

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

# Evercion

English Version



EVERLIGHT

Technical Service/Marketing Division



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# 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

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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

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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



## I . EXHAUST DYEING OF EVERCION H-E/H DYES/ESL

### 1. INTRODUCTION :

Everlight Chemical Industrial Corporation markets a wide range of high quality reactive dyes called : “Evercion H-E/H Dyes” .

Evercion H-E/H dyes are high exhaustion reactive dyes and are best suited in exhaust dyeing of cellulose and its blends with synthetic fibers. The application is in either piece or yarn on all types of bathwise dyeing equipment, such as Jig, Beam, Rapid, Jet, Hank and Package etc.

Exhaust methods are given for the dyeing of cellulose with each range of dyes.

### 2. LIST OF EVERCION H-E/H DYES :

- |                            |                              |
|----------------------------|------------------------------|
| (1) Evercion Yellow H-E6G  | (10) Evercion Blue H-EGN     |
| (2) Evercion Yellow H-E4G  | (11) Evercion Blue H-ERD     |
| (3) Evercion Yellow H-E4R  | (12) Evercion Navy Blue H-ER |
| (4) Evercion Orange E2G    | (13) Evercion Turquoise H-A  |
| (5) Evercion Orange H-ER   | (14) Evercion Green H-E4BD   |
| (6) Evercion Scarlet E2G   | (15) Evercion Yellow ESL     |
| (7) Evercion Scarlet H-E3G | (16) Evercion Deep Red ESL   |
| (8) Evercion Red H-E3B     | (17) Evercion Red ESL        |
| (9) Evercion Red H-E7B     | (18) Evercion Navy ESL       |

### 3. Dyeing quality of water and application of chelating agent :

Neutral soft water supply is best suited for dyeing. Metallic ions in water, such as  $\text{Ca}^{2+}$  &  $\text{Mg}^{2+}$ , often cause uneven dyeing, poor exhaustion and fastness. E.D.TA.can be used as chelaing agent except in the dye bath of Evercion Blue HERD.

#### **4. Dyeing quality of salt :**

Neutral glauber's salt and common salt, containing limit  $\text{Ca}^{2+}$  &  $\text{Mg}^{2++}$ , are suitable for cotton dyeing with reactive dyes. Common salt corrodes dyeing vessels under high temperature has to be avoided carefully. If hard water is being used, sodium hexameta-Phosphate will be recommended as chelating agent.

#### **5. Dissolving :**

Evercion dyes are highly soluble in water. Feed the dyes steadily into dissolving tank by high speed stirrer, running in water at  $40^{\circ}\text{C} \sim 50^{\circ}\text{C}$ . Heating makes dissolving easier, if necessary. Addition of small amount of urea can improve solubility for high concentrated dyes solution.

#### **6. Pre-treatment :**

Cotton substrates before dyeing should be pre-scoured to remove the oil, dirt and sizes etc. The residual chlorine and peroxide after bleaching must be removed as this may cause dyeing problems. Therefore, the quality of pre-treatment such as desizing, scouring, bleaching, mercerizing etc, should be carried out as careful as possible.

#### **7. Washing-off process after dyeing :**

The substantivity of Evercion H-E/H dyes is a function of electrolyte concentration. In order to achieve good wet fastness, the residuals of alkali and electrolyte after dyeing should be removed through washing and hot rinsing, soaping etc.

The recommended rinsing process as below :

- (1) cold rinsing, then hot rinsing, 10 min each cycle.
- (2) boiled soaping with 1-2 g/l soaping agent
- (3) hot rinsing 10min
- (4) cold rinsing, hydro-extracting, drying.

Softening or fixing process should be done after bath is clear. Over-flow rinsing will be recommended to remove unfixed dyes for purpose of avoiding staining. For soaping effect, neutral soaps and anionic detergents or non-ionic detergents are preferred.

Examples for washing-off process :

- |                          |                                        |
|--------------------------|----------------------------------------|
| (1) Jig dyeing           | (2) Piece dyeing                       |
| 2 end over-flow rinsing  | impact washing by cold rinsing 2 times |
| 4 ends boiled soaping    | hot rinsing 10 min at 70°C~80°C        |
| 2 ends hot rinsing       | boiled soaping 10~20 min               |
| 2 ends over-flow rinsing | hot rinsing at 80°C x 10min            |
|                          | Over-flow rinsing till bath is clear.  |

## 8.Recommendation of salt and alkali for Evercion :

Neutral salt acts as electrolyte in reactive dyes dyeing and promotes dyes substantivity. Addition of alkali joins the chemical linkage between reactive dyes and cellulose fibers. Glauber's salt is mainly recommended as electrolyte in reactive dye dyeing. The Application of common salt (NaCl) runs the risk of causing vessel corrosion and dye aggregation. Alkali addition mainly recommends soda ash. If trisodium phosphate ( $\text{Na}_3\text{PO}_4$ ) applied as alkali, pay attention to the related usage and pH.

The popular alkali addition method is feeding diluted alkali at the beginning of dyeing, but taking the risk of uneven dyeing and heavy foaming in bath. The final pH of dye bath should be  $11 \pm 0.2$  for Evercion dyeing with assistance of pH metering device to ensure the accuracy of alkali addition.

### Salt and alkali requirements for Evercion H-E/H dyes :

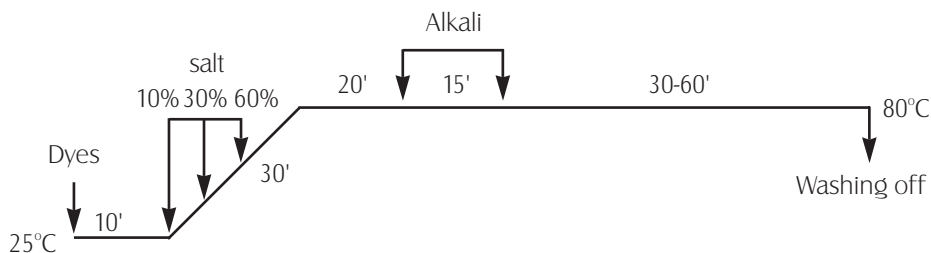
| Dyestuff<br>Depth of shade | Glauber's Salt or Common Salt (g/L) |                                    | Alkali (g/L) |                                 | Fixation<br>Time<br>(min) |
|----------------------------|-------------------------------------|------------------------------------|--------------|---------------------------------|---------------------------|
|                            | Unmercerized<br>Cotton              | Mercerized Cotton<br>Viscose rayon | Soda ash     | Soda ash + Caustic soda(38°B'e) |                           |
| Below 0.5%                 | 30                                  | 20                                 | 10           | 5 + 0.2                         | 30                        |
| 0.5%~1.0%                  | 40                                  | 30                                 | 15           | 5 + 0.2                         | 45                        |
| 1.0%~2.0%                  | 50                                  | 40                                 | 15           | 5 + 0.2                         | 45                        |
| 2.0%~3.0%                  | 60                                  | 50                                 | 20           | 5 + 0.2                         | 60                        |
| 3.0%~4.0%                  | 70                                  | 60                                 | 20           | 5 + 0.2                         | 60                        |
| Above 4.0%                 | 90                                  | 65                                 | 20           | 5 + 0.2                         | 60                        |

Remark : (1) Glauber's salt 100%  
(2) NaOH 38°B'e

## 9. Dyeing :

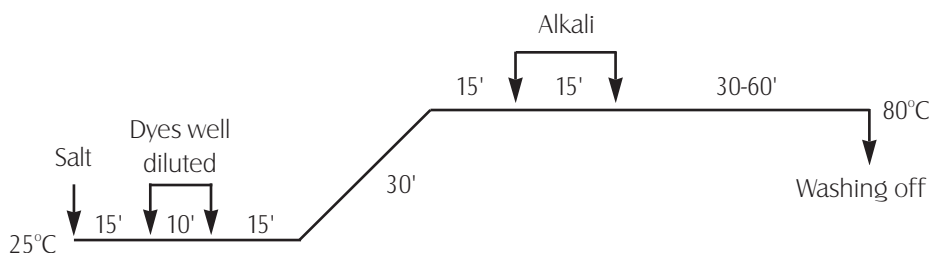
### 9-1 Evercion H-E/H dyeing method

Method 1 : Portionwise addition of salt



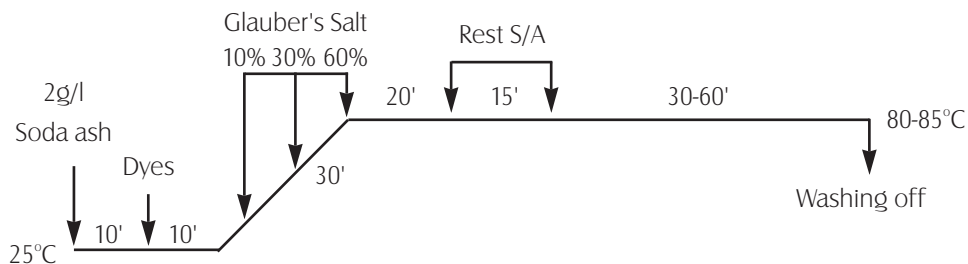
This is the general recommended method of Evercion H-E/H Dyes.

Method 2 : Salt at start

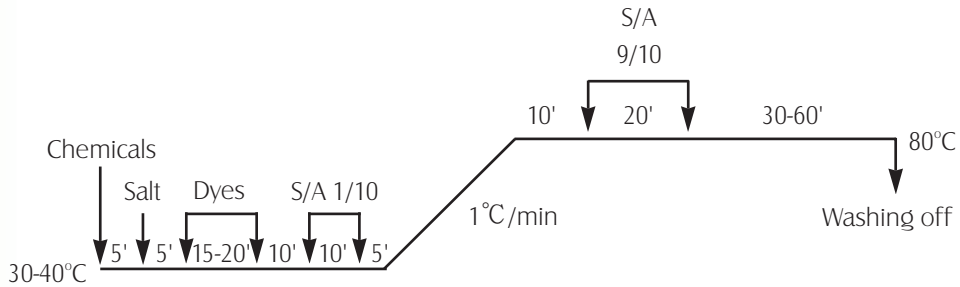


This method is recommended for fully automatic machines of Package, Beam, Winch, Jet etc.

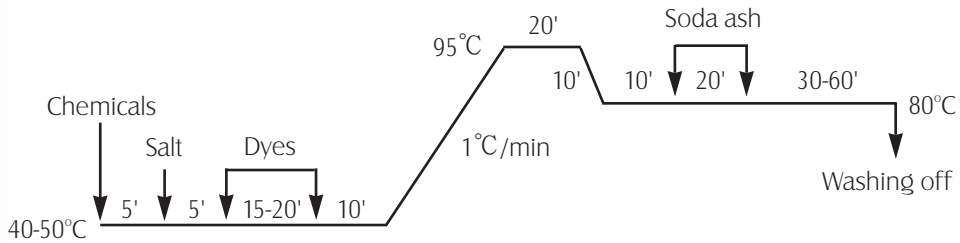
Method 3 : Special dyeing method of Evercion Turquoise H-A



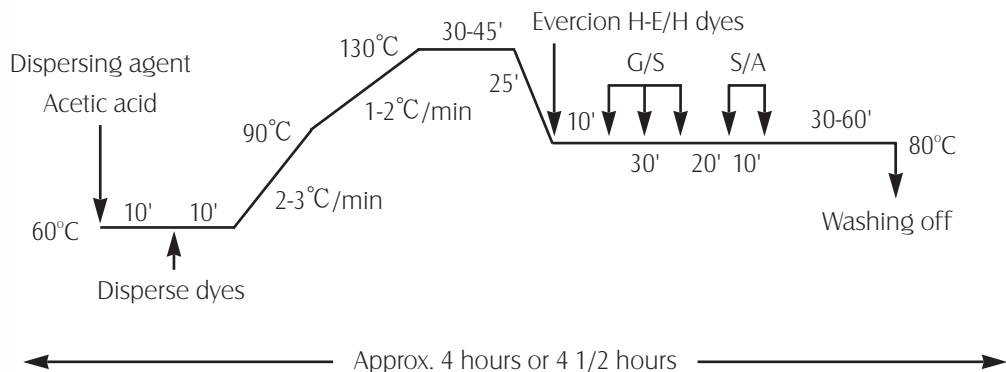
Method 4 : Evercion recommended dyeing method



Method 5 : Migration dyeing method for Cotton/Lycra, Viscose/Lycra, 100%Viscose, especially tough penetrated cotton.



Method 6 : One-bath two-stage dyeing method of T/C blends.



Advantages :

1. Use one-bath, two-stage method to dye disperse and Evercion H-E/H dyes on Jet, Winch, Beam or Package dyeing machine, can save more time and more energy compare with two-bath method.
2. Selected disperse dyes will be cleared well in the fixation stage of Evercion H-E/H dyes with alkali and can show good reproducibility, compatibility and levelling properties.
3. Evercion H-E/H dyes can show all the advantages of one-bath, two-stage method.i.e.good levelness, reproducibility and fastness properties.

Dyeing procedure :

1. Set the bath at 60°C with disperse dyes, 1 g/l of dispersing agent and buffer solution to set the pH value between 5-5.5.
2. Allow 10 minutes for the dyes and chemicals to distribute evenly, raise the temperature over 45 minutes to 130°C and dye 30-45 minutes.
3. Cool the dyebath over 25 minutes to 80°C.
4. Add the Evercion H-E/H dyes.
5. Allow 10 minutes for the dyes and chemicals to distribute evenly, add the Glauber's salt over 30 minutes.
6. Run for 20 minutes, then add soda ash over 10 minutes and dye for 30 to 60 minutes depending on the depth of shade.
7. If shade adjustment of the cellulose component is necessary, the bath should be cooled down to 60°C and added slowly the required Evercion H-E/H dyes over 10 minutes. After a further 10 minutes, the temperature is raised again to 80°C over 20 minutes and dyeing continued for 20 minutes.
8. Two or three warm rinses for 10 minutes per batch at 60°C.
9. Soap 15 minutes at boiling. (Add soaping agent 2g/l)
10. Warm rinse for 10 minutes at 60°C.
11. Cold rinse with overflow.
  - \* For very heavy shades a second soaping treatment is recommended.
  - \* For maximum wet fastness of medium to heavy scarlet and red shades, fixing is necessary, using the fixing agent in an amount equal to one-half of the weight of dye used, should be applied in the final rinsing bath after soaping. Treatment should be for 20 minutes at 40 to 50°C.

## 9-2 Recommendation for dyes combination

### 1. Tertiary shade:

Pale shades:

Evercion Yellow H-E4R

Evercion Red H-E3B

Evercion Blue H-ERD

Medium to heavy shades:

Evercion Yellow H-E4R

Evercion Yellow ESL

Evercion Red H-E7B

(or Evercion Crimson ESL )

Evercion Navy Blue H-ER\*

Evercion Navy ESL

\*Note: Evercion Navy Blue H-ER should not be used in pale shades.

### 2. Scarlet:

Evercion Red H-E3B

Evercion Red H-E7B

Evercion Orange H-ER

(or Evercion Scarlet E2G )

Evercion Scarlet H-E3G

Evercion Deep Red ESL

### 3. Jade, Grass Green:

Evercion Yellow H-E6G

(or Evercion Yellow H-E4G )

Evercion Turquoise H-A

### 4. Aqua, Turquoise:

Evercion Turquoise H-A

Evercion Blue H-EGN

### 5. Royal:

Evercion Blue H-EGN

Evercion Red H-E7B

### 6. Burgundy Maroon:

Evercion Yellow H-E4R

Evercion Yellow ESL

Evercion Red H-E3B

Evercion Crimson ESL

Evercion Navy Blue H-ER

Evercion Navy ESL

### 7. Dark Green:

Evercion Green H-E4BD

Evercion Navy Blue H-ER

Evercion Yellow H-E4R

### 8. Deep Navy:

Evercion Yellow H-E4R

Evercion Red H-E7B

Evercion Navy Blue H-ER

## 10. Shading for Evercion :

If shading recipe exceeds 25% more than original one, refreshing dye bath is necessary.

If shading recipe less 25% than original one, below methods are advisable:

### 10.1 shading without dropping method:

This method is advisable for recipe more than 1%

- |                               |                     |
|-------------------------------|---------------------|
| (a) cooling bath to 60°C      | (d) heating to 80°C |
| (b) feeding well-diluted dyes | (e) holding 30 min  |
| (c) holding 10 min at 60°C    | (f) sampling        |

### 10.2 shading with dropping half bath

This method is advisable for slight shading

- |                                                                                                               |                                                                        |
|---------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|
| (a) dropping half bath, then refilling<br>fresh water to reduce temperature<br>and electrolyte concentration. | (c) holding 10 min<br>(d) heating to 80°C<br>(e) holding 30min at 80°C |
| (b) feeding well-diluted dyes                                                                                 | (f) sampling                                                           |

Addition of electrolyte and alkali for above methods are not necessary.

## 11. Stripping for Evercion :

Stripping recipe for Evercion dyes described as follows:

- |                      |       |
|----------------------|-------|
| Soda ash             | 6 g/l |
| Sodium hydrosulphite | 6 g/l |

In order to achieve better stripping result, a strip with sodium hypochlorite is preferable.

- |       |                              |
|-------|------------------------------|
| NaOCL | 10 g/l (active chlorine 12%) |
|-------|------------------------------|

Treat 20min at room temperature. At last, using 2.5g/l sodium bisulfate to remove the residual chlorine. It's not recommended to use soda ash/sodium hydro-sulphite or caustic/hydrosulphite to complete stripping for Evercion Blue HEGN; Nevertheless, sodium hypochlorite is preferable. Regarding before stripping with soda ash/sodium hydrosulphite for metallized dyes, it's advisable to treat with E.D.T.A. Owing to tendency of stress strength degradation, stripping components containing peroxide is also not suitable for cotton dyeing with metallized dyes.

## II . DYEING PROPERTIES OF EVERCION H-E/H DYES

### 1. Reactivity :

The classification was made on the basis of an amount of alkali (Soda ash) to give a maximum strength.

Assessment :

| Amount of alkali required to give maximum strength (PH) | Reactivity group | Classification      |
|---------------------------------------------------------|------------------|---------------------|
| Below 10.9                                              | I                | High reactivity     |
| 11.0-11.5                                               | II               | Moderate reactivity |
| Above 11.6                                              | III              | Low reactivity      |

### 2. Substantivity :

The classification was made on the basis of a dye-uptake before the addition of alkali.

Assessment :

| Dye-uptake | Substantivity group | Classification         |
|------------|---------------------|------------------------|
| Above 50%  | A                   | High substantivity     |
| 50%-30%    | B                   | Moderate substantivity |
| Below 30%  | C                   | Low substantivity      |

### 3. Migration property :

The migration test was carried out in the following procedure :

A test fabric was adsorbed with dyes by primary exhaustion under the following conditions and a white fabric (unadsorbed) were treated together in a bath at a liquor ratio of 1:20 containing 60 g/l Glauber's salt at 80°C for 20 minutes, followed by fixation with an addition of 20 g/l Soda ash.

|                    |   |                               |
|--------------------|---|-------------------------------|
| Depth of shade     | : | 3.0% o.w.f.                   |
| Glauber's salt     | : | 60 g/l                        |
| Liquor ratio       | : | 1 : 20                        |
| Dyeing temperature | : | 80°C                          |
| Dyeing time        | : | 60 minutes after alkali added |

Assessment :

A difference in depth between the test fabric originally adsorbed with dyes and the fabric migrated was assessed by means of the grey scale for assessing change in color.

#### 4. Washing off property :

10 g unmercerized cotton knit was dyed at 3% o.w.f. by normal method, the dyed sample was washed in the sequence given below to measure the amount of unfixed dyes removed from each step.

- (1) 60°C, 5 min. water
- (2) 80°C, 5 min. hot water
- (3) 98°C, 5 min. soaping (neutral anionic surfactant, 3 g/l)
- (4) 80°C, 5 min. hot water
- (5) 60°C, 5 min. water

#### Assessment :

The washing off property was classified into five classes based on the ratio of the amount of unfixed dyes removed at steps 1 and 2 to the total amount removed.

$$\frac{\text{Amount removed at steps 1 and 2}}{\text{Total amount removed}} \times 100 = (\%)$$

#### Classification :

|   |             |
|---|-------------|
| 5 | 91% or more |
| 4 | 81-90%      |
| 3 | 71-80%      |
| 2 | 61-70%      |
| 1 | 60% or less |

#### 5. Solubility :

##### (a) Without addition of auxiliary

A predetermined amount of dye was dissolved in warm water (50°C), and after cooling down to 25°C, the dye solution was filtered with filter paper. The solubility was measured based on the presence or absence of residue on the filter paper.

