耐鹼溶解度(g/l)	Alkali-A 鹼劑A	100
	Alkali-A + Urea 100g/l 鹼劑 A + 尿素 100g/l	100
	Alkali-B 鹼劑 B	100
	Alkali-B + Urea 100g/l 鹼劑 B + 尿素 100g/l	100
	Alkali-C 鹼劑 C	100
Stripping 脫色性	Alkali 鹼處理	△
	Reduction 還原處理	○
	Reduction-Oxidization 還原處理後再氧化處理	○
	Oxidization-Reduction 氧化處理後再還原處理	○
Color Constancy 色恆性	Tungsten Lamp 鎢絲燈	1-2R
	TL84 Lamp	2-3R
Effect of Metallic Ions 金屬離子的影響	Fe ⁺⁺ 鐵離子	4
	Cu ⁺⁺ 銅離子	4
Acid Spotting 酸滴	Hydrochloric Acid 鹽酸	4
	Acetic Acid 醋酸	4-5
Alkali Spotting 鹼滴	Ammonia Water 氨水	5
	Soda Ash Solution 純鹼	2-3
Shade Change After Fixing Treatment 固色後變色性	Polyamide 聚乙醯胺	4
	Quaternary Ammonium Salt 四級胺鹽	3-4
Resin Finishing 樹脂加工	Melamine 三聚氰胺	5
	Glyoxal 乙二醛	4-5
Discharge Ability 拔染性	Neutral 中性	2
	Alkaline 鹼性	2

× : un-suitable, △ : moderate, ○ : suitable, Dyeing properties are based on 30g/l depth.

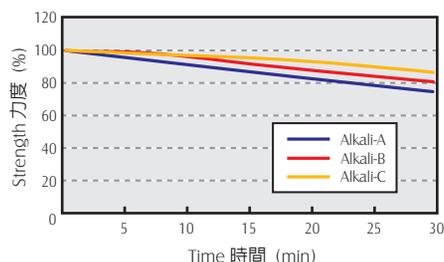
Dyeing Process to Recommend 染程推薦

	Very Good 非常好	Moderate 適用
Exhaustion Process 浸染	✓	
Cold Pad-Batch (CPB)	✓	
Pad dyeing		✓
Pad-Dry Chemical Pad-Steam (PDPS)	✓	
Process		✓
Pad-Dry Baking (PDB)	✓	
壓染		✓
Pad-Steam (PS)	✓	
Emoistfix	✓	
Discharge Printing 拔染印花		

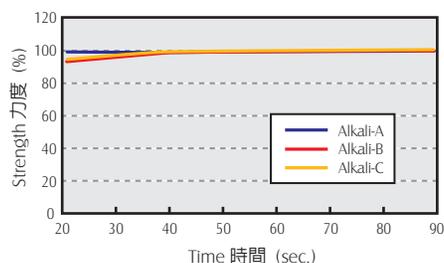
Dependency of Batching Time 捲置時間依存性(CPB)
(Dyeing temperature at 25°C)



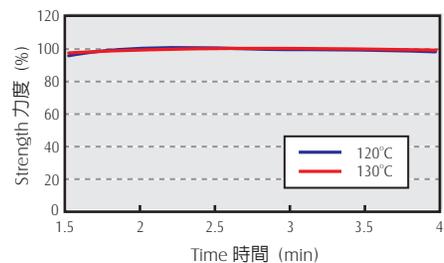
Stability of Padding liquor 染液安定性(CPB)
(Dyeing temperature at 25°C)



Dependency of Steaming Time 蒸處時間依存性(PD/PS)
(Saturated steam at 102°C)



Dependency of Fixation Time 固著時間依存性(Emoistfix)
(Substrate:130x70/32x20 1/3 twill cotton)



Everzol Blue ED



Fastness Before Fixing Treatment 固色前牢度表

Fastness 牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色	Staining 污染				
					Acetate 醋酸纖維	Cotton 棉	Nylon 尼龍	Polyester 聚酯	Acrylic 壓克力
Washing 耐水洗	ISO CO2	30 g/l	5	5	4-5	5	5	5	5
	ISO CO3		5	5	4-5	5	5	5	4-5
	ISO CO4		5	4-5	3-4	3-4	5	5	3
	ISO CO6-C1S		5	5	4-5	5	5	5	4-5
	ISO CO6-C2S		5	5	4-5	5	5	5	5
	M&S C4A		5	5	5	5	5	5	5
Water 耐水		30 g/l	4-5	5	5	4	5	5	5
Hot Water 耐熱水		30 g/l	5	5	5	4-5	5	5	5
Sea Water 耐海水		30 g/l	4	5	5	5	5	5	5
Post Mercerizing 後絲光		30 g/l	2-3	-	4-5	-			
Acid Hydrolysis 酸水解		30 g/l	4-5	5	4	3-4	5	5	3-4
Perspiration 耐汗	Acid 酸	30 g/l	4-5	5	4-5	4	5	5	5
	Alkali 鹼	30 g/l	4-5	5	4-5	4-5	5	5	5