##### (b) With an addition of 50 g/l Glauber's salt

A predetermined amount of dye and 50 g/l Glauber's salt were dissolved in warm water (50°C), and then the solubility was measured with the same method as in (a).

## 6. Stripping :

There are many methods of stripping materials dyed with Evercion dyes. Stripping test was made on cotton fabrics dyed at a dyeing depth of 3.0% o.w.f. under the following conditions:

### (1) Alkali treatment :

Caustic soda(38°Be') : 20 ml/l  
Liquor ratio : 1 : 20  
Temperature & Time : 80°C×60 min  
Hot rinsing, neutralizing and cold rinsing.

### (2) Reduction treatment :

Caustic soda(38°Be') : 20 ml/l  
Sodium hydrosulfite : 5 g/l  
Liquor ratio : 1 : 20  
Temperature & Time : 80°C×30 min.  
Hot rinsing, neutralizing and cold rinsing.

### (3) Combined reduction and oxidation treatments :

After the treatment (2), the fabrics are treated in the following chlorine bath :

Sodium hypochlorite (available chlorine 12%) : 8 g/l  
Liquor ratio : 1 : 20  
Temperature & Time : 30°C×30 min.  
The treated fabrics are cold rinsed, dechlorinated with 1 g/l sodium bisulfite at 50°C, hot rinsed and cold rinsed.

### (4) Combined oxidation and reduction treatments :

Sodium hypochlorite (available chlorine 12%) : 20 g/l  
Liquor ratio : 1 : 20  
Temperature & Time : 20-30°C×30 min.  
After the treatment and cold rinsing, the fabrics are further treated under the conditions (2).

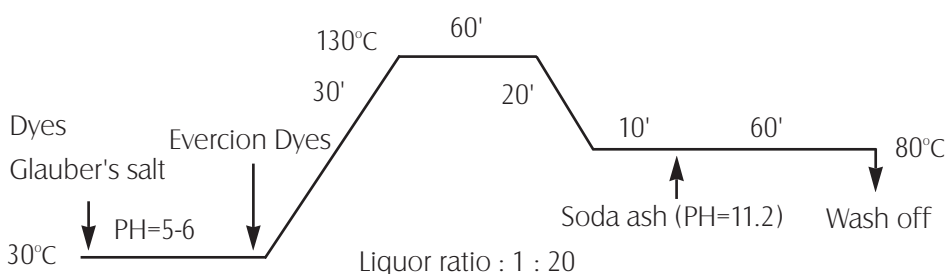
### Assessment :

The degree of stripping was assessed by means of the grey scale for assessing staining.

## 7. Suitability to high temperature one bath dyeing :

The suitability to high temperature one bath dyeing was examined by comparing the depth and color of the dyed fabrics obtained as follows with those of normal method.

### (a) Stability to dyed fabric :



### Assessment :

The shade change of the dyed fabric obtained by the above method was assessed against that obtained by the normal method by means of the grey scale for assessing the change of color.

### (b) Stability to dye liquor :

Depth of shade : 3.0% o.w.f.

Liquor volume : 200 ml (liquor ratio : 1 : 20)

The above dye liquor was adjusted to PH 5, and without adding any fabric to be dyed, treated at 130°C for 60 minutes. After cooling down the liquor to 60°C, unmercerized cotton knit was dyed by the normal method in this dye bath.

### Assessment :

The shade change of the dyed material obtained by the above method was assessed against that obtained by the normal method by means of the grey scale for assessing the change of color.

## 8. Color Constancy :

The shades of a sample of dyed materials under tungsten filament lamp and daylight fluorescent lamp were compared with that under standard light source, and the degree of shade difference was measured and classified as follows.

Symbols in parentheses mean the direction of difference in shade.

Y:Yellower R:Redder B:Bluer G:Greener C:Brighter D:Duller

## 9. Effect of metallic ion :

The effect of metallic ions on the shade and depth of dyeing was examined by adding metallic ions into the dyebath.

|                    |                                                                                                                                    |
|--------------------|------------------------------------------------------------------------------------------------------------------------------------|
| Material           | : Unmercerized cotton kinit                                                                                                        |
| Depth of shade     | : 3.0% o.w.f.                                                                                                                      |
| Glauber's salt     | : 60 g/l                                                                                                                           |
| Soda ash           | : 20 g/l                                                                                                                           |
| Liquor ratio       | : 1 : 20                                                                                                                           |
| Metallic ions      | : Fe <sup>++</sup> ferrous chloride (20 ppm as Fe <sup>++</sup> )<br>Cu <sup>++</sup> copper sulfate (20 ppm as Cu <sup>++</sup> ) |
| Dyeing temperature | : 80°C                                                                                                                             |
| Dyeing time        | : 60 minutes after alkali added                                                                                                    |

### Assessment :

The difference in shade and yield between the samples dyed with and without addition of metallic ion was judged by means of the grey scale for assessing the change in color.

## 10. Effect of fixing agent :

Fixing agent : (A) Polyethylene polyamine.  
(B) Quaternary Ammonium salt.

The effect of fixing agent is measured by the following conditions :

|                    |               |
|--------------------|---------------|
| Depth of shade     | : 3.0% o.w.f. |
| Fixing agent       | : 2.0% o.w.f. |
| Fixing temperature | : 60°C        |
| Fixing time        | : 20 minutes. |

### Assessment :

The difference in shade between the dyed samples with and without fixing was judged by means of grey scale for assessing change in color.

## 11. Effect of finishing resin :

Finishing resin : (A) Melamine resin.  
(B) Glyoxal resin.

The effect of finishing agent was measured by the following conditions :

|                     |                            |
|---------------------|----------------------------|
| Depth of shade      | : 3.0% o.w.f.              |
| Finishing agent     | : 40 g/l                   |
| Catalyst            | : 8 g/l                    |
| Finishing procedure | Padding → Drying → Baking. |
| Padding (pick-up)   | : 70%                      |
| Drying              | : 60°C                     |
| Baking              | : 180°C × 3 minutes.       |

### Assessment :

The difference in shade between the dyed samples with and without finishing was judged by means of grey scale for assessing change in color.

## 12. Exhaustion and fixation curves :

The degree of exhaustion of reactive dyes is considerably affected by various factors such as the form, scouring degree and crystallinity of materials to be dyed, and the degree of fibrous activity by mercerizing.

The degree of exhaustion and fixation of Evercion dyes, were measured on mercerized and unmercerized cotton knits, respectively, under the following conditions as shown in graphs.

|                    |                                 |
|--------------------|---------------------------------|
| Material           | : Unmercerized cotton knit      |
| Depth of shade     | : 3.0% o.w.f.                   |
| Glauber's salt     | : 60 g/l                        |
| Soda ash           | : 20 g/l                        |
| Liquor ratio       | : 1 : 20                        |
| Dyeing temperature | : 80°C                          |
| Dyeing time        | : 60 minutes after alkali added |

## 13. Effect of alkali :

|                    |                                                                                               |
|--------------------|-----------------------------------------------------------------------------------------------|
| Material           | : Unmercerized cotton knit                                                                    |
| Depth of shade     | : 3.0% o.w.f.                                                                                 |
| Glauber's salt     | : 60 g/l                                                                                      |
| Alkali             | : Soda ash      g/l : 5, 10, 15, 20*, 5, 5, 5,<br>NaOH (38°Be') cc/l : -, -, -, -, 0.5, 1, 2, |
| Liquor ratio       | : 1 : 20                                                                                      |
| Dyeing temperature | : 80°C                                                                                        |
| Dyeing time        | : 60 minutes after alkali added                                                               |

#### 14. Effect of liquor ratio :

|                    |                                 |
|--------------------|---------------------------------|
| Material           | : Unmercerized cotton knit      |
| Depth of shade     | : 3.0% o.w.f.                   |
| Glauber's salt     | : 60 g/l                        |
| Soda ash           | : 20 g/l                        |
| Liquor ratio       | : 1:5~1:120                     |
| Dyeing temperature | : 80°C                          |
| Dyeing time        | : 60 minutes after alkali added |

#### 15. Effect of temperature :

|                    |                                 |
|--------------------|---------------------------------|
| Material           | : Unmercerized cotton knit      |
| Depth of shade     | : 3.0% o.w.f.                   |
| Glauber's salt     | : 60 g/l                        |
| Soda ash           | : 20 g/l                        |
| Liquor ratio       | : 1 : 20                        |
| Dyeing temperature | : 60, 70, 80*, 90, 98°C         |
| Dyeing time        | : 60 minutes after alkali added |

#### 16. Effect of Glauber's salt :

|                    |                                 |
|--------------------|---------------------------------|
| Material           | : Unmercerized cotton knit      |
| Depth of shade     | : 0.25%, 1%, 2%, 4%             |
| Glauber's salt     | : 10~80 g/l                     |
| Soda ash           | : 20 g/l                        |
| Liquor ratio       | : 1 : 20                        |
| Dyeing temperature | : 80°C                          |
| Dyeing time        | : 60 minutes after alkali added |

## TEST METHOD OF FASTNESS PROPERTIES

1. The fastness properties were assessed according to the standards of the ISO, AATCC, JIS and CNS, Fastness test results are listed.
2. The fastness properties were tested with dyeing depth of 3.0% o.w.f.
3. The light fastness property is stated for several standard depth.
4. The nature of a change in shade is indicated by the following abbreviations:  
G=greener or Y=yellower R=redder B=bluer D=duller

|                                 |                                                                                                        |
|---------------------------------|--------------------------------------------------------------------------------------------------------|
| 1. Fastness to washing          | ISO 105 C02<br>ISO 105 C03<br>ISO 105 C04<br>ISO 105 C06-C1S<br>ISO 105 C06-C2S<br>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% Acteic acid solution for 30 min, 38°C<br>X 6 hours                                                  |
| 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 (UK-TO)    | 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 |

# Evercion Dyes

| 1 % | 3 % | dyes          | properties                                                                                                                                                                                                                                                                          |
|-----|-----|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|     |     | Yellow H-E6G  | <ol style="list-style-type: none"> <li>1. Good in colorfastness to chlorinated water.</li> <li>2. Good in colorfastness to light.</li> <li>3. Suitable for color match of brilliant green with Turquoise H-A.</li> </ol>                                                            |
|     |     | Yellow H-E4G  | <ol style="list-style-type: none"> <li>1. Suitable for brilliant green in combination with Turquoise H-A.</li> <li>2. Good reproducibility because of the small effects of liquor ratio, dyeing temperature and salt.</li> </ol>                                                    |
|     |     | Yellow H-E4R  | <ol style="list-style-type: none"> <li>1. A primary yellow, broad color range for color match.</li> <li>2. Suitable for a component of salmon in combination with Red H-E3B.</li> <li>3. Economical dye for the color match with Red H-E7B and Navy Blue H-ER of maroon.</li> </ol> |
|     |     | Orange E2G    | <ol style="list-style-type: none"> <li>1. High color yield.</li> <li>2. Good in colorfastness to chlorinated water.</li> <li>3. Suitable for color match of brilliant red and orange with Red H-E3B.</li> </ol>                                                                     |
|     |     | Orange H-ER   | <ol style="list-style-type: none"> <li>1. Economical brilliant orange with high color yield.</li> <li>2. Good in colorfastness to chlorinated water.</li> <li>3. Suitable for color match of with Red H-E3B.</li> </ol>                                                             |
|     |     | Scarlet E2G   | <ol style="list-style-type: none"> <li>1. High color yield, specially recommend for brilliant scalet with deep shades.</li> <li>2. Good in colorfastness to chlorinated water.</li> </ol>                                                                                           |
|     |     | Scarlet H-E3G | <ol style="list-style-type: none"> <li>1. High color yield and good build-up.</li> <li>2. Suitable for the combination with Red H-E3B or Yellow H-E4R.</li> </ol>                                                                                                                   |
|     |     | Red H-E3B     | <ol style="list-style-type: none"> <li>1. Economical brilliant red with high color yield.</li> <li>2. Suitable for a component of red in combination with Yellow H-E4R or Orange E-2G for trichromatic.</li> </ol>                                                                  |
|     |     | Red H-E7B     | <ol style="list-style-type: none"> <li>1. A primary red, broad color range for color match.</li> <li>2. Suitable for brilliant red with good reproducibility in combination with Scarlet E2G or Red H-E3B.</li> <li>3. Not suitable for pale violet with Blue H-EGN.</li> </ol>     |
|     |     | Blue H-EGN    | <ol style="list-style-type: none"> <li>1. Excellent in build-up.</li> <li>2. Good in colorfastness to light.</li> <li>3. Recommended for royal deep shades with high economy.</li> <li>4. Not suitable for pale shades.</li> </ol>                                                  |
|     |     | Blue H-ERD    | <ol style="list-style-type: none"> <li>1. A primary light blue of trichromatic combination.</li> <li>2. Excellent fastness to light, especially in pale shade.</li> <li>3. Good leveling property, so suitable for dyeing in pale to medium shade.</li> </ol>                       |

# Evercion Dyes

| 1 % | 3 % | dyes           | properties                                                                                                                                                                                                                                                                                                                           |
|-----|-----|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|     |     | Navy Blue H-ER | <ol style="list-style-type: none"> <li>1. An economical versatile heavy reddish Navy.</li> <li>2. Very good combinability with Red H-E7B, Red H-E3B, Yellow H-E4R for medium to deep shade.</li> <li>3. Not suitable for pale shades.</li> </ol>                                                                                     |
|     |     | Turquoise H-A  | <ol style="list-style-type: none"> <li>1. High color yield.</li> <li>2. For brilliant blue, green and turq. shades.</li> <li>3. Suitable for color match with Yellow H-E4G.</li> <li>4. Sodium sulfate is recommended as a salt.</li> </ol>                                                                                          |
|     |     | Green H-E4BD   | <ol style="list-style-type: none"> <li>1. High color yield and good build-up.</li> <li>2. Poor colorfastness to chlorinated water.</li> </ol>                                                                                                                                                                                        |
|     |     | Yellow ESL     | <ol style="list-style-type: none"> <li>1. High color yield and good build-up.</li> <li>2. A primary yellow, broad color range for color match.</li> <li>3. Good leveling and easy washing off, especially suitable with Red ESL and Navy ESL for trichromatic.</li> <li>4. Good in colorfastness to chlorinated water.</li> </ol>    |
|     |     | Deep Red ESL   | <ol style="list-style-type: none"> <li>1. High color yield and good build-up.</li> <li>2. Good washing off property.</li> </ol>                                                                                                                                                                                                      |
|     |     | Red ESL        | <ol style="list-style-type: none"> <li>1. High color yield and good build-up.</li> <li>2. A primary red, broad color range for color match.</li> <li>3. Good leveling and easy washing off, especially suitable with Yellow ESL and Navy ESL for trichromatic.</li> </ol>                                                            |
|     |     | Crimson ESL    | <ol style="list-style-type: none"> <li>1. High color yield and good build-up</li> <li>2. A primary red, broad color range for color match</li> <li>3. Good levelling, easy washing-off, excellent chlorinated water fastness</li> <li>4. Exceptional compatibility with Yellow ESL and Navy ESL for medium to heavy shade</li> </ol> |
|     |     | Navy ESL       | <ol style="list-style-type: none"> <li>1. High color yield and good build-up.</li> <li>2. Good leveling and easy washing off, especially suitable with Yellow ESL and Red ESL for trichromatic.</li> <li>3. Interested in an important component of medium to heavy shades, although it's not suitable in pale shades.</li> </ol>    |

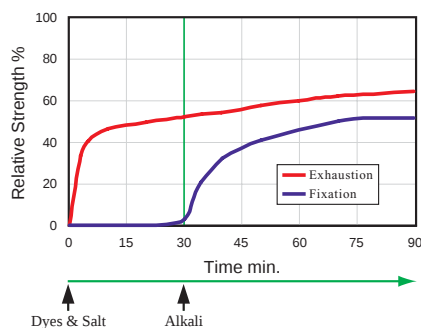




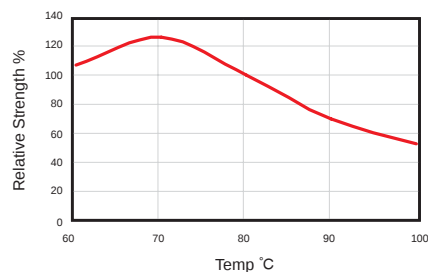
## Dyeing Properties 特性

| Characteristics                                     |                                  | Evaluation |
|-----------------------------------------------------|----------------------------------|------------|
| Reactivity 反應性                                      |                                  | II         |
| Substantivity 親和性                                   |                                  | A          |
| Migration 移染性                                       |                                  | 5          |
| Washing off 洗淨性                                     |                                  | 3-4        |
| Solubility g/l<br>溶解度                               | 50°C Water                       | 70         |
|                                                     | 50°C Water+50 g/l Salt           | 50         |
| High temp.<br>Dyeing<br>高溫染色性                       | Dyed fabric 色布                   | 3-4        |
|                                                     | Dye Liquor 染浴                    | 4-5        |
| Color<br>constancy<br>色恆性                           | Tungsten Lamp                    | G          |
|                                                     | TL 84 Lamp                       | G          |
| Metallic ions<br>金屬離子                               | Fe <sup>++</sup> 鐵               | 5          |
|                                                     | Cu <sup>++</sup> 銅               | 4-5        |
| Resin<br>finishing<br>樹脂加工                          | Melamine 三聚氰胺                    | 4          |
|                                                     | Glyoxal 乙二醛                      | 4          |
| Shade change<br>after fixing<br>treatment<br>固色後變色性 | Polyamide 聚乙醯胺                   | 4-5        |
|                                                     | Quaternary ammonium salt<br>四級胺鹽 | 4-5        |

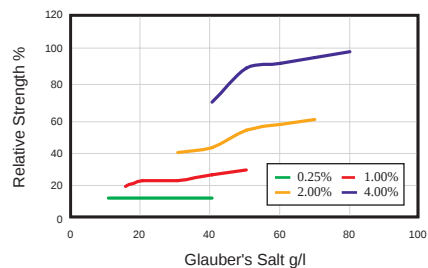
吸盡固著曲線 Exhaustion & Fixation



溫度依存性 Dependency on temperature



芒硝依存性 Dependency on Glauber's salt



# Evercion Yellow H-E6G

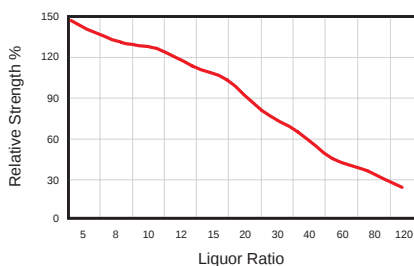
## Fastness before fixing treatment 固色前牢度表

| Evaluation           |             | Depth of shade<br>染色濃度 | Color change<br>變褪色 | Staining 汚染     |             |             |                 |                |            | Evaluation                   |               | Depth of shade<br>染色濃度 | Grade<br>級數 |      |
|----------------------|-------------|------------------------|---------------------|-----------------|-------------|-------------|-----------------|----------------|------------|------------------------------|---------------|------------------------|-------------|------|
|                      |             |                        |                     | Acetate<br>醋酸纖維 | Cotton<br>棉 | Nylon<br>尼龍 | Polyester<br>聚酯 | Acrylic<br>壓克力 | Wool<br>羊毛 |                              |               |                        |             |      |
| Fastness             |             |                        |                     |                 |             |             |                 |                |            | Fastness                     |               |                        |             |      |
| Washing<br>耐水洗       | ISO C02     | 3.0%                   | 5                   | 5               | 5           | 5           | 5               | 5              | 5          | Chlorinated Water耐氯水(20ppm)  |               | 3.0%                   | 4R          |      |
|                      | ISO C03     |                        | 5                   | 5               | 5           | 5           | 5               | 5              | 5          | Peroxide Bleaching雙氧水漂白      |               |                        | 3           |      |
|                      | ISO C04     |                        | 5                   | 5               | 5           | 5           | 5               | 5              | 5          | Rubbing<br>耐摩擦               | Dry 乾         | 3.0%                   | 5           |      |
|                      | ISO C06-C1S |                        | 5                   | 5               | 5           | 5           | 5               | 5              | 5          |                              | Wet 濕         | 4-5                    |             |      |
|                      | ISO C06-C2S |                        | 5                   | 5               | 5           | 5           | 5               | 5              | 5          | M&S C9A<br>(detergent Light) |               | 0.3%                   | >4-5        |      |
|                      | M&S C4A     |                        | 5                   | 5               | 5           | 5           | 5               | 5              | 5          |                              |               | 3.0%                   | >4-5        |      |
| Water 耐水             |             | 3.0%                   | 4-5                 | 5               | 5           | 4-5         | 5               | 5              | 4-5        | M&S C10A (UK-TO)             |               | 3.0%                   | 4-5         |      |
| Hot Water 耐熱水        |             | 3.0%                   | 5                   | 5               | 5           | 5           | 5               | 5              | 4-5        | Saliva (DIN) 耐唾液             |               | 3.0%                   | 4-5         |      |
| Sea Water 耐海水        |             | 3.0%                   | 5                   | 5               | 5           | 5           | 5               | 5              | 4-5        | Hot-<br>Pressing<br>耐熱壓      | Dry 乾         | Immediately            | 3.0%        | 4-5R |
| Post mercerizing 後絲光 |             | 3.0%                   | 3-4R                |                 | 4-5         |             |                 |                |            |                              | 4 Hours after | 4-5                    |             |      |
| Acid hydrolysis 酸水解  |             | 3.0%                   | 4                   | 4-5             | 4           | 3           | 4-5             | 4-5            | 4          |                              | Wet 濕         | Immediately            | 3.0%        | 4-5G |
| Perspiration<br>耐汗   | Acid 酸      | 3.0%                   | 4-5                 | 5               | 4-5         | 4-5         | 5               | 5              | 4-5        |                              |               | 4 Hours after          |             | 4    |
|                      | Alkali 鹼    |                        | 4-5                 | 5               | 4-5         | 4-5         | 5               | 5              | 4-5        | Dry cleaning 耐乾洗             |               | 3.0%                   | 4-5         |      |

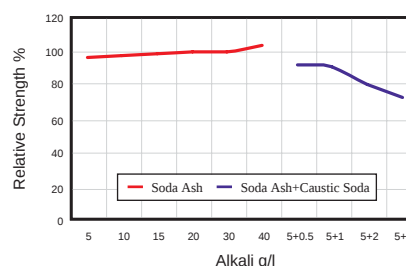
## Light Fastness 日光堅牢度

| Evaluation                                  |  | Dyeing<br>Depth<br>染色濃度 | Color<br>Change<br>20 AFU | Grade<br>ISO<br>Blue Scale | Evaluation                 |                | Dyeing<br>Depth<br>染色濃度 | Color<br>Change<br>20 AFU | Grade<br>ISO<br>Blue Scale |
|---------------------------------------------|--|-------------------------|---------------------------|----------------------------|----------------------------|----------------|-------------------------|---------------------------|----------------------------|
| Artificial Light<br>(Xenon-Arc Lamp)<br>耐日光 |  | 0.1 %                   | 1                         | 3                          | Perspiration Light<br>耐汗日光 | Acid<br>Alkali | 3.0 %                   | 4-5                       | 5                          |
|                                             |  | 0.3 %                   | 2-3                       | 3-4                        |                            |                |                         | 4                         | 5                          |
|                                             |  | 1.0 %                   | 3                         | 4-5                        |                            |                |                         |                           |                            |
|                                             |  | 3.0 %                   | 4                         | 5                          |                            |                |                         |                           |                            |
|                                             |  | 6.0 %                   | 4-5                       | 6                          |                            |                |                         |                           |                            |

浴比依存性 Dependency on Liquor ratio



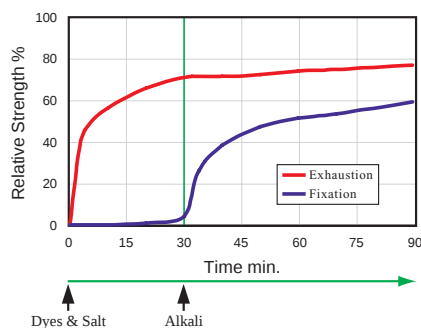
鹼依存性 Dependency on alkali



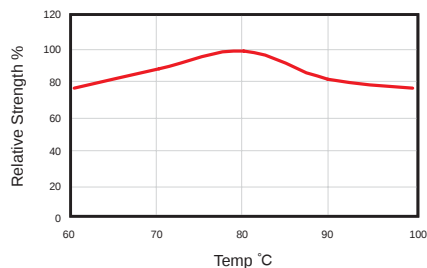
## Dyeing Properties 特性

| Characteristics                                     |                                  | Evaluation |
|-----------------------------------------------------|----------------------------------|------------|
| Reactivity 反應性                                      |                                  | II         |
| Substantivity 親和性                                   |                                  | A          |
| Migration 移染性                                       |                                  | 5          |
| Washing off 洗淨性                                     |                                  | 3-4        |
| Solubility g/l<br>溶解度                               | 50°C Water                       | 50         |
|                                                     | 50°C Water+50 g/l Salt           | 10 ↓       |
| High temp.<br>Dyeing<br>高溫染色性                       | Dyed fabric 色布                   | 4-5        |
|                                                     | Dye Liquor 染浴                    | 4-5        |
| Color<br>constancy<br>色恆性                           | Tungsten Lamp                    | B          |
|                                                     | TL 84 Lamp                       | B          |
| Metallic ions<br>金屬離子                               | Fe <sup>++</sup> 鐵               | 4-5        |
|                                                     | Cu <sup>++</sup> 銅               | 4RD        |
| Resin<br>finishing<br>樹脂加工                          | Melamine 三聚氰胺                    | 4-5G       |
|                                                     | Glyoxal 乙二醛                      | 5          |
| Shade change<br>after fixing<br>treatment<br>固色後變色性 | Polyamide 聚乙醯胺                   | 4-5G       |
|                                                     | Quaternary ammonium salt<br>四級胺鹽 | 5          |

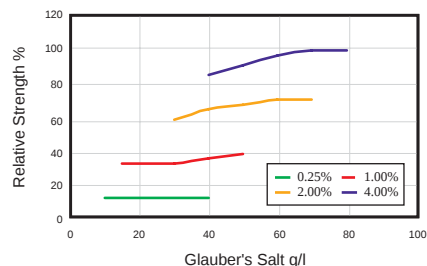
吸盡固著曲線 Exhaustion & Fixation



溫度依存性 Dependency on temperature



芒硝依存性 Dependency on Glauber's salt



# Evercion Yellow H-E4G

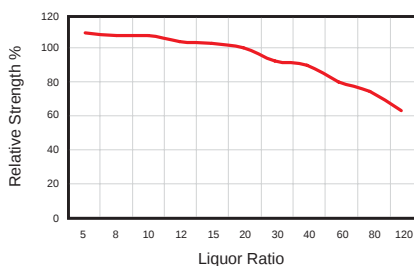
## Fastness before fixing treatment 固色前牢度表

| Evaluation           |             | Depth of shade<br>染色濃度 | Color change<br>變褪色 | Staining 污染     |             |             |                 |                |            | Evaluation                   |       | Depth of shade<br>染色濃度 | Grade<br>級數 |   |
|----------------------|-------------|------------------------|---------------------|-----------------|-------------|-------------|-----------------|----------------|------------|------------------------------|-------|------------------------|-------------|---|
|                      |             |                        |                     | Acetate<br>醋酸纖維 | Cotton<br>棉 | Nylon<br>尼龍 | Polyester<br>聚酯 | Acrylic<br>壓克力 | Wool<br>羊毛 |                              |       |                        |             |   |
| Fastness             |             |                        |                     |                 |             |             |                 |                |            | Fastness                     |       |                        |             |   |
| Washing<br>耐水洗       | ISO C02     | 3.0%                   | 5                   | 5               | 5           | 5           | 5               | 5              | 5          | Chlorinated Water耐氯水(20ppm)  |       | 3.0%                   | 3           |   |
|                      | ISO C03     |                        | 5                   | 5               | 5           | 5           | 5               | 5              | 5          | Peroxide Bleaching雙氧水漂白      |       |                        | 4R          |   |
|                      | ISO C04     |                        | 5                   | 5               | 5           | 5           | 5               | 5              | 5          | Rubbing<br>耐摩擦               | Dry 乾 | 3.0%                   | 4-5         |   |
|                      | ISO C06-C1S |                        | 5                   | 5               | 5           | 5           | 5               | 5              | 5          |                              | Wet 濕 |                        | 4           |   |
|                      | ISO C06-C2S |                        | 5                   | 5               | 5           | 5           | 5               | 5              | 5          | M&S C9A<br>(detergent Light) |       | 0.3%                   | >4-5        |   |
|                      | M&S C4A     |                        | 5                   | 4-5             | 5           | 5           | 5               | 5              | 5          |                              |       | 3.0%                   | >4-5        |   |
| Water 耐水             |             | 3.0%                   | 5                   | 5               | 5           | 4-5         | 5               | 5              | 5          | M&S C10A (UK-TO)             |       | 3.0%                   | 4-5         |   |
| Hot Water 耐熱水        |             | 3.0%                   | 5                   | 4-5             | 5           | 5           | 5               | 5              | 5          | Saliva (DIN) 耐唾液             |       | 3.0%                   | 5           |   |
| Sea Water 耐海水        |             | 3.0%                   | 4-5                 | 5               | 5           | 5           | 5               | 5              | 5          | Hot-Pressing<br>耐熱壓          | Dry 乾 | Immediately            | 3.0%        | 5 |
| Post mercerizing 後絲光 |             | 3.0%                   | 2-3R                |                 | 4-5         |             |                 |                |            |                              |       | 4 Hours after          |             | 5 |
| Acid hydrolysis 酸水解  |             | 3.0%                   | 4R                  | 4-5             | 4-5         | 5           | 5               | 5              | 4-5        |                              | Wet 濕 | Immediately            | 3.0%        | 5 |
| Perspiration<br>耐汗   | Acid 酸      | 3.0%                   | 4-5                 | 5               | 4-5         | 5           | 5               | 5              | 5          |                              |       | 4 Hours after          |             | 5 |
|                      | Alkali 鹼    |                        | 4-5                 | 5               | 5           | 5           | 5               | 5              | 5          | Dry cleaning 耐乾洗             |       | 3.0%                   | 4-5         |   |

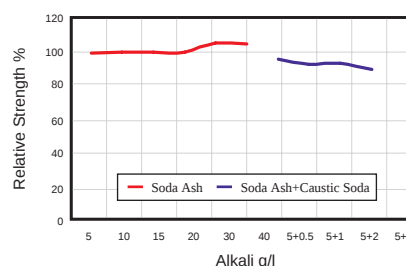
## Light Fastness 日光堅牢度

| Evaluation                                  |  | Dyeing<br>Depth<br>染色濃度 | Color<br>Change<br>20 AFU | Grade<br>ISO<br>Blue Scale | Evaluation                 |                | Dyeing<br>Depth<br>染色濃度 | Color<br>Change<br>20 AFU | Grade<br>ISO<br>Blue Scale |
|---------------------------------------------|--|-------------------------|---------------------------|----------------------------|----------------------------|----------------|-------------------------|---------------------------|----------------------------|
| Artificial Light<br>(Xenon-Arc Lamp)<br>耐日光 |  | 0.1 %                   | 2-3                       | 4                          | Perspiration Light<br>耐汗日光 | Acid<br>Alkali | 3.0 %                   | 4-5                       | 5-6                        |
|                                             |  | 0.3 %                   | 3                         | 4-5                        |                            |                |                         | 3-4                       | 5-6                        |
|                                             |  | 1.0 %                   | 4                         | 4-5                        |                            |                |                         |                           |                            |
|                                             |  | 3.0 %                   | 4-5                       | 5-6                        |                            |                |                         |                           |                            |
|                                             |  | 6.0 %                   | 4-5                       | 5-6                        |                            |                |                         |                           |                            |

浴比依存性 Dependency on Liquor ratio



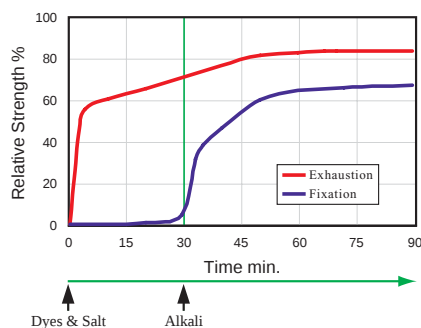
鹼依存性 Dependency on alkali



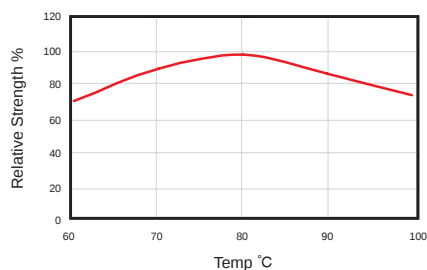
## Dyeing Properties 特性

| Characteristics                                     |                                  | Evaluation |
|-----------------------------------------------------|----------------------------------|------------|
| Reactivity 反應性                                      |                                  | II         |
| Substantivity 親和性                                   |                                  | A          |
| Migration 移染性                                       |                                  | 4-5        |
| Washing off 洗淨性                                     |                                  | 3          |
| Solubility g/l<br>溶解度                               | 50°C Water                       | 100        |
|                                                     | 50°C Water+50 g/l Salt           | 100        |
| High temp.<br>Dyeing<br>高溫染色性                       | Dyed fabric 色布                   | 1-2        |
|                                                     | Dye Liquor 染浴                    | 1          |
| Color<br>constancy<br>色恆性                           | Tungsten Lamp                    | G          |
|                                                     | TL 84 Lamp                       | G          |
| Metallic ions<br>金屬離子                               | Fe <sup>++</sup> 鐵               | 4-5D       |
|                                                     | Cu <sup>++</sup> 銅               | 4-5G       |
| Resin<br>finishing<br>樹脂加工                          | Melamine 三聚氰胺                    | 4-5R       |
|                                                     | Glyoxal 乙二醛                      | 5          |
| Shade change<br>after fixing<br>treatment<br>固色後變色性 | Polyamide 聚乙醯胺                   | 4-5R       |
|                                                     | Quaternary ammonium salt<br>四級胺鹽 | 5          |

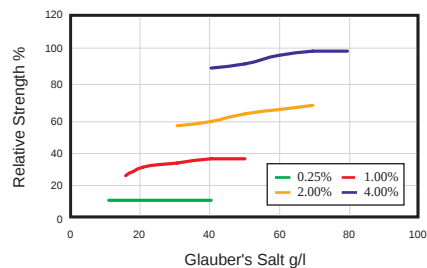
吸盡固著曲線 Exhaustion & Fixation



溫度依存性 Dependency on temperature



芒硝依存性 Dependency on Glauber's salt



# Evercion Yellow H-E4R

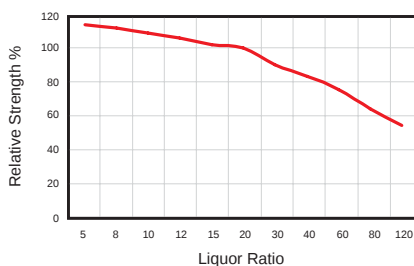
## Fastness before fixing treatment 固色前牢度表

| Evaluation           |             | Depth of shade<br>染色濃度 | Color change<br>變褪色 | Staining 污染     |             |             |                 |                |            | Evaluation                   |                  | Depth of shade<br>染色濃度 | Grade<br>級數 |      |
|----------------------|-------------|------------------------|---------------------|-----------------|-------------|-------------|-----------------|----------------|------------|------------------------------|------------------|------------------------|-------------|------|
|                      |             |                        |                     | Acetate<br>醋酸纖維 | Cotton<br>棉 | Nylon<br>尼龍 | Polyester<br>聚酯 | Acrylic<br>壓克力 | Wool<br>羊毛 |                              |                  |                        |             |      |
| Fastness             |             |                        |                     |                 |             |             |                 |                |            | Fastness                     |                  |                        |             |      |
| Washing<br>耐水洗       | ISO C02     | 3.0%                   | 5                   | 5               | 5           | 5           | 5               | 5              | 5          | Chlorinated Water耐氯水(20ppm)  |                  | 3.0%                   | 4           |      |
|                      | ISO C03     |                        | 5                   | 5               | 5           | 5           | 5               | 5              | 5          | Peroxide Bleaching雙氧水漂白      |                  |                        | 4           |      |
|                      | ISO C04     |                        | 5                   | 5               | 5           | 5           | 5               | 5              | 5          | Rubbing<br>耐摩擦               | Dry 乾            | 3.0%                   | 4-5         |      |
|                      | ISO C06-C1S |                        | 5                   | 5               | 5           | 5           | 5               | 5              | 5          |                              | Wet 濕            |                        | 3-4         |      |
|                      | ISO C06-C2S |                        | 5                   | 5               | 5           | 5           | 5               | 5              | 5          | M&S C9A<br>(detergent Light) |                  | 0.3%                   | >4-5        |      |
|                      | M&S C4A     |                        | 5                   | 5               | 5           | 5           | 5               | 5              | 5          |                              |                  | 3.0%                   | >4-5        |      |
| Water 耐水             |             | 3.0%                   | 4-5                 | 5               | 5           | 4           | 5               | 5              | 5          | M&S C10A (UK-TO)             |                  | 3.0%                   | 4-5         |      |
| Hot Water 耐熱水        |             | 3.0%                   | 5                   | 5               | 5           | 5           | 5               | 5              | 5          | Saliva (DIN) 耐唾液             |                  | 3.0%                   | 4-5         |      |
| Sea Water 耐海水        |             | 3.0%                   | 4                   | 5               | 4-5         | 5           | 5               | 5              | 5          | Hot-<br>Pressing<br>耐熱壓      | Dry<br>乾         | Immediately            | 3.0%        | 4D   |
| Post mercerizing 後絲光 |             | 3.0%                   | 2-3R                |                 | 4-5         |             |                 |                |            |                              |                  | 4 Hours after          |             | 5    |
| Acid hydrolysis 酸水解  |             | 3.0%                   | 3-4                 | 5               | 3           | 3           | 5               | 5              | 4          |                              | Wet<br>濕         | Immediately            | 3.0%        | 4-5D |
| Perspiration<br>耐汗   |             | 3.0%                   | 4-5                 | 5               | 4           | 4           | 5               | 5              | 5          |                              |                  | 4 Hours after          |             | 5    |
|                      |             |                        |                     | 4-5             | 5           | 4           | 5               | 5              | 5          | 5                            | Dry cleaning 耐乾洗 |                        | 3.0%        | 4-5  |

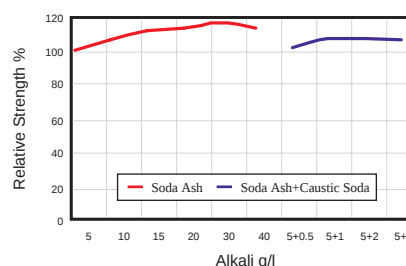
## Light Fastness 日光堅牢度

| Evaluation                                  |  | Dyeing<br>Depth<br>染色濃度 | Color<br>Change<br>20 AFU | Grade<br>ISO<br>Blue Scale | Evaluation                 |                | Dyeing<br>Depth<br>染色濃度 | Color<br>Change<br>20 AFU | Grade<br>ISO<br>Blue Scale |
|---------------------------------------------|--|-------------------------|---------------------------|----------------------------|----------------------------|----------------|-------------------------|---------------------------|----------------------------|
| Artificial Light<br>(Xenon-Arc Lamp)<br>耐日光 |  | 0.1 %                   | 3-4                       | 4                          | Perspiration Light<br>耐汗日光 | Acid<br>Alkali | 3.0 %                   | 4-5                       | 5-6                        |
|                                             |  | 0.3 %                   | 4                         | 5                          |                            |                |                         | 4                         | 5-6                        |
|                                             |  | 1.0 %                   | 4-5                       | 5                          |                            |                |                         |                           |                            |
|                                             |  | 3.0 %                   | >4-5                      | 6                          |                            |                |                         |                           |                            |
|                                             |  | 6.0 %                   | >4-5                      | 6                          |                            |                |                         |                           |                            |