Dyeing Depth 染色濃度		5 g/l	10 g/l	30 g/l	60 g/l	
Rubbing 耐磨擦	Dry 乾	5	5	4-5	4-5	
	Wet 溼	4	3-4	2-3	2-3	
		Color Change 變褪色	Color Change 變褪色	Color Change 變褪色	Color Change 變褪色	
Bleach 耐漂白	Chlorinated Water 耐氯水(20ppm)	-	-	4	-	
	Peroxide Bleaching 雙氧水漂白	-	-	4-5	-	
Hot-Pressing 耐熱壓	Dry 乾	Immediately	-	4-5	-	
		4 hours after	-	4-5	-	
	Wet 溼	Immediately	-	-	4	-
		4 hours after	-	-	4-5	-
M&S C10A (UK-TO) 多次水洗		-	-	4-5	-	
Saliva (DIN) 耐唾液		-	-	5	-	
Dry Cleaning 耐乾洗		-	-	4-5	-	

Lightfastness 耐晒牢度表

Lightfastness 耐晒牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色 20 AFU	Grade 級數 ISO Blue Scale (藍色票)	
Artificial Light 耐日光 (Xenon-Arc Lamp)			5 g/l	3-4	4	
			10 g/l	4	4-5	
			30 g/l	4-5	5	
			60 g/l	4-5	5-6	
Perspiration Light 耐汗日光	Acid 酸		5 g/l	2-3	3-4	
			10 g/l	3	4	
			30 g/l	3-4	5	
			60 g/l	4	5	
	Alkali 鹼			5 g/l	2-3	3
				10 g/l	3	3-4
				30 g/l	3-4	4
				60 g/l	4	5
M&S C9A (Detergent Light)			10 g/l	-	-	
			30 g/l	-	5	

Dyeing Properties 染料特性

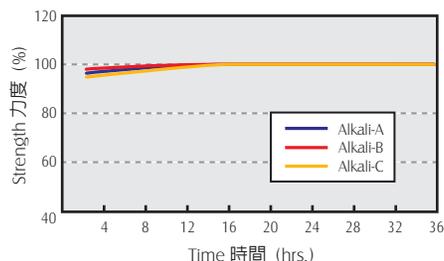
	Characteristics 特性	Evaluation 評級
Fixation Rate 固著率(%)	CPB 冷壓染 (30g/l)	> 95 %
	PDPS 連染 (30g/l)	> 95 %
	Emoistfix (30g/l)	> 95 %
Solubility 溶解度(g/l)	25°C Water 水	150
	50°C Water + 50g/l Salt 水 + 鹽 50g/l	150
Solubility in Alkali 耐鹼溶解度(g/l)	Alkali-A 鹼劑A	100
	Alkali-A + Urea 100g/l 鹼劑 A + 尿素 100g/l	100
	Alkali-B 鹼劑 B	100
	Alkali-B + Urea 100g/l 鹼劑 B + 尿素 100g/l	100
	Alkali-C 鹼劑 C	100
Stripping 脫色性	Alkali 鹼處理	△
	Reduction 還原處理	○
	Reduction-Oxidization 還原處理後再氧化處理	○
	Oxidization-Reduction 氧化處理後再還原處理	○
Color Constancy 色恆性	Tungsten Lamp 鎢絲燈	R
	TL84 Lamp	R
Effect of Metallic Ions 金屬離子的影響	Fe ⁺⁺ 鐵離子	4-5
	Cu ⁺⁺ 銅離子	4
Acid Spotting 酸滴	Hydrochloric Acid 鹽酸	3-4
	Acetic Acid 醋酸	4
Alkali Spotting 鹼滴	Ammonia Water 氨水	4-5
	Soda Ash Solution 純鹼	5
Shade Change After Fixing Treatment 固色後變色性	Polyamide 聚乙醯胺	4-5
	Quaternary Ammonium Salt 四級胺鹽	4-5
Resin Finishing 樹脂加工	Melamine 三聚氰胺	5
	Glyoxal 乙二醛	4-5
Discharge Ability 拔染性	Neutral 中性	3-4
	Alkaline 鹼性	3-4

× : un-suitable, △ : moderate, ○ : suitable, Dyeing properties are based on 30g/l depth.

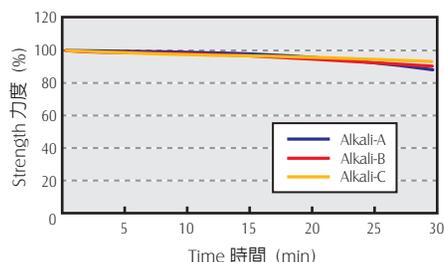
Dyeing Process to Recommend 染程推薦

	Very Good 非常好	Moderate 適用
Exhaustion Process 浸染	✓	
Cold Pad-Batch (CPB)	✓	
Pad dyeing		✓
Pad-Dry Chemical Pad-Steam (PDPS)	✓	
Process		✓
Pad-Dry Baking (PDB)	✓	
壓染		✓
Pad-Steam (PS)	✓	
Emoistfix	✓	
Discharge Printing 拔染印花	✓	

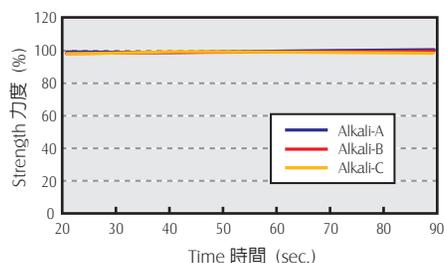
Dependency of Batching Time 捲置時間依存性(CPB)
(Dyeing temperature at 25°C)



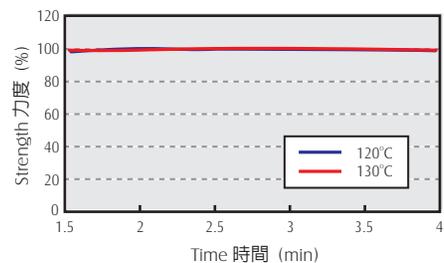
Stability of Padding liquor 染液安定性(CPB)
(Dyeing temperature at 25°C)



Dependency of Steaming Time 蒸處時間依存性(PD/PS)
(Saturated steam at 102°C)



Dependency of Fixation Time 固著時間依存性(Emoistfix)
(Substrate:130x70/32x20 1/3 twill cotton)



Everzol Navy ED



Fastness Before Fixing Treatment 固色前牢度表

Fastness 牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色	Staining 污染				
					Acetate 醋酸纖維	Cotton 棉	Nylon 尼龍	Polyester 聚酯	Acrylic 壓克力
Washing 耐水洗	ISO CO2	30 g/l	5	5	5	5	5	5	5
	ISO CO3		5	5	4-5	5	5	5	5
	ISO CO4		5	5	4	5	5	5	3-4
	ISO CO6-C1S		5	5	4-5	5	5	5	5
	ISO CO6-C2S		5	5	4-5	5	5	5	5
	M&S C4A		5	5	5	5	5	5	5
Water 耐水		30 g/l	4-5	5	5	5	5	5	5
Hot Water 耐熱水		30 g/l	5	5	5	5	5	5	5
Sea Water 耐海水		30 g/l	4	5	5	5	5	5	5
Post Mercerizing 後絲光		30 g/l	2-3	-	4	-			
Acid Hydrolysis 酸水解		30 g/l	5	5	4-5	4	5	5	4
Perspiration 耐汗	Acid 酸	30 g/l	4-5	5	5	5	5	5	5
	Alkali 鹼	30 g/l	4-5	5	5	4-5	5	5	5

Dyeing Depth 染色濃度		10 g/l	30 g/l	60 g/l	80 g/l	
Rubbing 耐磨擦	Dry 乾	5	5	4-5	4-5	
	Wet 溼	3-4	3	2-3	2-3	
		Color Change 變褪色	Color Change 變褪色	Color Change 變褪色	Color Change 變褪色	
Bleach 耐漂白	Chlorinated Water 耐氯水(20ppm)	-	-	3-4	-	
	Peroxide Bleaching 雙氧水漂白	-	-	4	-	
Hot-Pressing 耐熱壓	Dry 乾	Immediately	-	4	-	
		4 hours after	-	-	4-5	-
	Wet 溼	Immediately	-	-	4-5	-
		4 hours after	-	-	4-5	-
M&S C10A (UK-TO) 多次水洗		-	-	2-3	-	
Saliva (DIN) 耐唾液		-	-	5	-	
Dry Cleaning 耐乾洗		-	-	4-5	-	

Lightfastness 耐晒牢度表

Lightfastness 耐晒牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色 20 AFU	Grade 級數 ISO Blue Scale (藍色票)
Artificial Light 耐日光 (Xenon-Arc Lamp)			10 g/l	3-4	4-5
			30 g/l	4	5
			60 g/l	4-5	5-6
			80 g/l	5	5-6
Perspiration Light 耐汗日光		Acid 酸	10 g/l	2	3-4
			30 g/l	3	4
			60 g/l	4	5
			80 g/l	4	5
		Alkali 鹼	10 g/l	2-3	3
			30 g/l	3-4	4
			60 g/l	4	4-5
			80 g/l	4	5
M&S C9A (Detergent Light)			10 g/l	-	-
			30 g/l	-	2-3