浴比依存性 Dependency on Liquor ratio



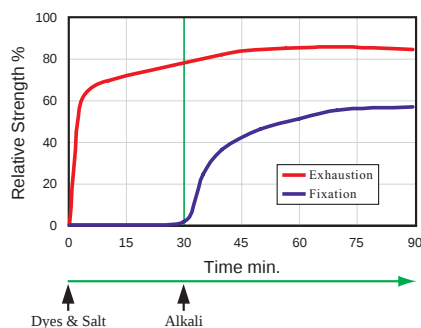
鹼依存性 Dependency on alkali



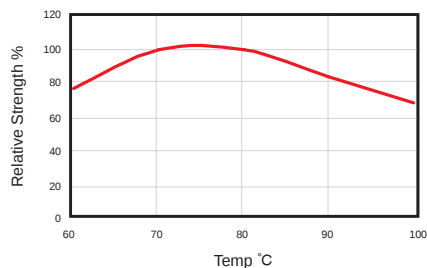
## Dyeing Properties 特性

| Characteristics                                     |                                  | Evaluation |
|-----------------------------------------------------|----------------------------------|------------|
| Reactivity 反應性                                      |                                  | I          |
| Substantivity 親和性                                   |                                  | A          |
| Migration 移染性                                       |                                  | 5          |
| Washing off 洗淨性                                     |                                  | 4          |
| Solubility g/l<br>溶解度                               | 50°C Water                       | 100        |
|                                                     | 50°C Water+50 g/l Salt           | 50         |
| High temp.<br>Dyeing<br>高溫染色性                       | Dyed fabric 色布                   | 3D         |
|                                                     | Dye Liquor 染浴                    | 3D         |
| Color<br>constancy<br>色恆性                           | Tungsten Lamp                    | Y          |
|                                                     | TL 84 Lamp                       | Y          |
| Metallic ions<br>金屬離子                               | Fe <sup>++</sup> 鐵               | 5          |
|                                                     | Cu <sup>++</sup> 銅               | 2-3RD      |
| Resin<br>finishing<br>樹脂加工                          | Melamine 三聚氰胺                    | 4-5Y       |
|                                                     | Glyoxal 乙二醛                      | 5          |
| Shade change<br>after fixing<br>treatment<br>固色後變色性 | Polyamide 聚乙醯胺                   | 4Y         |
|                                                     | Quaternary ammonium salt<br>四級胺鹽 | 4-5        |

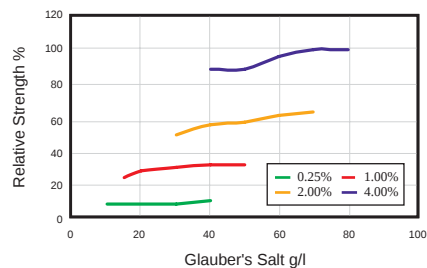
吸盡固著曲線 Exhaustion & Fixation



溫度依存性 Dependency on temperature



芒硝依存性 Dependency on Glauber's salt



# Evercion Orange E2G

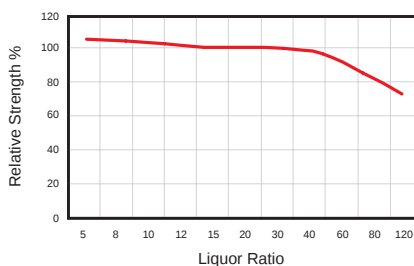
## Fastness before fixing treatment 固色前牢度表

| Evaluation           |             | Depth of shade<br>染色濃度 | Color change<br>變褪色 | Staining 污染     |             |             |                 |                |            | Evaluation                   |          | Depth of shade<br>染色濃度 | Grade<br>級數 |      |
|----------------------|-------------|------------------------|---------------------|-----------------|-------------|-------------|-----------------|----------------|------------|------------------------------|----------|------------------------|-------------|------|
|                      |             |                        |                     | Acetate<br>醋酸纖維 | Cotton<br>棉 | Nylon<br>尼龍 | Polyester<br>聚酯 | Acrylic<br>壓克力 | Wool<br>羊毛 |                              |          |                        |             |      |
| Fastness             |             |                        |                     |                 |             |             |                 |                |            | Fastness                     |          |                        |             |      |
| Washing<br>耐水洗       | ISO C02     | 3.0%                   | 4-5                 | 5               | 4           | 5           | 5               | 5              | 5          | Chlorinated Water耐氯水(20ppm)  |          | 3.0%                   | 4           |      |
|                      | ISO C03     |                        | 4                   | 5               | 4           | 5           | 5               | 5              | 5          | Peroxide Bleaching雙氧水漂白      |          |                        | 4           |      |
|                      | ISO C04     |                        | 4                   | 5               | 3           | 5           | 5               | 5              | 5          | Rubbing<br>耐摩擦               | Dry 乾    | 3.0%                   | 4-5         |      |
|                      | ISO C06-C1S |                        | 5                   | 5               | 3-4         | 5           | 5               | 5              | 5          |                              | Wet 濕    |                        | 3-4         |      |
|                      | ISO C06-C2S |                        | 5                   | 5               | 3-4         | 5           | 5               | 5              | 5          | M&S C9A<br>(detergent Light) |          | 0.3%                   | >4-5        |      |
|                      | M&S C4A     |                        | 5                   | 5               | 3-4         | 5           | 5               | 5              | 5          |                              |          | 3.0%                   | >4-5        |      |
| Water 耐水             |             | 3.0%                   | 4                   | 5               | 4           | 4-5         | 5               | 5              | 4-5        | M&S C10A (UK-TO)             |          | 3.0%                   | 4-5         |      |
| Hot Water 耐熱水        |             | 3.0%                   | 4-5                 | 5               | 4-5         | 5           | 5               | 5              | 5          | Saliva (DIN) 耐唾液             |          | 3.0%                   | 4-5         |      |
| Sea Water 耐海水        |             | 3.0%                   | 4                   | 5               | 4-5         | 5           | 5               | 5              | 5          | Hot-<br>Pressing<br>耐熱壓      | Dry<br>乾 | Immediately            | 3.0%        | 2-3R |
| Post mercerizing 後絲光 |             | 3.0%                   | 2Y                  |                 | 4-5         |             |                 |                |            |                              |          | 4 Hours after          |             | 4-5  |
| Acid hydrolysis 酸水解  |             | 3.0%                   | 4                   | 5               | 4-5         | 4-5         | 5               | 5              | 4          |                              | Wet<br>濕 | Immediately            | 3.0%        | 3R   |
| Perspiration<br>耐汗   | Acid 酸      | 3.0%                   | 4                   | 5               | 4           | 4           | 5               | 5              | 5          |                              |          | 4 Hours after          |             | 5    |
|                      | Alkali 鹼    |                        | 4-5                 | 5               | 4           | 4-5         | 5               | 5              | 5          | Dry cleaning 耐乾洗             |          | 3.0%                   | 4-5         |      |

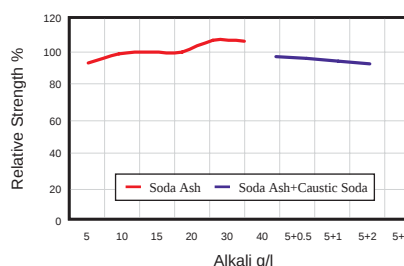
## Light Fastness 日光堅牢度

| Evaluation                                  |  | Dyeing<br>Depth<br>染色濃度 | Color<br>Change<br>20 AFU | Grade<br>ISO<br>Blue Scale | Evaluation                 |                | Dyeing<br>Depth<br>染色濃度 | Color<br>Change<br>20 AFU | Grade<br>ISO<br>Blue Scale |
|---------------------------------------------|--|-------------------------|---------------------------|----------------------------|----------------------------|----------------|-------------------------|---------------------------|----------------------------|
| Artificial Light<br>(Xenon-Arc Lamp)<br>耐日光 |  | 0.1 %                   | 2                         | 3                          | Perspiration Light<br>耐汗日光 | Acid<br>Alkali | 3.0 %                   | 4                         | 5-6                        |
|                                             |  | 0.3 %                   | 2-3                       | 3                          |                            |                |                         | 4                         | 5-6                        |
|                                             |  | 1.0 %                   | 3                         | 4-5                        |                            |                |                         |                           |                            |
|                                             |  | 3.0 %                   | 4                         | 5-6                        |                            |                |                         |                           |                            |
|                                             |  | 6.0 %                   | 4                         | 5-6                        |                            |                |                         |                           |                            |

浴比依存性 Dependency on Liquor ratio



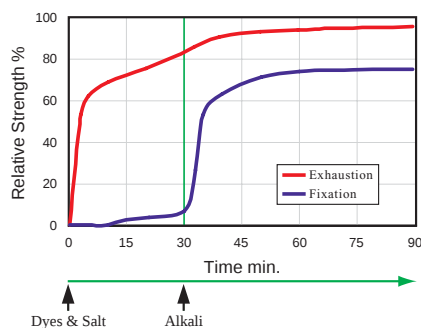
鹼依存性 Dependency on alkali



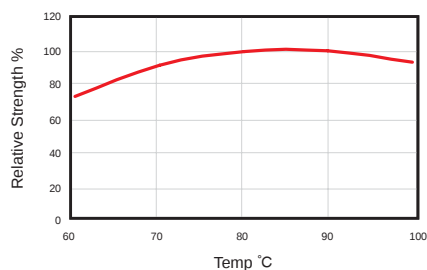
## Dyeing Properties 特性

| Characteristics                                     |                                  | Evaluation |
|-----------------------------------------------------|----------------------------------|------------|
| Reactivity 反應性                                      |                                  | II         |
| Substantivity 親和性                                   |                                  | A          |
| Migration 移染性                                       |                                  | 4-5        |
| Washing off 洗淨性                                     |                                  | 3-4        |
| Solubility g/l<br>溶解度                               | 50°C Water                       | 40         |
|                                                     | 50°C Water+50 g/l Salt           | 10         |
| High temp.<br>Dyeing<br>高溫染色性                       | Dyed fabric 色布                   | 3D         |
|                                                     | Dye Liquor 染浴                    | 2-3D       |
| Color<br>constancy<br>色恆性                           | Tungsten Lamp                    | B          |
|                                                     | TL 84 Lamp                       | G          |
| Metallic ions<br>金屬離子                               | Fe <sup>++</sup> 鐵               | 5          |
|                                                     | Cu <sup>++</sup> 銅               | 2-3RD      |
| Resin<br>finishing<br>樹脂加工                          | Melamine 三聚氰胺                    | 4-5        |
|                                                     | Glyoxal 乙二醛                      | 4-5        |
| Shade change<br>after fixing<br>treatment<br>固色後變色性 | Polyamide 聚乙醯胺                   | 4-5        |
|                                                     | Quaternary ammonium salt<br>四級胺鹽 | 4-5        |

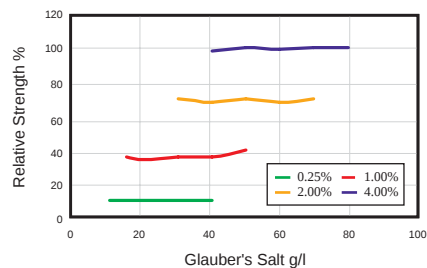
吸盡固著曲線 Exhaustion & Fixation



溫度依存性 Dependency on temperature



芒硝依存性 Dependency on Glauber's salt



# Evercion Orange H-ER

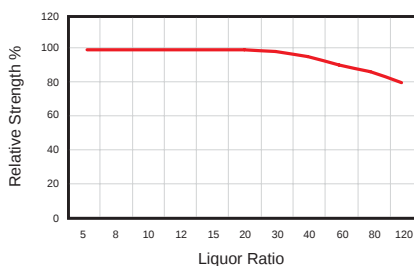
## Fastness before fixing treatment 固色前牢度表

| Evaluation           |             | Depth of shade<br>染色濃度 | Color change<br>變褪色 | Staining 污染     |             |             |                 |                |            | Evaluation                   |                  | Depth of shade<br>染色濃度 | Grade<br>級數 |               |
|----------------------|-------------|------------------------|---------------------|-----------------|-------------|-------------|-----------------|----------------|------------|------------------------------|------------------|------------------------|-------------|---------------|
|                      |             |                        |                     | Acetate<br>醋酸纖維 | Cotton<br>棉 | Nylon<br>尼龍 | Polyester<br>聚酯 | Acrylic<br>壓克力 | Wool<br>羊毛 |                              |                  |                        |             |               |
| Fastness             |             |                        |                     |                 |             |             |                 |                |            | Fastness                     |                  |                        |             |               |
| Washing<br>耐水洗       | ISO C02     | 3.0%                   | 4-5                 | 5               | 3-4         | 5           | 5               | 5              | 5          | Chlorinated Water耐氯水(20ppm)  |                  | 3.0%                   | 4           |               |
|                      | ISO C03     |                        | 4-5                 | 4-5             | 4           | 5           | 5               | 5              | 5          | Peroxide Bleaching雙氧水漂白      |                  |                        | 3-4         |               |
|                      | ISO C04     |                        | 4-5                 | 5               | 3-4         | 5           | 5               | 5              | 5          | Rubbing<br>耐摩擦               | Dry 乾            | 3.0%                   | 5           |               |
|                      | ISO C06-C1S |                        | 4-5                 | 5               | 4           | 5           | 5               | 5              | 5          |                              | Wet 濕            |                        | 3           |               |
|                      | ISO C06-C2S |                        | 4-5                 | 5               | 4           | 5           | 5               | 5              | 5          | M&S C9A<br>(detergent Light) |                  | 0.3%                   | >4-5        |               |
|                      | M&S C4A     |                        | 4-5                 | 5               | 4           | 5           | 5               | 5              | 5          |                              |                  | 3.0%                   | >4-5        |               |
| Water 耐水             |             | 3.0%                   | 4-5                 | 5               | 4           | 3           | 4-5             | 4-5            | 4-5        | M&S C10A (UK-TO)             |                  | 3.0%                   | 4-5         |               |
| Hot Water 耐熱水        |             | 3.0%                   | 5                   | 5               | 4           | 5           | 5               | 5              | 5          | Saliva (DIN) 耐唾液             |                  | 3.0%                   | 4           |               |
| Sea Water 耐海水        |             | 3.0%                   | 4-5Y                | 5               | 4-5         | 5           | 5               | 5              | 5          | Hot-<br>Pressing<br>耐熱壓      | Dry 乾            | Immediately            | 3.0%        | 3RD           |
| Post mercerizing 後絲光 |             | 3.0%                   | 3Y                  |                 | 4           |             |                 |                |            |                              |                  | 4 Hours after          |             | 4-5D          |
| Acid hydrolysis 酸水解  |             | 3.0%                   | 3-4R                | 4-5             | 4           | 3-4         | 5               | 5              | 3-4        |                              | Wet 濕            | Immediately            | 3.0%        | 2-3D          |
| Perspiration<br>耐汗   | Acid 酸      | 3.0%                   | 3-4Y                | 5               | 3-4         | 3-4         | 5               | 5              | 4-5        |                              |                  |                        |             | 4 Hours after |
|                      | Alkali 鹼    |                        |                     | 4Y              | 5           | 3-4         | 3-4             | 5              | 5          | 4-5                          | Dry cleaning 耐乾洗 |                        | 3.0%        | 4-5           |

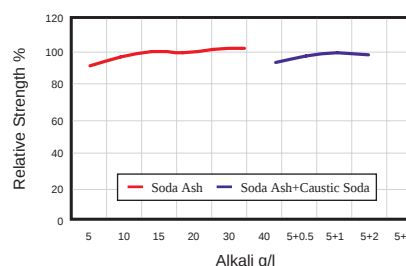
## Light Fastness 日光堅牢度

| Evaluation                                  |  | Dyeing<br>Depth<br>染色濃度 | Color<br>Change<br>20 AFU | Grade<br>ISO<br>Blue Scale | Evaluation                 |                | Dyeing<br>Depth<br>染色濃度 | Color<br>Change<br>20 AFU | Grade<br>ISO<br>Blue Scale |
|---------------------------------------------|--|-------------------------|---------------------------|----------------------------|----------------------------|----------------|-------------------------|---------------------------|----------------------------|
| Artificial Light<br>(Xenon-Arc Lamp)<br>耐日光 |  | 0.1 %                   | 1                         | 2-3                        | Perspiration Light<br>耐汗日光 | Acid<br>Alkali | 3.0 %                   | 3-4                       | 4                          |
|                                             |  | 0.3 %                   | 1-2                       | 3                          |                            |                |                         | 2-3                       | 3-4                        |
|                                             |  | 1.0 %                   | 2-3                       | 3-4                        |                            |                |                         |                           |                            |
|                                             |  | 3.0 %                   | 3-4                       | 4                          |                            |                |                         |                           |                            |
|                                             |  | 6.0 %                   | 3-4                       | 4-5                        |                            |                |                         |                           |                            |

浴比依存性 Dependency on Liquor ratio



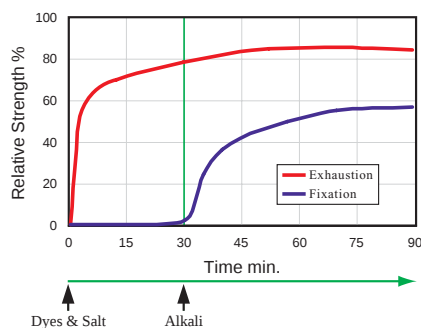
鹼依存性 Dependency on alkali



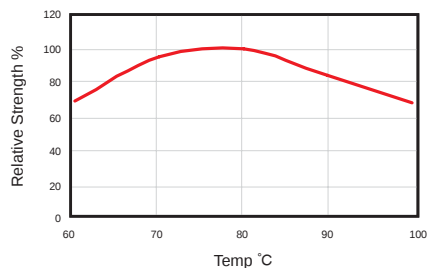
## Dyeing Properties 特性

| Characteristics                                     |                                  | Evaluation |
|-----------------------------------------------------|----------------------------------|------------|
| Reactivity 反應性                                      |                                  | III        |
| Substantivity 親和性                                   |                                  | A          |
| Migration 移染性                                       |                                  | 4          |
| Washing off 洗淨性                                     |                                  | 2-3        |
| Solubility g/l<br>溶解度                               | 50°C Water                       | 90         |
|                                                     | 50°C Water+50 g/l Salt           | 10         |
| High temp.<br>Dyeing<br>高溫染色性                       | Dyed fabric 色布                   | 3          |
|                                                     | Dye Liquor 染浴                    | 3-4        |
| Color<br>constancy<br>色恆性                           | Tungsten Lamp                    | R          |
|                                                     | TL 84 Lamp                       | R          |
| Metallic ions<br>金屬離子                               | Fe <sup>++</sup> 鐵               | 4G         |
|                                                     | Cu <sup>++</sup> 銅               | 2-3B       |
| Resin<br>finishing<br>樹脂加工                          | Melamine 三聚氰胺                    | 4-5        |
|                                                     | Glyoxal 乙二醛                      | 4-5        |
| Shade change<br>after fixing<br>treatment<br>固色後變色性 | Polyamide 聚乙醯胺                   | 4-5        |
|                                                     | Quaternary ammonium salt<br>四級胺鹽 | 4-5        |

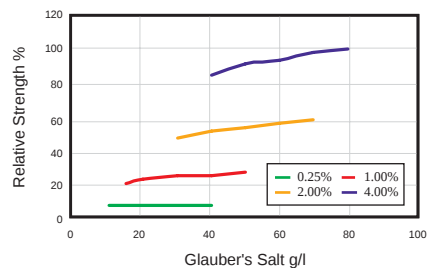
吸盡固著曲線 Exhaustion & Fixation



溫度依存性 Dependency on temperature



芒硝依存性 Dependency on Glauber's salt



# Evercion Scarlet E2G

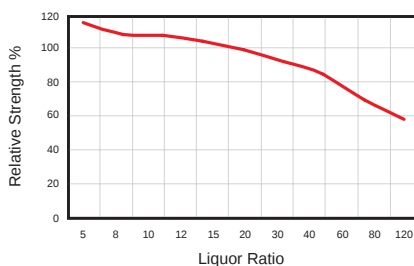
## Fastness before fixing treatment 固色前牢度表

| Evaluation           |             | Depth of shade<br>染色濃度 | Color change<br>變褪色 | Staining 污染     |             |             |                 |                |            | Evaluation                  |               | Depth of shade<br>染色濃度 | Grade<br>級數 |     |
|----------------------|-------------|------------------------|---------------------|-----------------|-------------|-------------|-----------------|----------------|------------|-----------------------------|---------------|------------------------|-------------|-----|
|                      |             |                        |                     | Acetate<br>醋酸纖維 | Cotton<br>棉 | Nylon<br>尼龍 | Polyester<br>聚酯 | Acrylic<br>壓克力 | Wool<br>羊毛 |                             |               |                        |             |     |
| Fastness             |             |                        |                     |                 |             |             |                 |                |            | Fastness                    |               |                        |             |     |
| Washing<br>耐水洗       | ISO C02     | 3.0%                   | 4-5                 | 5               | 4           | 5           | 5               | 5              | 5          | Chlorinated Water耐氯水(20ppm) |               | 3.0%                   | 4-5         |     |
|                      | ISO C03     |                        | 4                   | 5               | 3-4         | 5           | 5               | 5              | 5          | Peroxide Bleaching雙氧水漂白     |               |                        | 4           |     |
|                      | ISO C04     |                        | 4                   | 5               | 3           | 5           | 5               | 5              | 3          | Rubbing<br>耐摩擦              | Dry 乾         | 3.0%                   | 4-5         |     |
|                      | ISO C06-C1S |                        | 4-5                 | 5               | 4           | 5           | 5               | 5              | 5          |                             | Wet 濕         |                        | 2-3         |     |
|                      | ISO C06-C2S |                        | 4-5                 | 5               | 4           | 5           | 5               | 5              | 5          | M&S C9A                     |               | 0.3%                   | 4-5         |     |
|                      | M&S C4A     |                        | 4-5                 | 5               | 4           | 5           | 5               | 5              | 5          | (detergent Light)           |               | 3.0%                   | 4-5         |     |
| Water 耐水             |             | 3.0%                   | 4-5                 | 5               | 5           | 4-5         | 5               | 5              | 4-5        | M&S C10A (UK-TO)            |               | 3.0%                   | 4-5         |     |
| Hot Water 耐熱水        |             | 3.0%                   | 5                   | 5               | 5           | 5           | 5               | 5              | 4-5        | Saliva (DIN) 耐唾液            |               | 3.0%                   | 4-5         |     |
| Sea Water 耐海水        |             | 3.0%                   | 4-5                 | 5               | 5           | 5           | 5               | 5              | 4-5        | Hot-Pressing<br>耐熱壓         | Dry 乾         | Immediately            | 3.0%        | 3RD |
| Post mercerizing 後絲光 |             | 3.0%                   | 3R                  |                 | 5           |             |                 |                |            |                             | 4 Hours after | 5                      |             |     |
| Acid hydrolysis 酸水解  |             | 3.0%                   | 4-5                 | 5               | 4           | 5           | 5               | 4              | 5          |                             | Wet 濕         | Immediately            | 3.0%        | 4RD |
| Perspiration<br>耐汗   | Acid 酸      | 3.0%                   | 4-5                 | 5               | 4           | 5           | 5               | 5              | 5          |                             |               | 4 Hours after          |             |     |
|                      | Alkali 鹼    |                        | 4-5                 | 4-5             | 4           | 5           | 5               | 4-5            | 5          | Dry cleaning 耐乾洗            |               | 3.0%                   | 4-5         |     |

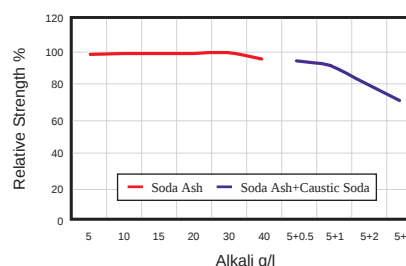
## Light Fastness 日光堅牢度

| Evaluation                                  |  | Dyeing<br>Depth<br>染色濃度 | Color<br>Change<br>20 AFU | Grade<br>ISO<br>Blue Scale | Evaluation                 |                | Dyeing<br>Depth<br>染色濃度 | Color<br>Change<br>20 AFU | Grade<br>ISO<br>Blue Scale |
|---------------------------------------------|--|-------------------------|---------------------------|----------------------------|----------------------------|----------------|-------------------------|---------------------------|----------------------------|
| Artificial Light<br>(Xenon-Arc Lamp)<br>耐日光 |  | 0.1 %                   | 2                         | 3-4                        | Perspiration Light<br>耐汗日光 | Acid<br>Alkali | 3.0 %                   | 3                         | 5                          |
|                                             |  | 0.3 %                   | 2-3                       | 3-4                        |                            |                |                         | 3                         | 5                          |
|                                             |  | 1.0 %                   | 3-4                       | 4-5                        |                            |                |                         |                           |                            |
|                                             |  | 3.0 %                   | 4                         | 5                          |                            |                |                         |                           |                            |
|                                             |  | 6.0 %                   | 4                         | 5-6                        |                            |                |                         |                           |                            |

浴比依存性 Dependency on Liquor ratio



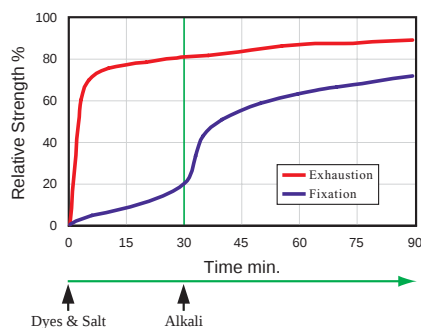
鹼依存性 Dependency on alkali



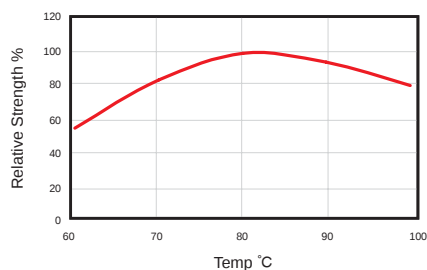
## Dyeing Properties 特性

| Characteristics                                     |                                  | Evaluation |
|-----------------------------------------------------|----------------------------------|------------|
| Reactivity 反應性                                      |                                  | II         |
| Substantivity 親和性                                   |                                  | A          |
| Migration 移染性                                       |                                  | 5          |
| Washing off 洗淨性                                     |                                  | 2-3        |
| Solubility g/l<br>溶解度                               | 50°C Water                       | 100        |
|                                                     | 50°C Water+50 g/l Salt           | 100        |
| High temp.<br>Dyeing<br>高溫染色性                       | Dyed fabric 色布                   | 2          |
|                                                     | Dye Liquor 染浴                    | 2          |
| Color<br>constancy<br>色恆性                           | Tungsten Lamp                    | B          |
|                                                     | TL 84 Lamp                       | G          |
| Metallic ions<br>金屬離子                               | Fe <sup>++</sup> 鐵               | 4-5Y       |
|                                                     | Cu <sup>++</sup> 銅               | 3-4Y       |
| Resin<br>finishing<br>樹脂加工                          | Melamine 三聚氰胺                    | 4-5        |
|                                                     | Glyoxal 乙二醛                      | 4-5        |
| Shade change<br>after fixing<br>treatment<br>固色後變色性 | Polyamide 聚乙醯胺                   | 4-5        |
|                                                     | Quaternary ammonium salt<br>四級胺鹽 | 4-5        |

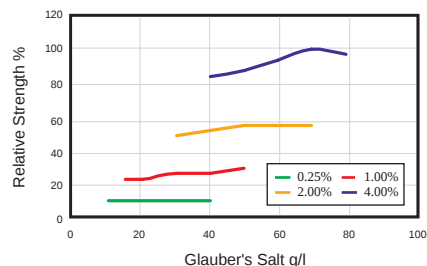
吸盡固著曲線 Exhaustion & Fixation



溫度依存性 Dependency on temperature



芒硝依存性 Dependency on Glauber's salt



# Evercion Scarlet H-E3G

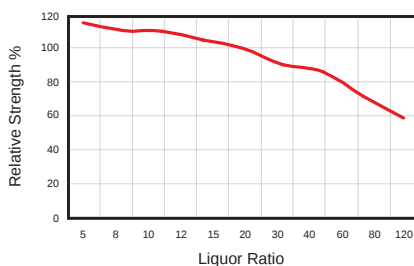
## Fastness before fixing treatment 固色前牢度表

| Evaluation           |             | Depth of shade<br>染色濃度 | Color change<br>變褪色 | Staining 汚染     |             |             |                 |                |            | Evaluation                  |          | Depth of shade<br>染色濃度 | Grade<br>級數 |               |
|----------------------|-------------|------------------------|---------------------|-----------------|-------------|-------------|-----------------|----------------|------------|-----------------------------|----------|------------------------|-------------|---------------|
|                      |             |                        |                     | Acetate<br>醋酸纖維 | Cotton<br>棉 | Nylon<br>尼龍 | Polyester<br>聚酯 | Acrylic<br>壓克力 | Wool<br>羊毛 |                             |          |                        |             |               |
| Fastness             |             |                        |                     |                 |             |             |                 |                |            | Fastness                    |          |                        |             |               |
| Washing<br>耐水洗       | ISO C02     | 3.0%                   | 5                   | 5               | 4-5         | 5           | 5               | 5              | 5          | Chlorinated Water耐氯水(20ppm) |          | 3.0%                   | 3-4         |               |
|                      | ISO C03     |                        | 5                   | 5               | 4-5         | 5           | 5               | 5              | 5          | Peroxide Bleaching雙氧水漂白     |          |                        | 2           |               |
|                      | ISO C04     |                        | 5                   | 5               | 4           | 5           | 5               | 5              | 5          | Rubbing<br>耐摩擦              | Dry 乾    | 3.0%                   | 5           |               |
|                      | ISO C06-C1S |                        | 5                   | 5               | 4           | 5           | 5               | 5              | 5          |                             | Wet 濕    |                        | 3           |               |
|                      | ISO C06-C2S |                        | 5                   | 5               | 4           | 5           | 5               | 5              | 5          | M&S C9A                     |          | 0.3%                   | >4-5        |               |
|                      | M&S C4A     |                        | 5                   | 5               | 4           | 5           | 5               | 5              | 5          | (detergent Light)           |          | 3.0%                   | >4-5        |               |
| Water 耐水             |             | 3.0%                   | 5                   | 5               | 3-4         | 3-4         | 5               | 5              | 4-5        | M&S C10A (UK-TO)            |          | 3.0%                   | 4-5         |               |
| Hot Water 耐熱水        |             | 3.0%                   | 5                   | 5               | 5           | 5           | 5               | 5              | 5          | Saliva (DIN) 耐唾液            |          | 3.0%                   | 4-5         |               |
| Sea Water 耐海水        |             | 3.0%                   | 4                   | 5               | 4-5         | 5           | 5               | 5              | 5          | Hot-<br>Pressing<br>耐熱壓     | Dry<br>乾 | Immediately            | 3.0%        | 3RD           |
| Post mercerizing 後絲光 |             | 3.0%                   | 2-3Y                |                 | 4-5         |             |                 |                |            |                             |          | 4 Hours after          |             | 5             |
| Acid hydrolysis 酸水解  |             | 3.0%                   | 3-4                 | 4-5             | 3           | 3-4         | 5               | 5              | 3-4        |                             | Wet<br>濕 | Immediately            | 3.0%        | 4RD           |
| Perspiration<br>耐汗   | Acid 酸      | 3.0%                   | 4-5                 | 4-5             | 3-4         | 3-4         | 5               | 4-5            | 4-5        |                             |          |                        |             | 4 Hours after |
|                      | Alkali 鹼    |                        | 4-5                 | 5               | 4-5         | 5           | 5               | 5              | 5          | Dry cleaning 耐乾洗            |          | 3.0%                   | 4-5         |               |

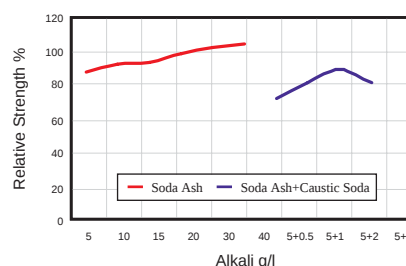
## Light Fastness 日光堅牢度

| Evaluation                                  |  | Dyeing<br>Depth<br>染色濃度 | Color<br>Change<br>20 AFU | Grade<br>ISO<br>Blue Scale | Evaluation                 |                | Dyeing<br>Depth<br>染色濃度 | Color<br>Change<br>20 AFU | Grade<br>ISO<br>Blue Scale |
|---------------------------------------------|--|-------------------------|---------------------------|----------------------------|----------------------------|----------------|-------------------------|---------------------------|----------------------------|
| Artificial Light<br>(Xenon-Arc Lamp)<br>耐日光 |  | 0.1 %                   | 2                         | 3                          | Perspiration Light<br>耐汗日光 | Acid<br>Alkali | 3.0 %                   | 3                         | 4-5                        |
|                                             |  | 0.3 %                   | 2-3                       | 3-4                        |                            |                |                         | 3                         | 4-5                        |
|                                             |  | 1.0 %                   | 3-4                       | 4                          |                            |                |                         |                           |                            |
|                                             |  | 3.0 %                   | 4                         | 4-5                        |                            |                |                         |                           |                            |
|                                             |  | 6.0 %                   | 4                         | 4-5                        |                            |                |                         |                           |                            |

浴比依存性 Dependency on Liquor ratio



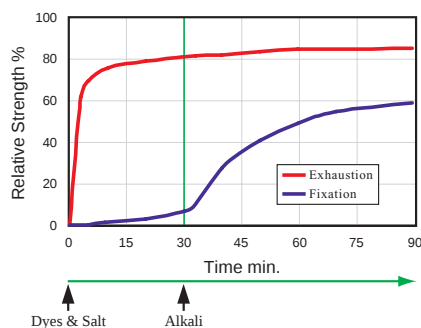
鹼依存性 Dependency on alkali



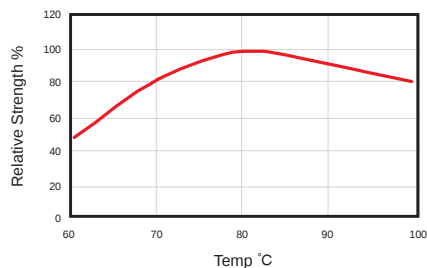
## Dyeing Properties 特性

| Characteristics                                     |                                  | Evaluation |
|-----------------------------------------------------|----------------------------------|------------|
| Reactivity 反應性                                      |                                  | II         |
| Substantivity 親和性                                   |                                  | A          |
| Migration 移染性                                       |                                  | 4-5        |
| Washing off 洗淨性                                     |                                  | 2-3        |
| Solubility g/l<br>溶解度                               | 50°C Water                       | 140        |
|                                                     | 50°C Water+50 g/l Salt           | 140        |
| High temp.<br>Dyeing<br>高溫染色性                       | Dyed fabric 色布                   | 3-4        |
|                                                     | Dye Liquor 染浴                    | 3-4        |
| Color<br>constancy<br>色恆性                           | Tungsten Lamp                    | R          |
|                                                     | TL 84 Lamp                       | Y          |
| Metallic ions<br>金屬離子                               | Fe <sup>++</sup> 鐵               | 4-5Y       |
|                                                     | Cu <sup>++</sup> 銅               | 3-4B       |
| Resin<br>finishing<br>樹脂加工                          | Melamine 三聚氰胺                    | 4BD        |
|                                                     | Glyoxal 乙二醛                      | 4B         |
| Shade change<br>after fixing<br>treatment<br>固色後變色性 | Polyamide 聚乙醯胺                   | 4BD        |
|                                                     | Quaternary ammonium salt<br>四級胺鹽 | 4-5B       |

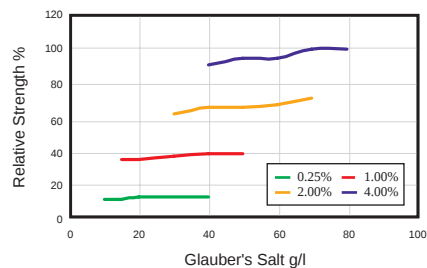
吸盡固著曲線 Exhaustion & Fixation



溫度依存性 Dependency on temperature



芒硝依存性 Dependency on Glauber's salt



# Evercion Red H-E3B

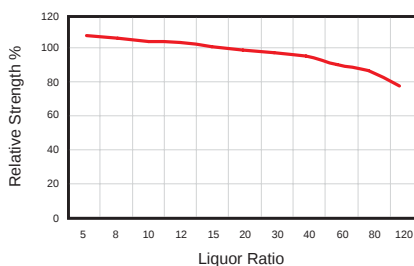
## Fastness before fixing treatment 固色前牢度表

| Evaluation           |             | Depth of shade<br>染色濃度 | Color change<br>變褪色 | Staining 污染     |             |             |                 |                |            | Evaluation                   |       | Depth of shade<br>染色濃度 | Grade<br>數 |               |
|----------------------|-------------|------------------------|---------------------|-----------------|-------------|-------------|-----------------|----------------|------------|------------------------------|-------|------------------------|------------|---------------|
|                      |             |                        |                     | Acetate<br>醋酸纖維 | Cotton<br>棉 | Nylon<br>尼龍 | Polyester<br>聚酯 | Acrylic<br>壓克力 | Wool<br>羊毛 |                              |       |                        |            |               |
| Fastness             |             |                        |                     |                 |             |             |                 |                |            | Fastness                     |       |                        |            |               |
| Washing<br>耐水洗       | ISO C02     | 3.0%                   | 4-5                 | 5               | 4-5         | 5           | 5               | 5              | 5          | Chlorinated Water耐氯水(20ppm)  |       | 3.0%                   | 3B         |               |
|                      | ISO C03     |                        | 4-5                 | 4               | 4           | 5           | 5               | 5              | 5          | Peroxide Bleaching雙氧水漂白      |       |                        | 2-3        |               |
|                      | ISO C04     |                        | 4-5                 | 4-5             | 3           | 5           | 5               | 5              | 5          | Rubbing<br>耐摩擦               | Dry 乾 | 3.0%                   | 5          |               |
|                      | ISO C06-C1S |                        | 5                   | 5               | 4-5         | 5           | 5               | 5              | 5          |                              | Wet 濕 | 2-3                    |            |               |
|                      | ISO C06-C2S |                        | 5                   | 5               | 4-5         | 5           | 5               | 5              | 5          | M&S C9A<br>(detergent Light) |       | 0.3%                   | >4-5       |               |
|                      | M&S C4A     |                        | 5                   | 5               | 4-5         | 5           | 5               | 5              | 5          |                              |       | 3.0%                   | >4-5       |               |
| Water 耐水             |             | 3.0%                   | 5                   | 5               | 4           | 3-4         | 5               | 4-5            | 4-5        | M&S C10A (UK-TO)             |       | 3.0%                   | 4-5        |               |
| Hot Water 耐熱水        |             | 3.0%                   | 4-5                 | 4-5             | 4           | 4-5         | 4-5             | 4-5            | 4-5        | Saliva (DIN) 耐唾液             |       | 3.0%                   | 4-5        |               |
| Sea Water 耐海水        |             | 3.0%                   | 3-4B                | 5               | 4-5         | 5           | 5               | 5              | 5          | Hot-<br>Pressing<br>耐熱壓      | Dry 乾 | Immediately            | 3.0%       | 2-3B          |
| Post mercerizing 後絲光 |             | 3.0%                   | 2Y                  |                 | 4           |             |                 |                |            |                              |       | 4 Hours after          |            | 4-5           |
| Acid hydrolysis 酸水解  |             | 3.0%                   | 3-4                 | 4-5             | 3           | 3           | 4-5             | 4              | 3-4        |                              | Wet 濕 | Immediately            | 3.0%       | 4-5           |
| Perspiration<br>耐汗   | Acid 酸      | 3.0%                   | 4                   | 5               | 4-5         | 4-5         | 5               | 5              | 5          |                              |       |                        |            | 4 Hours after |
|                      | Alkali 鹼    |                        | 4                   | 5               | 4-5         | 5           | 5               | 5              | 5          | Dry cleaning 耐乾洗             |       | 3.0%                   | 4-5        |               |

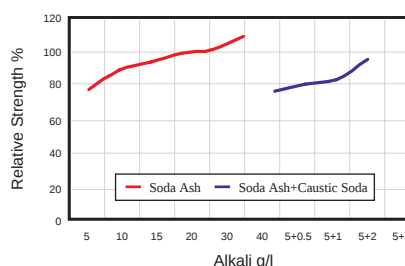
## Light Fastness 日光堅牢度

| Evaluation                                  |  | Dyeing<br>Depth<br>染色濃度 | Color<br>Change<br>20 AFU | Grade<br>ISO<br>Blue Scale | Evaluation                 |                | Dyeing<br>Depth<br>染色濃度 | Color<br>Change<br>20 AFU | Grade<br>ISO<br>Blue Scale |
|---------------------------------------------|--|-------------------------|---------------------------|----------------------------|----------------------------|----------------|-------------------------|---------------------------|----------------------------|
| Artificial Light<br>(Xenon-Arc Lamp)<br>耐日光 |  | 0.1 %                   | 2                         | 3-4                        | Perspiration Light<br>耐汗日光 | Acid<br>Alkali | 3.0 %                   | 3                         | 4-5                        |
|                                             |  | 0.3 %                   | 2-3                       | 4                          |                            |                |                         | 3                         | 4-5                        |
|                                             |  | 1.0 %                   | 3                         | 4-5                        |                            |                |                         |                           |                            |
|                                             |  | 3.0 %                   | 3-4                       | 4-5                        |                            |                |                         |                           |                            |
|                                             |  | 6.0 %                   | 4                         | 5                          |                            |                |                         |                           |                            |