Dyeing Properties 染料特性

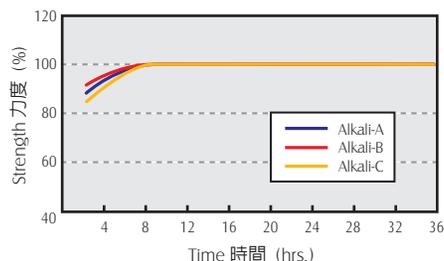
	Characteristics 特性	Evaluation 評級
Fixation Rate 固著率(%)	CPB 冷壓染 (30g/l)	> 95 %
	PDPS 連染 (30g/l)	> 95 %
	Emoistfix (30g/l)	> 95 %
Solubility 溶解度(g/l)	25°C Water 水	150
	50°C Water + 50g/l Salt 水 + 鹽 50g/l	150
Solubility in Alkali 耐鹼溶解度(g/l)	Alkali-A 鹼劑A	80
	Alkali-A + Urea 100g/l 鹼劑 A + 尿素 100g/l	80
	Alkali-B 鹼劑 B	80
	Alkali-B + Urea 100g/l 鹼劑 B + 尿素 100g/l	80
	Alkali-C 鹼劑 C	80
Stripping 脫色性	Alkali 鹼處理	△
	Reduction 還原處理	○
	Reduction-Oxidization 還原處理後再氧化處理	○
	Oxidization-Reduction 氧化處理後再還原處理	○
Color Constancy 色恆性	Tungsten Lamp 鎢絲燈	R
	TL84 Lamp	R
Effect of Metallic Ions 金屬離子的影響	Fe ⁺⁺ 鐵離子	4-5
	Cu ⁺⁺ 銅離子	4
Acid Spotting 酸滴	Hydrochloric Acid 鹽酸	2-3
	Acetic Acid 醋酸	4
Alkali Spotting 鹼滴	Ammonia Water 氨水	5
	Soda Ash Solution 純鹼	3
Shade Change After Fixing Treatment 固色後變色性	Polyamide 聚乙醯胺	4-5
	Quaternary Ammonium Salt 四級胺鹽	4-5
Resin Finishing 樹脂加工	Melamine 三聚氰胺	4-5
	Glyoxal 乙二醛	4-5
Discharge Ability 拔染性	Neutral 中性	4
	Alkaline 鹼性	4-5

× : un-suitable, △ : moderate, ○ : suitable, Dyeing properties are based on 60g/l dye.

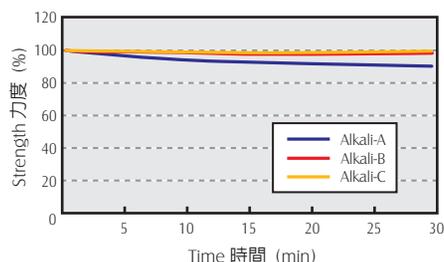
Dyeing Process to Recommend 染程推薦

	Very Good 非常好	Moderate 適用
Exhaustion Process 浸染	✓	
Cold Pad-Batch (CPB)	✓	
Pad dyeing		✓
Pad-Dry Chemical Pad-Steam (PDPS)	✓	
Process		✓
Pad-Dry Baking (PDB)	✓	
壓染		✓
Pad-Steam (PS)	✓	
Emoistfix	✓	
Discharge Printing 拔染印花	✓	

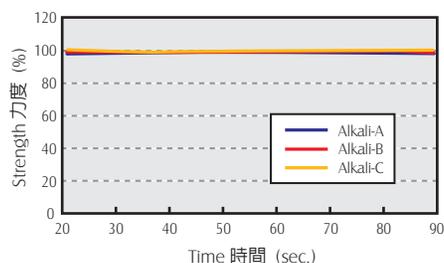
Dependency of Batching Time 捲置時間依存性(CPB)
(Dyeing temperature at 25°C)



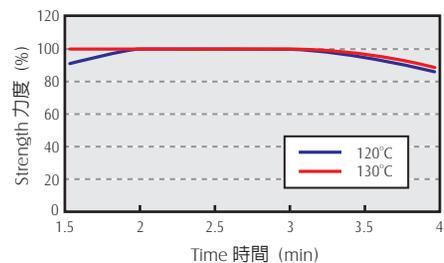
Stability of Padding liquor 染液安定性(CPB)
(Dyeing temperature at 25°C)



Dependency of Steaming Time 蒸處時間依存性(PD/PS)
(Saturated steam at 102°C)



Dependency of Fixation Time 固著時間依存性(Emoistfix)
(Substrate:130x70/32x20 1/3 twill cotton)



Everzol Black ED



Fastness Before Fixing Treatment 固色前牢度表

Fastness 牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色	Staining 污染				
					Acetate 醋酸纖維	Cotton 棉	Nylon 尼龍	Polyester 聚酯	Acrylic 壓克力
Washing 耐水洗	ISO CO2	60 g/l	5	5	4-5	4-5	5	5	4
	ISO CO3		5	5	4-5	5	5	5	5
	ISO CO4		5	4-5	3-4	3	5	5	2-3
	ISO CO6-C1S		5	5	4	4	5	5	4
	ISO CO6-C2S		5	5	4-5	4-5	5	5	5
	M&S C4A		4-5	5	5	5	5	5	5
Water 耐水		60 g/l	4-5	5	5	5	5	5	5
Hot Water 耐熱水		60 g/l	5	5	4-5	5	5	5	5
Sea Water 耐海水		60 g/l	4-5	5	5	5	5	5	5
Post Mercerizing 後絲光		60 g/l	3R	-	4-5	-			
Acid Hydrolysis 酸水解		60 g/l	4	5	5	4	5	5	4-5
Perspiration 耐汗	Acid 酸	60 g/l	4-5	5	5	5	5	5	5
	Alkali 鹼	60 g/l	4-5	5	5	5	5	5	5

Dyeing Depth 染色濃度		10 g/l	30 g/l	60 g/l	80 g/l	
Rubbing 耐磨擦	Dry 乾	5	5	4-5	4-5	
	Wet 溼	3-4	3	2-3	2-3	
		Color Change 變褪色	Color Change 變褪色	Color Change 變褪色	Color Change 變褪色	
Bleach 耐漂白	Chlorinated Water 耐氯水(20ppm)	-	-	4-5	-	
	Peroxide Bleaching 雙氧水漂白	-	-	5	-	
Hot-Pressing 耐熱壓	Dry 乾	Immediately	-	4	-	
		4 hours after	-	-	4-5	-
	Wet 溼	Immediately	-	-	4	-
		4 hours after	-	-	4-5	-
M&S C10A (UK-TO) 多次水洗		-	-	4-5	-	
Saliva (DIN) 耐唾液		-	-	5	-	
Dry Cleaning 耐乾洗		-	-	4-5	-	

Lightfastness 耐晒牢度表

Lightfastness 耐晒牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色 20 AFU	Grade 級數 ISO Blue Scale (藍色票)	
Artificial Light 耐日光 (Xenon-Arc Lamp)			10 g/l	3	4-5	
			30 g/l	4	5	
			60 g/l	4-5	5-6	
			80 g/l	4-5	6	
Perspiration Light 耐汗日光	Acid 酸		10 g/l	1	3	
			30 g/l	2	4	
			60 g/l	3-4	5	
			80 g/l	4-5	5-6	
	Alkali 鹼			10 g/l	1-2	2
				30 g/l	2-3	3-4
				60 g/l	4	4-5
				80 g/l	4-5	5
M&S C9A (Detergent Light)			10 g/l	-	-	
			60 g/l	-	>4-5	

Dyeing Properties 染料特性

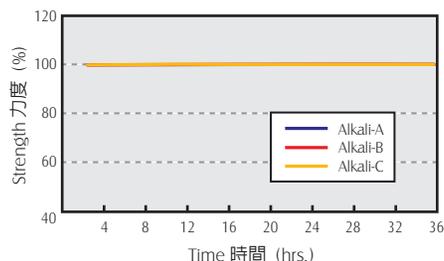
	Characteristics 特性	Evaluation 評級
Fixation Rate 固著率(%)	CPB 冷壓染 (30g/l)	> 95 %
	PDPS 連染 (30g/l)	> 95 %
	Emoistfix (30g/l)	> 95 %
Solubility 溶解度(g/l)	25°C Water 水	150
	50°C Water + 50g/l Salt 水 + 鹽 50g/l	150
Solubility in Alkali 耐鹼溶解度(g/l)	Alkali-A 鹼劑A	100
	Alkali-A + Urea 100g/l 鹼劑 A + 尿素 100g/l	100
	Alkali-B 鹼劑 B	100
	Alkali-B + Urea 100g/l 鹼劑 B + 尿素 100g/l	100
	Alkali-C 鹼劑 C	100
Stripping 脫色性	Alkali 鹼處理	△
	Reduction 還原處理	○
	Reduction-Oxidization 還原處理後再氧化處理	○
	Oxidization-Reduction 氧化處理後再還原處理	○
Color Constancy 色恆性	Tungsten Lamp 鎢絲燈	Y
	TL84 Lamp	Y
Effect of Metallic Ions 金屬離子的影響	Fe ⁺⁺ 鐵離子	4
	Cu ⁺⁺ 銅離子	2-3
Acid Spotting 酸滴	Hydrochloric Acid 鹽酸	5
	Acetic Acid 醋酸	5
Alkali Spotting 鹼滴	Ammonia Water 氨水	3-4
	Soda Ash Solution 純鹼	1-2
Shade Change After Fixing Treatment 固色後變色性	Polyamide 聚乙醯胺	5
	Quaternary Ammonium Salt 四級胺鹽	5
Resin Finishing 樹脂加工	Melamine 三聚氰胺	3-4
	Glyoxal 乙二醛	5
Discharge Ability 拔染性	Neutral 中性	3
	Alkaline 鹼性	4