浴比依存性 Dependency on Liquor ratio



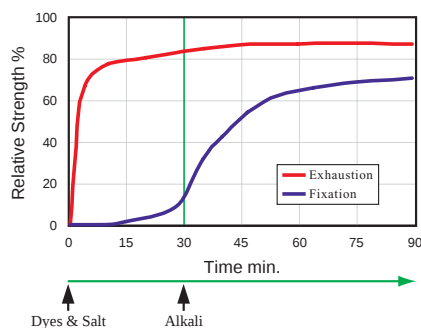
鹼依存性 Dependency on alkali



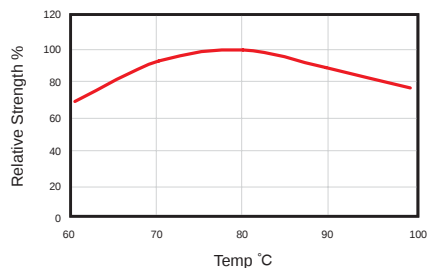
## Dyeing Properties 特性

| Characteristics                                     |                                  | Evaluation |
|-----------------------------------------------------|----------------------------------|------------|
| Reactivity 反應性                                      |                                  | II         |
| Substantivity 親和性                                   |                                  | A          |
| Migration 移染性                                       |                                  | 4          |
| Washing off 洗淨性                                     |                                  | 3          |
| Solubility g/l<br>溶解度                               | 50°C Water                       | 150        |
|                                                     | 50°C Water+50 g/l Salt           | 150        |
| High temp.<br>Dyeing<br>高溫染色性                       | Dyed fabric 色布                   | 4          |
|                                                     | Dye Liquor 染浴                    | 3-4        |
| Color<br>constancy<br>色恆性                           | Tungsten Lamp                    | R          |
|                                                     | TL 84 Lamp                       | B          |
| Metallic ions<br>金屬離子                               | Fe <sup>++</sup> 鐵               | 4-5        |
|                                                     | Cu <sup>++</sup> 銅               | 3B         |
| Resin<br>finishing<br>樹脂加工                          | Melamine 三聚氰胺                    | 4-5        |
|                                                     | Glyoxal 乙二醛                      | 4-5        |
| Shade change<br>after fixing<br>treatment<br>固色後變色性 | Polyamide 聚乙醯胺                   | 3B         |
|                                                     | Quaternary ammonium salt<br>四級胺鹽 | 4-5B       |

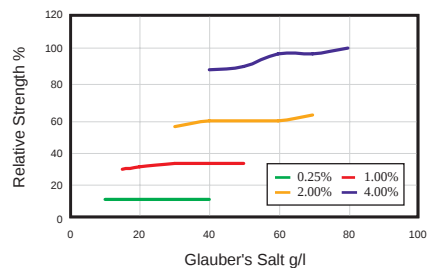
吸盡固著曲線 Exhaustion & Fixation



溫度依存性 Dependency on temperature



芒硝依存性 Dependency on Glauber's salt



# Evercion Red H-E7B

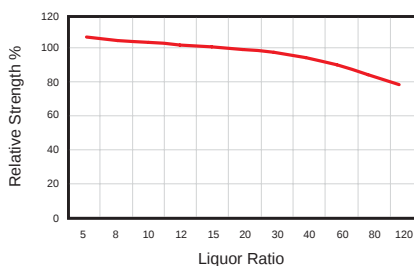
## Fastness before fixing treatment 固色前牢度表

| Evaluation           |             | Depth of shade<br>染色濃度 | Color change<br>變褪色 | Staining 污染     |             |             |                 |                |            | Evaluation                   |                  | Depth of shade<br>染色濃度 | Grade<br>級數 |       |
|----------------------|-------------|------------------------|---------------------|-----------------|-------------|-------------|-----------------|----------------|------------|------------------------------|------------------|------------------------|-------------|-------|
|                      |             |                        |                     | Acetate<br>醋酸纖維 | Cotton<br>棉 | Nylon<br>尼龍 | Polyester<br>聚酯 | Acrylic<br>壓克力 | Wool<br>羊毛 |                              |                  |                        |             |       |
| Fastness             |             |                        |                     |                 |             |             |                 |                |            | Fastness                     |                  |                        |             |       |
| Washing<br>耐水洗       | ISO C02     | 3.0%                   | 4-5                 | 5               | 3-4         | 5           | 5               | 5              | 5          | Chlorinated Water耐氯水(20ppm)  |                  | 3.0%                   | 3-4B        |       |
|                      | ISO C03     |                        | 4-5                 | 4-5             | 3           | 5           | 5               | 4-5            | 5          | Peroxide Bleaching雙氧水漂白      |                  |                        | 4           |       |
|                      | ISO C04     |                        | 4-5                 | 4-5             | 3           | 5           | 5               | 4-5            | 5          | Rubbing<br>耐摩擦               | Dry 乾            | 3.0%                   | 5           |       |
|                      | ISO C06-C1S |                        | 5                   | 5               | 4           | 5           | 5               | 5              | 5          |                              | Wet 濕            | 2-3                    |             |       |
|                      | ISO C06-C2S |                        | 5                   | 5               | 4-5         | 5           | 5               | 5              | 5          | M&S C9A<br>(detergent Light) |                  | 0.3%                   | >4-5        |       |
|                      | M&S C4A     |                        | 5                   | 5               | 4-5         | 5           | 5               | 5              | 5          |                              |                  | 3.0%                   | >4-5        |       |
| Water 耐水             |             | 3.0%                   | 5                   | 4-5             | 3           | 2-3         | 5               | 4-5            | 3-4        | M&S C10A (UK-TO)             |                  | 3.0%                   | 4-5         |       |
| Hot Water 耐熱水        |             | 3.0%                   | 5                   | 4-5             | 4-5         | 5           | 5               | 5              | 5          | Saliva (DIN) 耐唾液             |                  | 3.0%                   | 4-5         |       |
| Sea Water 耐海水        |             | 3.0%                   | 4B                  | 5               | 4-5         | 5           | 5               | 5              | 5          | Hot-Pressing<br>耐熱壓          | Dry 乾            | Immediately            | 3.0%        | 2BD   |
| Post mercerizing 後絲光 |             | 3.0%                   | 2Y                  |                 | 4           |             |                 |                |            |                              | 4 Hours after    | 4-5                    |             |       |
| Acid hydrolysis 酸水解  |             | 3.0%                   | 4                   | 4               | 3-4         | 3           | 4               | 4-5            | 3-4        |                              | Wet 濕            | Immediately            | 3.0%        | 2-3BI |
| Perspiration<br>耐汗   | Acid 酸      | 3.0%                   | 4B                  | 5               | 3           | 3-4         | 5               | 4              | 4-5        |                              |                  | 4 Hours after          |             | 4-5   |
|                      | Alkali 鹼    |                        | 4-5                 | 5               | 4           | 5           | 5               | 5              | 5          | 5                            | Dry cleaning 耐乾洗 |                        | 3.0%        | 4-5   |

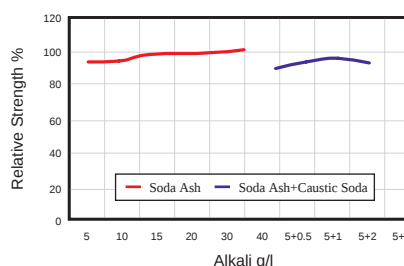
## Light Fastness 日光堅牢度

| Evaluation                                  |  | Dyeing Depth<br>染色濃度 | Color Change<br>20 AFU | Grade ISO<br>Blue Scale | Evaluation                 |                | Dyeing Depth<br>染色濃度 | Color Change<br>20 AFU | Grade ISO<br>Blue Scale |
|---------------------------------------------|--|----------------------|------------------------|-------------------------|----------------------------|----------------|----------------------|------------------------|-------------------------|
| Artificial Light<br>(Xenon-Arc Lamp)<br>耐日光 |  | 0.1 %                | 1-2                    | 3-4                     | Perspiration Light<br>耐汗日光 | Acid<br>Alkali | 3.0 %                | 3-4                    | 4-5                     |
|                                             |  | 0.3 %                | 2                      | 3-4                     |                            |                |                      | 3-4                    | 4-5                     |
|                                             |  | 1.0 %                | 2-3                    | 4                       |                            |                |                      |                        |                         |
|                                             |  | 3.0 %                | 3-4                    | 4-5                     |                            |                |                      |                        |                         |
|                                             |  | 6.0 %                | 4                      | 5                       |                            |                |                      |                        |                         |

浴比依存性 Dependency on Liquor ratio



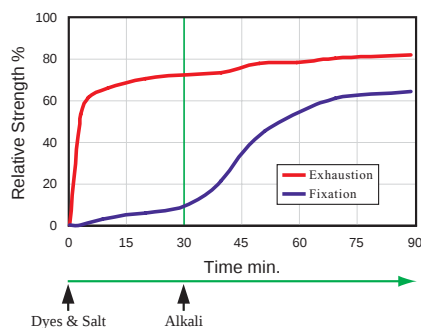
鹼依存性 Dependency on alkali



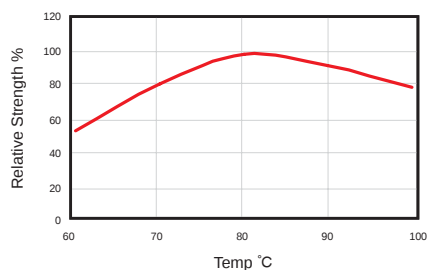
## Dyeing Properties 特性

| Characteristics                                     |                                  | Evaluation |
|-----------------------------------------------------|----------------------------------|------------|
| Reactivity 反應性                                      |                                  | II         |
| Substantivity 親和性                                   |                                  | A          |
| Migration 移染性                                       |                                  | 5          |
| Washing off 洗淨性                                     |                                  | 3          |
| Solubility g/l<br>溶解度                               | 50°C Water                       | 100        |
|                                                     | 50°C Water+50 g/l Salt           | 100        |
| High temp.<br>Dyeing<br>高溫染色性                       | Dyed fabric 色布                   | 1-2        |
|                                                     | Dye Liquor 染浴                    | 2          |
| Color<br>constancy<br>色恆性                           | Tungsten Lamp                    | R          |
|                                                     | TL 84 Lamp                       | R          |
| Metallic ions<br>金屬離子                               | Fe <sup>++</sup> 鐵               | 4-5G       |
|                                                     | Cu <sup>++</sup> 銅               | 5          |
| Resin<br>finishing<br>樹脂加工                          | Melamine 三聚氰胺                    | 4-5Y       |
|                                                     | Glyoxal 乙二醛                      | 4-5Y       |
| Shade change<br>after fixing<br>treatment<br>固色後變色性 | Polyamide 聚乙醯胺                   | 4Y         |
|                                                     | Quaternary ammonium salt<br>四級胺鹽 | 5          |

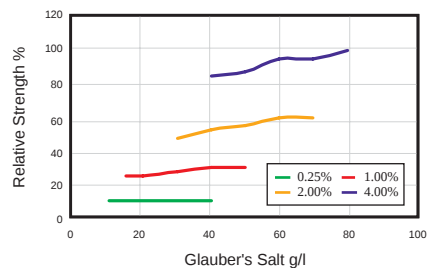
吸盡固著曲線 Exhaustion & Fixation



溫度依存性 Dependency on temperature



芒硝依存性 Dependency on Glauber's salt



# Evercion Blue H-EGN



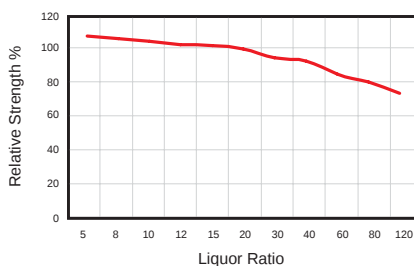
## Fastness before fixing treatment 固色前牢度表

| Evaluation           |             | Depth of shade<br>染色濃度 | Color change<br>變褪色 | Staining 污染     |             |             |                 |                |            | Evaluation                   |       | Depth of shade<br>染色濃度 | Grade<br>級數 |    |
|----------------------|-------------|------------------------|---------------------|-----------------|-------------|-------------|-----------------|----------------|------------|------------------------------|-------|------------------------|-------------|----|
|                      |             |                        |                     | Acetate<br>醋酸纖維 | Cotton<br>棉 | Nylon<br>尼龍 | Polyester<br>聚酯 | Acrylic<br>壓克力 | Wool<br>羊毛 |                              |       |                        |             |    |
| Fastness             |             |                        |                     |                 |             |             |                 |                |            | Fastness                     |       |                        |             |    |
| Washing<br>耐水洗       | ISO C02     | 3.0%                   | 5                   | 5               | 4-5         | 5           | 5               | 5              | 5          | Chlorinated Water耐氯水(20ppm)  |       | 3.0%                   | 1           |    |
|                      | ISO C03     |                        | 5                   | 5               | 4-5         | 5           | 5               | 5              | 5          | Peroxide Bleaching雙氧水漂白      |       |                        | 3-4         |    |
|                      | ISO C04     |                        | 4-5                 | 5               | 3-4         | 5           | 5               | 5              | 3          | Rubbing<br>耐摩擦               | Dry 乾 | 3.0%                   | 5           |    |
|                      | ISO C06-C1S |                        | 5                   | 5               | 4           | 5           | 5               | 5              | 5          |                              | Wet 濕 | 3                      |             |    |
|                      | ISO C06-C2S |                        | 5                   | 5               | 4           | 5           | 5               | 5              | 5          | M&S C9A<br>(detergent Light) |       | 0.3%                   | >4-5        |    |
|                      | M&S C4A     |                        | 5                   | 5               | 4           | 5           | 5               | 5              | 5          |                              |       | 3.0%                   | >4-5        |    |
| Water 耐水             |             | 3.0%                   | 5                   | 5               | 3-4         | 3           | 5               | 5              | 4          | M&S C10A (UK-TO)             |       | 3.0%                   | 4-5         |    |
| Hot Water 耐熱水        |             | 3.0%                   | 4-5                 | 5               | 5           | 5           | 5               | 5              | 5          | Saliva (DIN) 耐唾液             |       | 3.0%                   | 4-5         |    |
| Sea Water 耐海水        |             | 3.0%                   | 4-5                 | 5               | 5           | 5           | 5               | 5              | 5          | Hot-Pressing<br>耐熱壓          | Dry 乾 | Immediately            | 3.0%        | 4D |
| Post mercerizing 後絲光 |             | 3.0%                   | 2-3R                |                 | 4-5         |             |                 |                |            |                              |       | 4 Hours after          |             | 5  |
| Acid hydrolysis 酸水解  |             | 3.0%                   | 3                   | 4-5             | 4           | 4           | 4-5             | 4-5            | 4          |                              | Wet 濕 | Immediately            | 3.0%        | 4  |
| Perspiration<br>耐汗   | Acid 酸      | 3.0%                   | 4                   | 5               | 3-4         | 4           | 5               | 5              | 4          |                              |       | 4 Hours after          |             | 5  |
|                      | Alkali 鹼    |                        | 4                   | 5               | 3-4         | 4-5         | 5               | 5              | 5          | Dry cleaning 耐乾洗             |       | 3.0%                   | 4-5         |    |

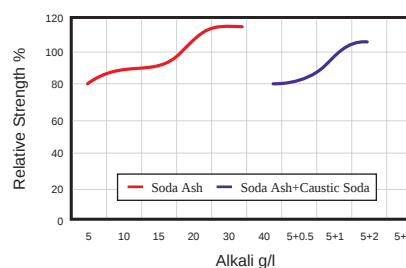
## Light Fastness 日光堅牢度

| Evaluation                                  |  | Dyeing<br>Depth<br>染色濃度 | Color<br>Change<br>20 AFU | Grade<br>ISO<br>Blue Scale | Evaluation                 |                | Dyeing<br>Depth<br>染色濃度 | Color<br>Change<br>20 AFU | Grade<br>ISO<br>Blue Scale |
|---------------------------------------------|--|-------------------------|---------------------------|----------------------------|----------------------------|----------------|-------------------------|---------------------------|----------------------------|
| Artificial Light<br>(Xenon-Arc Lamp)<br>耐日光 |  | 0.1 %                   | 3-4                       | 4-5                        | Perspiration Light<br>耐汗日光 | Acid<br>Alkali | 3.0 %                   | 4-5                       | 5                          |
|                                             |  | 0.3 %                   | 4                         | 5-6                        |                            |                |                         | 4-5                       | 5                          |
|                                             |  | 1.0 %                   | 4                         | 5-6                        |                            |                |                         |                           |                            |
|                                             |  | 3.0 %                   | 4-5                       | 6                          |                            |                |                         |                           |                            |
|                                             |  | 6.0 %                   | 4-5                       | >6                         |                            |                |                         |                           |                            |

浴比依存性 Dependency on Liquor ratio



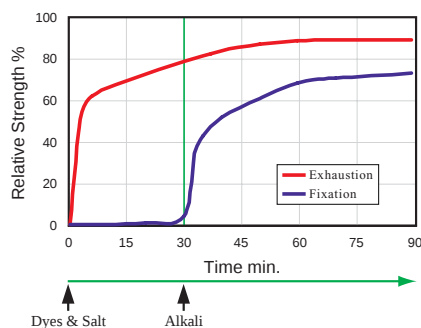
鹼依存性 Dependency on alkali



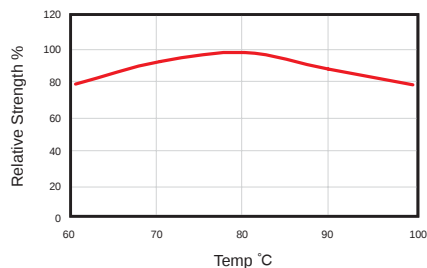
## Dyeing Properties 特性

| Characteristics                                     |                                  | Evaluation |
|-----------------------------------------------------|----------------------------------|------------|
| Reactivity 反應性                                      |                                  | II         |
| Substantivity 親和性                                   |                                  | A          |
| Migration 移染性                                       |                                  | 5          |
| Washing off 洗淨性                                     |                                  | 3          |
| Solubility g/l<br>溶解度                               | 50°C Water                       | 100        |
|                                                     | 50°C Water+50 g/l Salt           | 100        |
| High temp.<br>Dyeing<br>高溫染色性                       | Dyed fabric 色布                   | 2-3YD      |
|                                                     | Dye Liquor 染浴                    | 2-3YD      |
| Color<br>constancy<br>色恆性                           | Tungsten Lamp                    | R          |
|                                                     | TL 84 Lamp                       | R          |
| Metallic ions<br>金屬離子                               | Fe <sup>++</sup> 鐵               | 4-5G       |
|                                                     | Cu <sup>++</sup> 銅               | 4-5G       |
| Resin<br>finishing<br>樹脂加工                          | Melamine 三聚氰胺                    | 4Y         |
|                                                     | Glyoxal 乙二醛                      | 4-5G       |
| Shade change<br>after fixing<br>treatment<br>固色後變色性 | Polyamide 聚乙醯胺                   | 4-5Y       |
|                                                     | Quaternary ammonium salt<br>四級胺鹽 | 4G         |