X : un-suitable, △ : moderate, ○ : suitable, Dyeing properties are based on 60g/l depth.

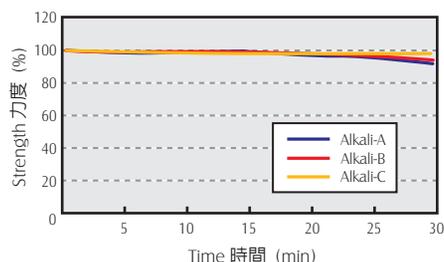
Dyeing Process to Recommend 染程推薦

	Very Good 非常好	Moderate 適用
Exhaustion Process 浸染	✓	
Cold Pad-Batch (CPB)	✓	
Pad dyeing		✓
Pad-Dry Chemical Pad-Steam (PDPS)	✓	
Process		✓
Pad-Dry Baking (PDB)	✓	
壓染		✓
Pad-Steam (PS)	✓	
Emoistfix	✓	
Discharge Printing 拔染印花	✓	

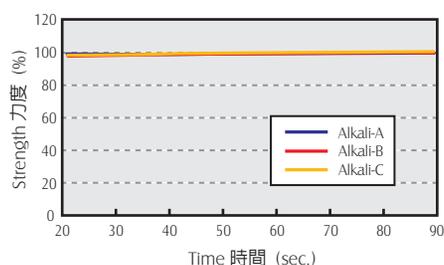
Dependency of Batching Time 捲置時間依存性(CPB)
(Dyeing temperature at 25°C)



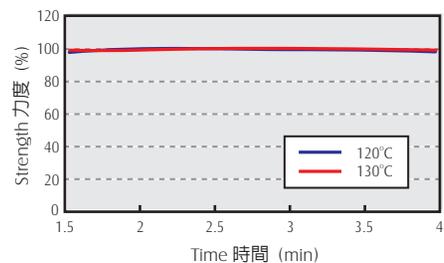
Stability of Padding liquor 染液安定性(CPB)
(Dyeing temperature at 25°C)



Dependency of Steaming Time 蒸處時間依存性(PD/PS)
(Saturated steam at 102°C)



Dependency of Fixation Time 固著時間依存性(Emoistfix)
(Substrate:130x70/32x20 1/3 twill cotton)



Everzol Black ED-G



Fastness Before Fixing Treatment 固色前牢度表

Fastness 牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色	Staining 污染				
					Acetate 醋酸纖維	Cotton 棉	Nylon 尼龍	Polyester 聚酯	Acrylic 壓克力
Washing 耐水洗	ISO CO2	60 g/l	5	5	5	5	5	5	5
	ISO CO3		5	5	5	5	5	5	5
	ISO CO4		5	5	3-4	5	5	5	3-4
	ISO CO6-C1S		5	5	5	5	5	5	5
	ISO CO6-C2S		5	5	5	5	5	5	5
	M&S C4A		5	5	5	5	5	5	5
Water 耐水		60 g/l	4-5	5	5	5	5	5	5
Hot Water 耐熱水		60 g/l	4-5	5	5	4-5	5	5	5
Sea Water 耐海水		60 g/l	4-5	5	5	5	5	5	5
Post Mercerizing 後絲光		60 g/l	3-4R	-	3-4	-			
Acid Hydrolysis 酸水解		60 g/l	4-5	5	5	5	5	5	5
Perspiration 耐汗	Acid 酸	60 g/l	4-5	5	5	5	5	5	5
	Alkali 鹼	60 g/l	4-5	5	5	5	5	5	5

Dyeing Depth 染色濃度		10 g/l	30 g/l	60 g/l	80 g/l	
Rubbing 耐磨擦	Dry 乾	5	4-5	4-5	4-5	
	Wet 溼	3-4	3	2-3	2-3	
		Color Change 變褪色	Color Change 變褪色	Color Change 變褪色	Color Change 變褪色	
Bleach 耐漂白	Chlorinated Water 耐氯水(20ppm)	-	-	3-4	-	
	Peroxide Bleaching 雙氧水漂白	-	-	5	-	
Hot-Pressing 耐熱壓	Dry 乾	Immediately	-	4	-	
		4 hours after	-	4-5	-	
	Wet 溼	Immediately	-	-	3-4	-
		4 hours after	-	-	4	-
M&S C10A (UK-TO) 多次水洗		-	-	4-5	-	
Saliva (DIN) 耐唾液		-	-	5	-	
Dry Cleaning 耐乾洗		-	-	4-5	-	

Lightfastness 耐晒牢度表

Lightfastness 耐晒牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色 20 AFU	Grade 級數 ISO Blue Scale (藍色票)	
Artificial Light 耐日光 (Xenon-Arc Lamp)			10 g/l	2	4	
			30 g/l	3	5	
			60 g/l	4	5-6	
			80 g/l	4-5	6	
Perspiration Light 耐汗日光	Acid 酸		10 g/l	1-2	3-4	
			30 g/l	2-3	4-5	
			60 g/l	4	5-6	
			80 g/l	4-5	5-6	
	Alkali 鹼			10 g/l	1-2	3
				30 g/l	3	4-5
				60 g/l	4	5-6
				80 g/l	4-5	5-6
M&S C9A (Detergent Light)			10 g/l	-	4-5	
			60 g/l	-	5	

Dyeing Properties 染料特性

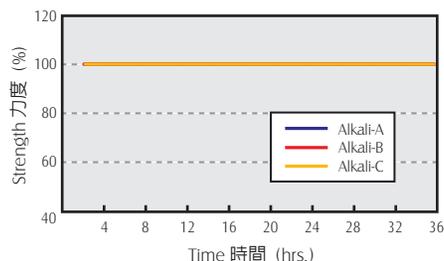
	Characteristics 特性	Evaluation 評級
Fixation Rate 固著率(%)	CPB 冷壓染 (30g/l)	> 95 %
	PDPS 連染 (30g/l)	> 95 %
	Emoistfix (30g/l)	> 95 %
Solubility 溶解度(g/l)	25°C Water 水	100
	50°C Water + 50g/l Salt 水 + 鹽 50g/l	100
Solubility in Alkali 耐鹼溶解度(g/l)	Alkali-A 鹼劑A	100
	Alkali-A + Urea 100g/l 鹼劑 A + 尿素 100g/l	100
	Alkali-B 鹼劑 B	100
	Alkali-B + Urea 100g/l 鹼劑 B + 尿素 100g/l	100
	Alkali-C 鹼劑 C	100
Stripping 脫色性	Alkali 鹼處理	△
	Reduction 還原處理	○
	Reduction-Oxidization 還原處理後再氧化處理	○
	Oxidization-Reduction 氧化處理後再還原處理	○
Color Constancy 色恆性	Tungsten Lamp 鎢絲燈	Y
	TL84 Lamp	Y
Effect of Metallic Ions 金屬離子的影響	Fe ⁺⁺ 鐵離子	4
	Cu ⁺⁺ 銅離子	1
Acid Spotting 酸滴	Hydrochloric Acid 鹽酸	4-5
	Acetic Acid 醋酸	4
Alkali Spotting 鹼滴	Ammonia Water 氨水	2-3
	Soda Ash Solution 純鹼	1
Shade Change After Fixing Treatment 固色後變色性	Polyamide 聚乙醯胺	4
	Quaternary Ammonium Salt 四級胺鹽	5
Resin Finishing 樹脂加工	Melamine 三聚氰胺	4
	Glyoxal 乙二醛	2-3
Discharge Ability 拔染性	Neutral 中性	3-4
	Alkaline 鹼性	4-5

× : un-suitable, △ : moderate, ○ : suitable, Dyeing properties are based on 60g/l dye.

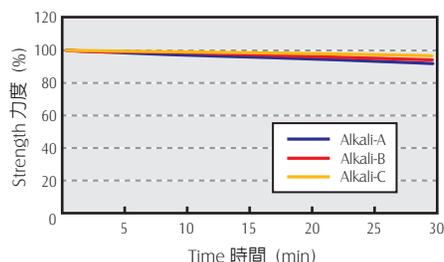
Dyeing Process to Recommend 染程推薦

	Very Good 非常好	Moderate 適用
Exhaustion Process 浸染	✓	
Cold Pad-Batch (CPB)	✓	
Pad dyeing		✓
Pad-Dry Chemical Pad-Steam (PDPS)	✓	
Process		✓
Pad-Dry Baking (PDB)	✓	
壓染		✓
Pad-Steam (PS)	✓	
Emoistfix	✓	
Discharge Printing 拔染印花	✓	