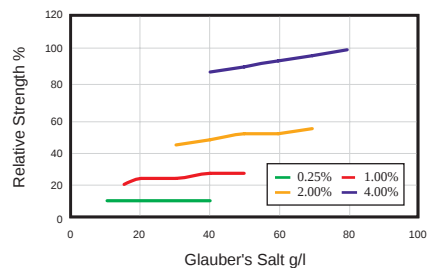
吸盡固著曲線 Exhaustion & Fixation



溫度依存性 Dependency on temperature



芒硝依存性 Dependency on Glauber's salt



# Evercion Blue H-ERD

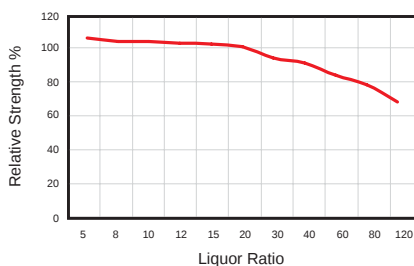
## Fastness before fixing treatment 固色前牢度表

| Evaluation           |             | Depth of shade<br>染色濃度 | Color change<br>變褪色 | Staining 污染     |             |             |                 |                |            | Evaluation                   |               | Depth of shade<br>染色濃度 | Grade<br>級數 |    |
|----------------------|-------------|------------------------|---------------------|-----------------|-------------|-------------|-----------------|----------------|------------|------------------------------|---------------|------------------------|-------------|----|
|                      |             |                        |                     | Acetate<br>醋酸纖維 | Cotton<br>棉 | Nylon<br>尼龍 | Polyester<br>聚酯 | Acrylic<br>壓克力 | Wool<br>羊毛 |                              |               |                        |             |    |
| Fastness             |             |                        |                     |                 |             |             |                 |                |            | Fastness                     |               |                        |             |    |
| Washing<br>耐水洗       | ISO C02     | 3.0%                   | 5                   | 4-5             | 3-4         | 5           | 5               | 5              | 5          | Chlorinated Water耐氯水(20ppm)  |               | 3.0%                   | 1           |    |
|                      | ISO C03     |                        | 4-5                 | 4-5             | 3-4         | 5           | 5               | 5              | 5          | Peroxide Bleaching雙氧水漂白      |               |                        | 3-4         |    |
|                      | ISO C04     |                        | 4-5                 | 4-5             | 3           | 5           | 5               | 5              | 5          | Rubbing<br>耐摩擦               | Dry 乾         | 3.0%                   | 5           |    |
|                      | ISO C06-C1S |                        | 4-5                 | 5               | 3-4         | 5           | 5               | 5              | 5          |                              | Wet 濕         | 3                      |             |    |
|                      | ISO C06-C2S |                        | 4-5                 | 5               | 4           | 5           | 5               | 5              | 5          | M&S C9A<br>(detergent Light) |               | 0.3%                   | >4-5        |    |
|                      | M&S C4A     |                        | 4-5                 | 5               | 4           | 5           | 5               | 5              | 5          |                              |               | 3.0%                   | >4-5        |    |
| Water 耐水             |             | 3.0%                   | 5                   | 5               | 3-4         | 3           | 5               | 5              | 5          | M&S C10A (UK-TO)             |               | 3.0%                   | 4-5         |    |
| Hot Water 耐熱水        |             | 3.0%                   | 4-5                 | 5               | 5           | 5           | 5               | 5              | 5          | Saliva (DIN) 耐唾液             |               | 3.0%                   | 4-5         |    |
| Sea Water 耐海水        |             | 3.0%                   | 4-5                 | 5               | 5           | 5           | 5               | 5              | 5          | Hot-<br>Pressing<br>耐熱壓      | Dry 乾         | Immediately            | 3.0%        | 4D |
| Post mercerizing 後絲光 |             | 3.0%                   | 2-3R                |                 | 4-5         |             |                 |                |            |                              | 4 Hours after | 5                      |             |    |
| Acid hydrolysis 酸水解  |             | 3.0%                   | 3                   | 4-5             | 4           | 4           | 4-5             | 4-5            | 4          |                              | Wet 濕         | Immediately            | 3.0%        | 4  |
| Perspiration<br>耐汗   | Acid 酸      | 3.0%                   | 4                   | 5               | 3-4         | 4           | 5               | 5              | 4          |                              |               | 4 Hours after          |             | 5  |
|                      | Alkali 鹼    |                        | 4                   | 5               | 3-4         | 4-5         | 5               | 5              | 5          | Dry cleaning 耐乾洗             |               | 3.0%                   | 4-5         |    |

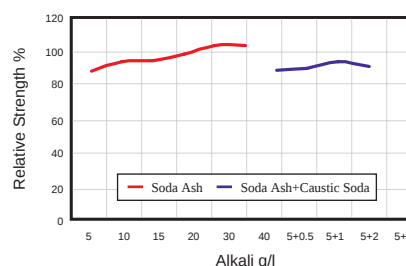
## Light Fastness 日光堅牢度

| Evaluation                                  |  | Dyeing<br>Depth<br>染色濃度 | Color<br>Change<br>20 AFU | Grade<br>ISO<br>Blue Scale | Evaluation                 |                | Dyeing<br>Depth<br>染色濃度 | Color<br>Change<br>20 AFU | Grade<br>ISO<br>Blue Scale |
|---------------------------------------------|--|-------------------------|---------------------------|----------------------------|----------------------------|----------------|-------------------------|---------------------------|----------------------------|
| Artificial Light<br>(Xenon-Arc Lamp)<br>耐日光 |  | 0.1 %                   | 3                         | 4-5                        | Perspiration Light<br>耐汗日光 | Acid<br>Alkali | 3.0 %                   | 3-4                       | 5                          |
|                                             |  | 0.3 %                   | 3-4                       | 5-6                        |                            |                |                         | 3                         | 5                          |
|                                             |  | 1.0 %                   | 3-4                       | 5-6                        |                            |                |                         |                           |                            |
|                                             |  | 3.0 %                   | 4                         | 6                          |                            |                |                         |                           |                            |
|                                             |  | 6.0 %                   | 4                         | >6                         |                            |                |                         |                           |                            |

浴比依存性 Dependency on Liquor ratio



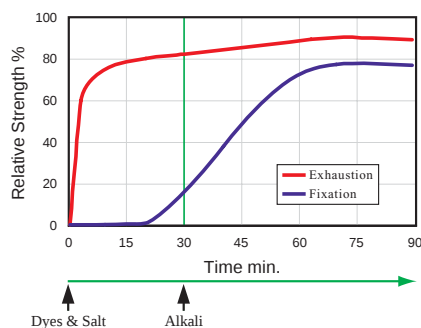
鹼依存性 Dependency on alkali



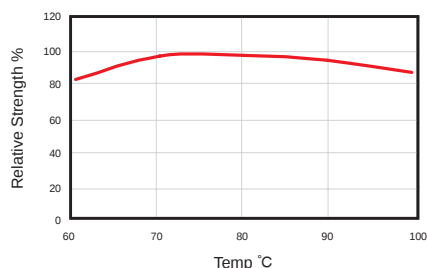
## Dyeing Properties 特性

| Characteristics                                     |                                  | Evaluation |
|-----------------------------------------------------|----------------------------------|------------|
| Reactivity 反應性                                      |                                  | II         |
| Substantivity 親和性                                   |                                  | A          |
| Migration 移染性                                       |                                  | 4-5        |
| Washing off 洗淨性                                     |                                  | 3          |
| Solubility g/l<br>溶解度                               | 50°C Water                       | 100        |
|                                                     | 50°C Water+50 g/l Salt           | 100        |
| High temp.<br>Dyeing<br>高溫染色性                       | Dyed fabric 色布                   | 3          |
|                                                     | Dye Liquor 染浴                    | 4-5        |
| Color<br>constancy<br>色恆性                           | Tungsten Lamp                    | YD         |
|                                                     | TL 84 Lamp                       | YD         |
| Metallic ions<br>金屬離子                               | Fe <sup>++</sup> 鐵               | 5          |
|                                                     | Cu <sup>++</sup> 銅               | 5          |
| Resin<br>finishing<br>樹脂加工                          | Melamine 三聚氰胺                    | 4Y         |
|                                                     | Glyoxal 乙二醛                      | 4R         |
| Shade change<br>after fixing<br>treatment<br>固色後變色性 | Polyamide 聚乙醯胺                   | 4Y         |
|                                                     | Quaternary ammonium salt<br>四級胺鹽 | 5          |

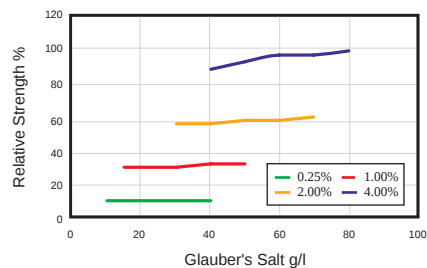
吸盡固著曲線 Exhaustion & Fixation



溫度依存性 Dependency on temperature



芒硝依存性 Dependency on Glauber's salt



# Evercion Navy Blue H-ER

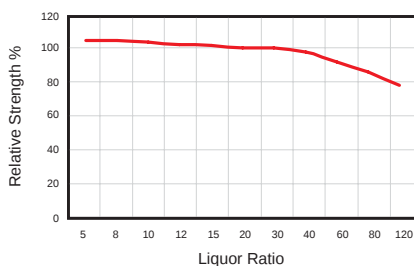
## Fastness before fixing treatment 固色前牢度表

| Evaluation           |             | Depth of shade<br>染色濃度 | Color change<br>變褪色 | Staining 污染     |             |             |                 |                |            | Evaluation                  |               | Depth of shade<br>染色濃度 | Grade<br>級數 |   |
|----------------------|-------------|------------------------|---------------------|-----------------|-------------|-------------|-----------------|----------------|------------|-----------------------------|---------------|------------------------|-------------|---|
|                      |             |                        |                     | Acetate<br>醋酸纖維 | Cotton<br>棉 | Nylon<br>尼龍 | Polyester<br>聚酯 | Acrylic<br>壓克力 | Wool<br>羊毛 |                             |               |                        |             |   |
| Fastness             |             |                        |                     |                 |             |             |                 |                |            | Fastness                    |               |                        |             |   |
| Washing<br>耐水洗       | ISO C02     | 3.0%                   | 4-5                 | 5               | 4           | 5           | 5               | 5              | 5          | Chlorinated Water耐氯水(20ppm) |               | 3.0%                   | 4-5         |   |
|                      | ISO C03     |                        | 4-5                 | 5               | 4           | 5           | 5               | 5              | 5          | Peroxide Bleaching雙氧水漂白     |               |                        | 4-5         |   |
|                      | ISO C04     |                        | 4-5                 | 5               | 3-4         | 5           | 5               | 5              | 5          | Rubbing<br>耐摩擦              | Dry 乾         | 3.0%                   | 4-5         |   |
|                      | ISO C06-C1S |                        | 4-5                 | 5               | 4           | 5           | 5               | 5              | 5          |                             | Wet 濕         |                        | 2-3         |   |
|                      | ISO C06-C2S |                        | 4-5                 | 5               | 4           | 5           | 5               | 5              | 5          | M&S C9A                     |               | 0.3%                   | 4-5         |   |
|                      | M&S C4A     |                        | 4-5                 | 5               | 4           | 5           | 5               | 5              | 5          | (detergent Light)           |               | 3.0%                   | 4-5         |   |
| Water 耐水             |             | 3.0%                   | 4-5                 | 5               | 4           | 3-4         | 5               | 5              | 5          | M&S C10A (UK-TO)            |               | 3.0%                   | 4-5         |   |
| Hot Water 耐熱水        |             | 3.0%                   | 5                   | 5               | 5           | 5           | 5               | 5              | 5          | Saliva (DIN) 耐唾液            |               | 3.0%                   | 4-5         |   |
| Sea Water 耐海水        |             | 3.0%                   | 5                   | 5               | 5           | 5           | 5               | 5              | 5          | Hot-<br>Pressing<br>耐熱壓     | Dry 乾         | Immediately            | 3.0%        | 5 |
| Post mercerizing 後絲光 |             | 3.0%                   | 2R                  |                 | 4-5         |             |                 |                |            |                             | 4 Hours after | 5                      |             |   |
| Acid hydrolysis 酸水解  |             | 3.0%                   | 4-5                 | 5               | 4-5         | 5           | 5               | 5              | 4          |                             | Wet 濕         | Immediately            | 3.0%        | 5 |
| Perspiration<br>耐汗   | Acid 酸      | 3.0%                   | 4-5                 | 5               | 4-5         | 3-4         | 5               | 5              | 5          |                             |               | 4 Hours after          |             | 5 |
|                      | Alkali 鹼    |                        | 4-5                 | 5               | 4-5         | 5           | 5               | 5              | 5          | Dry cleaning 耐乾洗            |               | 3.0%                   | 4-5         |   |

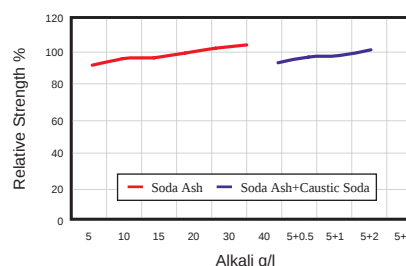
## Light Fastness 日光堅牢度

| Evaluation                                  |  | Dyeing<br>Depth<br>染色濃度 | Color<br>Change<br>20 AFU | Grade<br>ISO<br>Blue Scale | Evaluation                 |                | Dyeing<br>Depth<br>染色濃度 | Color<br>Change<br>20 AFU | Grade<br>ISO<br>Blue Scale |
|---------------------------------------------|--|-------------------------|---------------------------|----------------------------|----------------------------|----------------|-------------------------|---------------------------|----------------------------|
| Artificial Light<br>(Xenon-Arc Lamp)<br>耐日光 |  | 0.1 %                   | 2                         | 3                          | Perspiration Light<br>耐汗日光 | Acid<br>Alkali | 3.0 %                   | 2-3                       | 4                          |
|                                             |  | 0.3 %                   | 2-3                       | 3-4                        |                            |                |                         | 2-3                       | 4                          |
|                                             |  | 1.0 %                   | 3                         | 3-4                        |                            |                |                         |                           |                            |
|                                             |  | 3.0 %                   | 3-4                       | 4-5                        |                            |                |                         |                           |                            |
|                                             |  | 6.0 %                   | 4                         | 5-6                        |                            |                |                         |                           |                            |

浴比依存性 Dependency on Liquor ratio



鹼依存性 Dependency on alkali

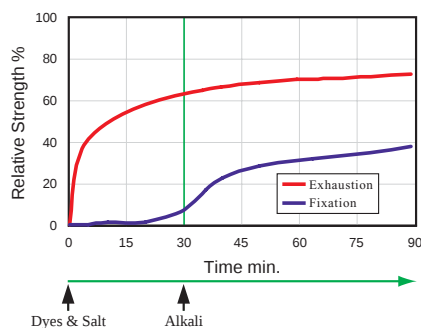


# Evercion Turquoise H-A

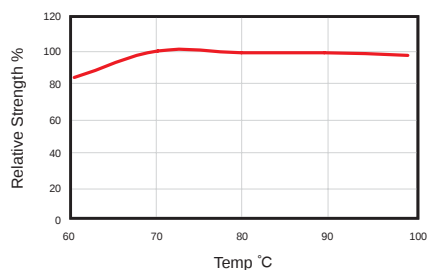
## Dyeing Properties 特性

| Characteristics                                     |                                  | Evaluation |
|-----------------------------------------------------|----------------------------------|------------|
| Reactivity 反應性                                      |                                  | II         |
| Substantivity 親和性                                   |                                  | A          |
| Migration 移染性                                       |                                  | 5          |
| Washing off 洗淨性                                     |                                  | 3-4        |
| Solubility g/l<br>溶解度                               | 50°C Water                       | 100        |
|                                                     | 50°C Water+50 g/l Salt           | 10 ↓       |
| High temp.<br>Dyeing<br>高溫染色性                       | Dyed fabric 色布                   | 5          |
|                                                     | Dye Liquor 染浴                    | 5          |
| Color<br>constancy<br>色恆性                           | Tungsten Lamp                    | RD         |
|                                                     | TL 84 Lamp                       | R          |
| Metallic ions<br>金屬離子                               | Fe <sup>++</sup> 鐵               | 5          |
|                                                     | Cu <sup>++</sup> 銅               | 5          |
| Resin<br>finishing<br>樹脂加工                          | Melamine 三聚氰胺                    | 4-5Y       |
|                                                     | Glyoxal 乙二醛                      | 5          |
| Shade change<br>after fixing<br>treatment<br>固色後變色性 | Polyamide 聚乙醯胺                   | 4Y         |
|                                                     | Quaternary ammonium salt<br>四級胺鹽 | 4-5        |

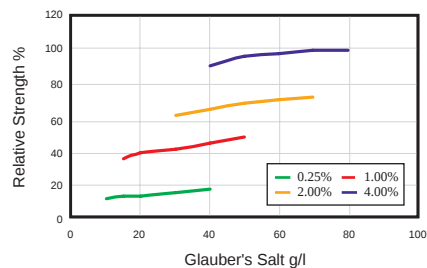
吸盡固著曲線 Exhaustion & Fixation



溫度依存性 Dependency on temperature



芒硝依存性 Dependency on Glauber's salt



# Evercion Turquoise H-A

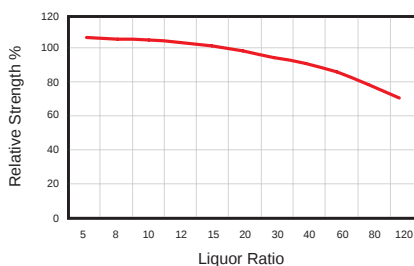
## Fastness before fixing treatment 固色前牢度表

| Evaluation           |             | Depth of shade<br>染色濃度 | Color change<br>變褪色 | Staining 污染     |             |             |                 |                |            | Evaluation                   |          | Depth of shade<br>染色濃度 | Grade<br>級數 |      |
|----------------------|-------------|------------------------|---------------------|-----------------|-------------|-------------|-----------------|----------------|------------|------------------------------|----------|------------------------|-------------|------|
|                      |             |                        |                     | Acetate<br>醋酸纖維 | Cotton<br>棉 | Nylon<br>尼龍 | Polyester<br>聚酯 | Acrylic<br>壓克力 | Wool<br>羊毛 |                              |          |                        |             |      |
| Fastness             |             |                        |                     |                 |             |             |                 |                |            | Fastness                     |          |                        |             |      |
| Washing<br>耐水洗       | ISO C02     | 3.0%                   | 5                   | 5               | 3-4         | 5           | 5               | 4              | 5          | Chlorinated Water耐氯水(20ppm)  |          | 3.0%                   | 3           |      |
|                      | ISO C03     |                        | 5                   | 5               | 3-4         | 5           | 5               | 4              | 5          | Peroxide Bleaching雙氧水漂白      |          |                        | 1           |      |
|                      | ISO C04     |                        | 4                   | 5               | 3           | 5           | 5               | 4-5            | 5          | Rubbing<br>耐摩擦               | Dry 乾    | 3.0%                   | 5           |      |
|                      | ISO C06-C1S |                        | 4-5                 | 5               | 3-4         | 5           | 5               | 4              | 5          |                              | Wet 濕    |                        | 2-3         |      |
|                      | ISO C06-C2S |                        | 4-5                 | 5               | 3-4         | 5           | 5               | 4-5            | 5          | M&S C9A<br>(detergent Light) |          | 0.3%                   | >4-5        |      |
|                      | M&S C4A     |                        | 4-5                 | 5               | 3-4         | 5           | 5               | 4              | 5          |                              |          | 3.0%                   | >4-5        |      |
| Water 耐水             |             | 3.0%                   | 5                   | 5               | 4-5         | 3-4         | 4               | 4              | 4          | M&S C10A (UK-TO)             |          | 3.0%                   | 4-5         |      |
| Hot Water 耐熱水        |             | 3.0%                   | 5                   | 4-5             | 5           | 5           | 5               | 5              | 5          | Saliva (DIN) 耐唾液             |          | 3.0%                   | 4           |      |
| Sea Water 耐海水        |             | 3.0%                   | 5                   | 5               | 5           | 5           | 5               | 5              | 5          | Hot-<br>Pressing<br>耐熱壓      | Dry<br>乾 | Immediately            | 3.0%        | 4-5Y |
| Post mercerizing 後絲光 |             | 3.0%                   | 3-4G                |                 | 3           |             |                 |                |            |                              |          | 4 Hours after          |             | 5    |
| Acid hydrolysis 酸水解  |             | 3.0%                   | 3                   | 4-5             | 5           | 5           | 5               | 5              | 4          |                              | Wet<br>濕 | Immediately            | 3.0%        | 4-5Y |
| Perspiration<br>耐汗   | Acid 酸      | 3.0%                   | 5                   | 5               | 4-5         | 4-5         | 5               | 5              | 4-5        |                              |          | 4 Hours after          |             | 5    |
|                      | Alkali 鹼    |                        | 4-5                 | 5               | 4-5         | 5           | 5               | 5              | 5          | Dry cleaning 耐乾洗             |          | 3.0%                   | 4-5         |      |