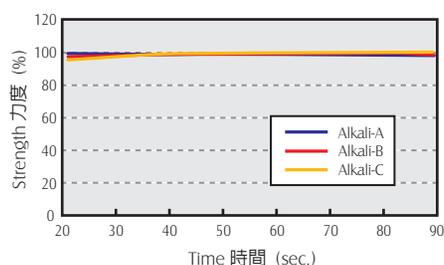
Dependency of Batching Time 捲置時間依存性(CPB)
(Dyeing temperature at 25°C)



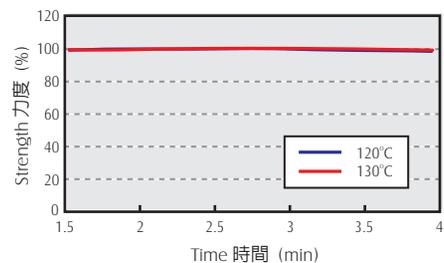
Stability of Padding liquor 染液安定性(CPB)
(Dyeing temperature at 25°C)



Dependency of Steaming Time 蒸處時間依存性(PD/PS)
(Saturated steam at 102°C)



Dependency of Fixation Time 固著時間依存性(Emoistfix)
(Substrate:130x70/32x20 1/3 twill cotton)



Everzol Black ED-R



Fastness Before Fixing Treatment 固色前牢度表

Fastness 牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色	Staining 污染				
					Acetate 醋酸纖維	Cotton 棉	Nylon 尼龍	Polyester 聚酯	Acrylic 壓克力
Washing 耐水洗	ISO CO2	60 g/l	5	5	5	5	5	5	5
	ISO CO3		5	5	5	5	5	5	5
	ISO CO4		5	5	3-4	4-5	5	5	3-4
	ISO CO6-C1S		5	5	5	5	5	5	5
	ISO CO6-C2S		5	5	4-5	5	5	5	5
	M&S C4A		5	5	5	5	5	5	5
Water 耐水		60 g/l	4-5	5	5	5	5	5	5
Hot Water 耐熱水		60 g/l	4-5	5	4-5	3-4	4-5	5	5
Sea Water 耐海水		60 g/l	4-5	5	5	5	5	5	5
Post Mercerizing 後絲光		60 g/l	3-4R	-	3-4	-			
Acid Hydrolysis 酸水解		60 g/l	4-5	5	5	5	5	5	5
Perspiration 耐汗	Acid 酸	60 g/l	4-5	5	5	5	5	5	5
	Alkali 鹼	60 g/l	4-5	5	5	5	5	5	5

Dyeing Depth 染色濃度		10 g/l	30 g/l	60 g/l	80 g/l
Rubbing 耐磨擦	Dry 乾	5	5	4-5	4-5
	Wet 溼	3-4	3	2-3	2-3
		Color Change 變褪色	Color Change 變褪色	Color Change 變褪色	Color Change 變褪色
Bleach 耐漂白	Chlorinated Water 耐氯水(20ppm)	-	-	4-5	-
	Peroxide Bleaching 雙氧水漂白	-	-	4-5	-
Hot-Pressing 耐熱壓	Dry 乾	Immediately	-	4-5	-
		4 hours after	-	4-5	-
	Wet 溼	Immediately	-	4-5	-
		4 hours after	-	4-5	-
M&S C10A (UK-TO) 多次水洗		-	-	4-5	-
Saliva (DIN) 耐唾液		-	-	5	-
Dry Cleaning 耐乾洗		-	-	4-5	-

Lightfastness 耐晒牢度表

Lightfastness 耐晒牢度		Evaluation 評級	Dyeing Depth 染色濃度	Color Change 變褪色 20 AFU	Grade 級數 ISO Blue Scale (藍色票)	
Artificial Light 耐日光 (Xenon-Arc Lamp)			10 g/l	2-3	4	
			30 g/l	3-4	5	
			60 g/l	4	5-6	
			80 g/l	4-5	6	
Perspiration Light 耐汗日光	Acid 酸		10 g/l	2-3	4	
			30 g/l	4	5-6	
			60 g/l	4-5	6	
			80 g/l	4-5	6	
	Alkali 鹼			10 g/l	2-3	3
				30 g/l	3-4	4
				60 g/l	4-5	5-6
				80 g/l	4-5	6
M&S C9A (Detergent Light)			10 g/l	-	4	
			60 g/l	-	4-5	

Note

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此內容資料及建議是在我們細心下完成，但未能涵蓋客戶各種可能發生之情況。此資料謹以作為客戶參考並依現況斟酌使用。

永光化學工業股份有限公司－技術行銷處

The contented information and recommendation presented here were carried out with the utmost care, but cannot be extended to cover every possible case. They are intended to serve as non-binding reference and must be adapted to the prevailing condition.

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Technical Service/Marketing Division



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