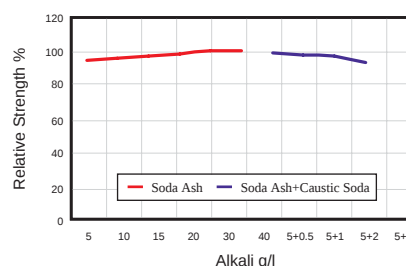
## Light Fastness 日光堅牢度

| Evaluation                                  |  | Dyeing<br>Depth<br>染色濃度 | Color<br>Change<br>20 AFU | Grade<br>ISO<br>Blue Scale | Evaluation                 |                | Dyeing<br>Depth<br>染色濃度 | Color<br>Change<br>20 AFU | Grade<br>ISO<br>Blue Scale |
|---------------------------------------------|--|-------------------------|---------------------------|----------------------------|----------------------------|----------------|-------------------------|---------------------------|----------------------------|
| Artificial Light<br>(Xenon-Arc Lamp)<br>耐日光 |  | 0.1 %                   | 2                         | 3-4                        | Perspiration Light<br>耐汗日光 | Acid<br>Alkali | 3.0 %                   | 2                         | 4                          |
|                                             |  | 0.3 %                   | 2-3                       | 4-5                        |                            |                |                         | 2                         | 4                          |
|                                             |  | 1.0 %                   | 3                         | 4-5                        |                            |                |                         |                           |                            |
|                                             |  | 3.0 %                   | 3-4                       | 5                          |                            |                |                         |                           |                            |
|                                             |  | 6.0 %                   | 4                         | 5                          |                            |                |                         |                           |                            |

浴比依存性 Dependency on Liquor ratio



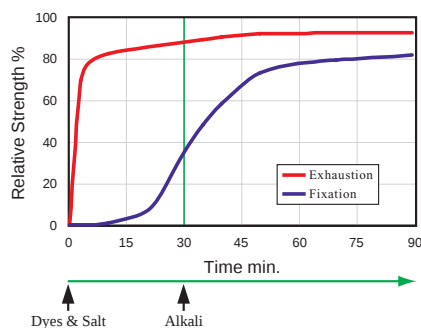
鹼依存性 Dependency on alkali



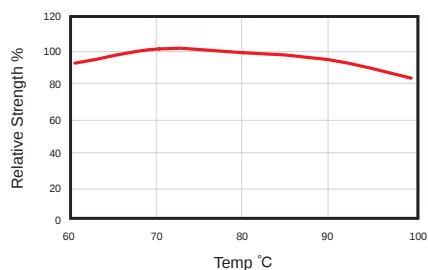
## Dyeing Properties 特性

| Characteristics                                     |                                  | Evaluation |
|-----------------------------------------------------|----------------------------------|------------|
| Reactivity 反應性                                      |                                  | II         |
| Substantivity 親和性                                   |                                  | A          |
| Migration 移染性                                       |                                  | 3-4        |
| Washing off 洗淨性                                     |                                  | 3          |
| Solubility g/l<br>溶解度                               | 50°C Water                       | 120        |
|                                                     | 50°C Water+50 g/l Salt           | 120        |
| High temp.<br>Dyeing<br>高溫染色性                       | Dyed fabric 色布                   | 4-5        |
|                                                     | Dye Liquor 染浴                    | 4          |
| Color<br>constancy<br>色恆性                           | Tungsten Lamp                    | RD         |
|                                                     | TL 84 Lamp                       | RD         |
| Metallic ions<br>金屬離子                               | Fe <sup>++</sup> 鐵               | 4-5Y       |
|                                                     | Cu <sup>++</sup> 銅               | 4D         |
| Resin<br>finishing<br>樹脂加工                          | Melamine 三聚氰胺                    | 4-5B       |
|                                                     | Glyoxal 乙二醛                      | 4-5B       |
| Shade change<br>after fixing<br>treatment<br>固色後變色性 | Polyamide 聚乙醯胺                   | 3-4Y       |
|                                                     | Quaternary ammonium salt<br>四級胺鹽 | 4-5        |

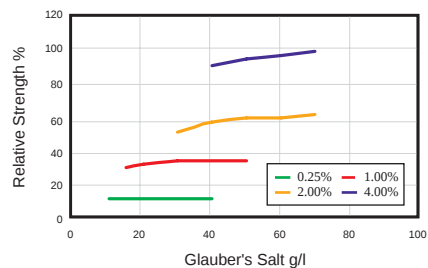
吸盡固著曲線 Exhaustion & Fixation



溫度依存性 Dependency on temperature



芒硝依存性 Dependency on Glauber's salt



# Evercion Green H-E4BD



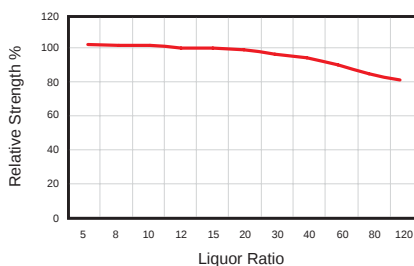
## Fastness before fixing treatment 固色前牢度表

| Evaluation           |             | Depth of shade<br>染色濃度 | Color change<br>變褪色 | Staining 污染     |             |             |                 |                |            | Evaluation                  |          |               | Depth of shade<br>染色濃度 | Grade<br>級數 |
|----------------------|-------------|------------------------|---------------------|-----------------|-------------|-------------|-----------------|----------------|------------|-----------------------------|----------|---------------|------------------------|-------------|
|                      |             |                        |                     | Acetate<br>醋酸纖維 | Cotton<br>棉 | Nylon<br>尼龍 | Polyester<br>聚酯 | Acrylic<br>壓克力 | Wool<br>羊毛 |                             |          |               |                        |             |
| Fastness             |             |                        |                     |                 |             |             |                 |                |            | Fastness                    |          |               |                        |             |
| Washing<br>耐水洗       | ISO C02     | 3.0%                   | 5                   | 5               | 4           | 5           | 5               | 5              | 5          | Chlorinated Water耐氯水(20ppm) |          |               | 3.0%                   | 2           |
|                      | ISO C03     |                        | 5                   | 5               | 4           | 5           | 5               | 5              | 5          | Peroxide Bleaching雙氧水漂白     |          |               |                        | 4           |
|                      | ISO C04     |                        | 5                   | 5               | 4           | 5           | 5               | 5              | 5          | Rubbing<br>耐摩擦              | Dry 乾    | 3.0%          | 5                      |             |
|                      | ISO C06-C1S |                        | 5                   | 5               | 4           | 5           | 5               | 5              | 5          |                             | Wet 濕    |               | 2-3                    |             |
|                      | ISO C06-C2S |                        | 5                   | 5               | 4           | 5           | 5               | 5              | 5          | M&S C9A                     |          |               | 0.3%                   | 4           |
|                      | M&S C4A     |                        | 5                   | 5               | 4           | 5           | 5               | 5              | 5          | (detergent Light)           |          |               | 3.0%                   | 4           |
| Water 耐水             |             | 3.0%                   | 4-5                 | 5               | 3-4         | 3           | 5               | 5              | 3-4        | M&S C10A (UK-TO)            |          |               | 3.0%                   | 4-5         |
| Hot Water 耐熱水        |             | 3.0%                   | 5                   | 5               | 4-5         | 5           | 5               | 5              | 5          | Saliva (DIN) 耐唾液            |          |               | 3.0%                   | 4-5         |
| Sea Water 耐海水        |             | 3.0%                   | 4                   | 5               | 4-5         | 5           | 5               | 5              | 5          | Hot-<br>Pressing<br>耐熱壓     | Dry<br>乾 | Immediately   | 3.0%                   | 2-3RD       |
| Post mercerizing 後絲光 |             | 3.0%                   | 2-3G                |                 | 4-5         |             |                 |                |            |                             |          | 4 Hours after |                        | 5           |
| Acid hydrolysis 酸水解  |             | 3.0%                   | 4                   | 5               | 4-5         | 5           | 5               | 5              | 4-5        |                             | Wet<br>濕 | Immediately   | 3.0%                   | 3RD         |
| Perspiration 耐汗      |             | 3.0%                   | 4-5                 | 5               | 2-3         | 3           | 3               | 5              | 5          |                             |          | 4 Hours after |                        | 5           |
|                      |             |                        | 4-5                 | 5               | 3           | 5           | 5               | 5              | 5          | Dry cleaning 耐乾洗            |          |               | 3.0%                   | 4-5         |

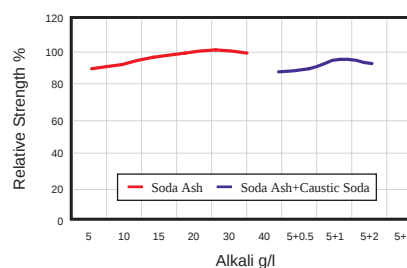
## Light Fastness 日光堅牢度

| Evaluation                                  |  | Dyeing<br>Depth<br>染色濃度 | Color<br>Change<br>20 AFU | Grade<br>ISO<br>Blue Scale | Evaluation                 |                | Dyeing<br>Depth<br>染色濃度 | Color<br>Change<br>20 AFU | Grade<br>ISO<br>Blue Scale |
|---------------------------------------------|--|-------------------------|---------------------------|----------------------------|----------------------------|----------------|-------------------------|---------------------------|----------------------------|
| Artificial Light<br>(Xenon-Arc Lamp)<br>耐日光 |  | 0.1 %                   | 1                         | 3                          | Perspiration Light<br>耐汗日光 | Acid<br>Alkali | 3.0 %                   | 2                         | 4                          |
|                                             |  | 0.3 %                   | 1-2                       | 3                          |                            |                |                         | 2                         | 3-4                        |
|                                             |  | 1.0 %                   | 2                         | 3-4                        |                            |                |                         |                           |                            |
|                                             |  | 3.0 %                   | 2-3                       | 4                          |                            |                |                         |                           |                            |
|                                             |  | 6.0 %                   | 3                         | 4-5                        |                            |                |                         |                           |                            |

浴比依存性 Dependency on Liquor ratio



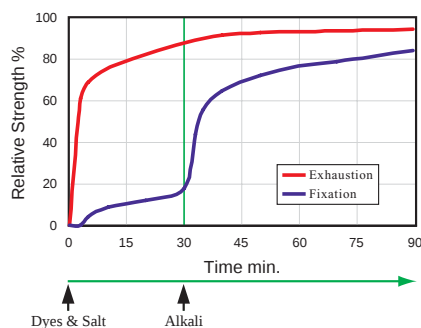
鹼依存性 Dependency on alkali



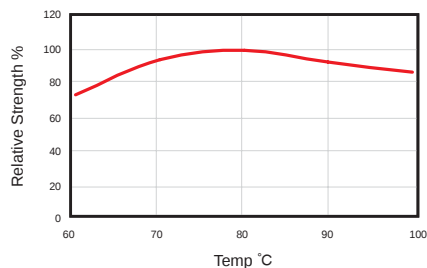
## Dyeing Properties 特性

| Characteristics                                     |                                  | Evaluation |
|-----------------------------------------------------|----------------------------------|------------|
| Reactivity 反應性                                      |                                  | III        |
| Substantivity 親和性                                   |                                  | A          |
| Migration 移染性                                       |                                  | 4          |
| Washing off 洗淨性                                     |                                  | 3          |
| Solubility g/l<br>溶解度                               | 50°C Water                       | 100        |
|                                                     | 50°C Water+50 g/l Salt           | 100        |
| High temp.<br>Dyeing<br>高溫染色性                       | Dyed fabric 色布                   | 3-4        |
|                                                     | Dye Liquor 染浴                    | 3-4        |
| Color<br>constancy<br>色恆性                           | Tungsten Lamp                    | G          |
|                                                     | TL 84 Lamp                       | G          |
| Metallic ions<br>金屬離子                               | Fe <sup>++</sup> 鐵               | 4-5        |
|                                                     | Cu <sup>++</sup> 銅               | 4          |
| Resin<br>finishing<br>樹脂加工                          | Melamine 三聚氰胺                    | 4-5        |
|                                                     | Glyoxal 乙二醛                      | 5          |
| Shade change<br>after fixing<br>treatment<br>固色後變色性 | Polyamide 聚乙醯胺                   | 4-5        |
|                                                     | Quaternary ammonium salt<br>四級胺鹽 | 5          |

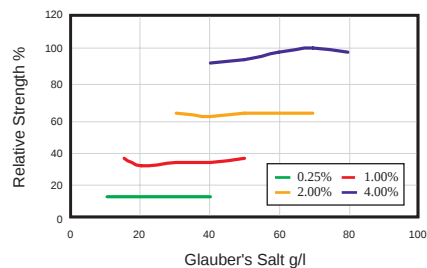
吸盡固著曲線 Exhaustion & Fixation



溫度依存性 Dependency on temperature



芒硝依存性 Dependency on Glauber's salt



# Evercion Yellow ESL

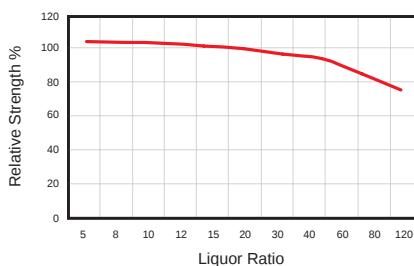
## Fastness before fixing treatment 固色前牢度表

| Evaluation           |             | Depth of shade<br>染色濃度 | Color change<br>變褪色 | Staining 污染     |             |             |                 |                |            | Evaluation                   |          | Depth of shade<br>染色濃度 | Grade<br>級數 |               |
|----------------------|-------------|------------------------|---------------------|-----------------|-------------|-------------|-----------------|----------------|------------|------------------------------|----------|------------------------|-------------|---------------|
|                      |             |                        |                     | Acetate<br>醋酸纖維 | Cotton<br>棉 | Nylon<br>尼龍 | Polyester<br>聚酯 | Acrylic<br>壓克力 | Wool<br>羊毛 |                              |          |                        |             |               |
| Fastness             |             |                        |                     |                 |             |             |                 |                |            | Fastness                     |          |                        |             |               |
| Washing<br>耐水洗       | ISO C02     | 3.0%                   | 5                   | 5               | 4-5         | 5           | 5               | 5              | 5          | Chlorinated Water耐氯水(20ppm)  |          | 3.0%                   | 4Y          |               |
|                      | ISO C03     |                        | 5                   | 5               | 4-5         | 5           | 5               | 5              | 5          | Peroxide Bleaching雙氧水漂白      |          |                        | 4-5         |               |
|                      | ISO C04     |                        | 5                   | 5               | 4           | 5           | 5               | 5              | 5          | Rubbing<br>耐摩擦               | Dry 乾    | 3.0%                   | 5           |               |
|                      | ISO C06-C1S |                        | 5                   | 5               | 4-5         | 5           | 5               | 5              | 5          |                              | Wet 濕    |                        | 3-4         |               |
|                      | ISO C06-C2S |                        | 5                   | 5               | 4-5         | 5           | 5               | 5              | 5          | M&S C9A<br>(detergent Light) |          | 0.3%                   | >4-5        |               |
|                      | M&S C4A     |                        | 5                   | 5               | 4-5         | 5           | 5               | 5              | 5          |                              |          | 3.0%                   | >4-5        |               |
| Water 耐水             |             | 3.0%                   | 5                   | 5               | 4           | 4           | 5               | 5              | 5          | M&S C10A (UK-TO)             |          | 3.0%                   | 4-5         |               |
| Hot Water 耐熱水        |             | 3.0%                   | 5                   | 5               | 4-5         | 5           | 5               | 5              | 5          | Saliva (DIN) 耐唾液             |          | 3.0%                   | 4-5         |               |
| Sea Water 耐海水        |             | 3.0%                   | 5                   | 5               | 4-5         | 5           | 5               | 5              | 5          | Hot-<br>Pressing<br>耐熱壓      | Dry<br>乾 | Immediately            | 3.0%        | 4             |
| Post mercerizing 後絲光 |             | 3.0%                   | 2-3                 |                 | 4-5         |             |                 |                |            |                              |          | 4 Hours after          |             | 5             |
| Acid hydrolysis 酸水解  |             | 3.0%                   | 4-5                 | 5               | 4           | 4-5         | 5               | 5              | 5          |                              | Wet<br>濕 | Immediately            | 3.0%        | 4-5           |
| Perspiration<br>耐汗   | Acid 酸      | 3.0%                   | 4-5                 | 5               | 4-5         | 4-5         | 5               | 5              | 5          |                              |          |                        |             | 4 Hours after |
|                      | Alkali 鹼    |                        | 4-5                 | 5               | 4-5         | 5           | 5               | 5              | 5          | Dry cleaning 耐乾洗             |          | 3.0%                   | 4-5         |               |

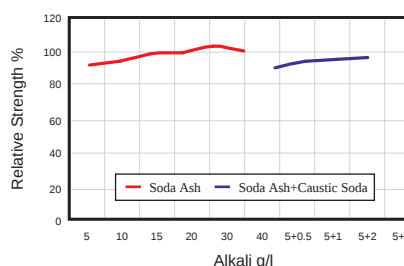
## Light Fastness 日光堅牢度

| Evaluation                                  |  | Dyeing<br>Depth<br>染色濃度 | Color<br>Change<br>20 AFU | Grade<br>ISO<br>Blue Scale | Evaluation                 |                | Dyeing<br>Depth<br>染色濃度 | Color<br>Change<br>20 AFU | Grade<br>ISO<br>Blue Scale |
|---------------------------------------------|--|-------------------------|---------------------------|----------------------------|----------------------------|----------------|-------------------------|---------------------------|----------------------------|
| Artificial Light<br>(Xenon-Arc Lamp)<br>耐日光 |  | 0.1 %                   | 4                         | 5                          | Perspiration Light<br>耐汗日光 | Acid<br>Alkali | 3.0 %                   | 4-5                       | 5-6                        |
|                                             |  | 0.3 %                   | 4-5                       | 5                          |                            |                |                         | 4-5                       | 5-6                        |
|                                             |  | 1.0 %                   | 4-5                       | 5                          |                            |                |                         |                           |                            |
|                                             |  | 3.0 %                   | 4-5                       | 5-6                        |                            |                |                         |                           |                            |
|                                             |  | 6.0 %                   | 4-5                       | 5-6                        |                            |                |                         |                           |                            |

浴比依存性 Dependency on Liquor ratio



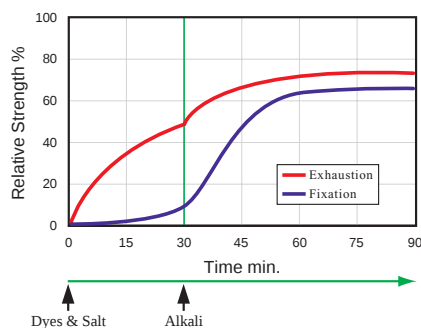
鹼依存性 Dependency on alkali



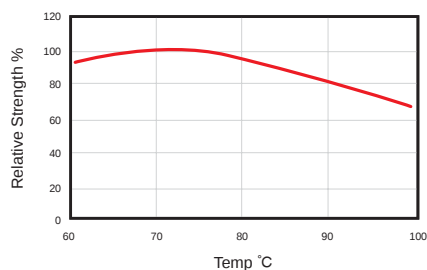
## Dyeing Properties 特性

| Characteristics                                     |                                  | Evaluation |
|-----------------------------------------------------|----------------------------------|------------|
| Reactivity 反應性                                      |                                  | II         |
| Substantivity 親和性                                   |                                  | A          |
| Migration 移染性                                       |                                  | 2-3        |
| Washing off 洗淨性                                     |                                  | 2-3        |
| Solubility g/l<br>溶解度                               | 50°C Water                       | 100        |
|                                                     | 50°C Water+50 g/l Salt           | 100        |
| High temp.<br>Dyeing<br>高溫染色性                       | Dyed fabric 色布                   | 4          |
|                                                     | Dye Liquor 染浴                    | 3-4        |
| Color<br>constancy<br>色恆性                           | Tungsten Lamp                    | B          |
|                                                     | TL 84 Lamp                       | B          |
| Metallic ions<br>金屬離子                               | Fe <sup>++</sup> 鐵               | 5          |
|                                                     | Cu <sup>++</sup> 銅               | 1          |
| Resin<br>finishing<br>樹脂加工                          | Melamine 三聚氰胺                    | 4-5        |
|                                                     | Glyoxal 乙二醛                      | 4          |
| Shade change<br>after fixing<br>treatment<br>固色後變色性 | Polyamide 聚乙醯胺                   | 4-5        |
|                                                     | Quaternary ammonium salt<br>四級胺鹽 | 4-5        |

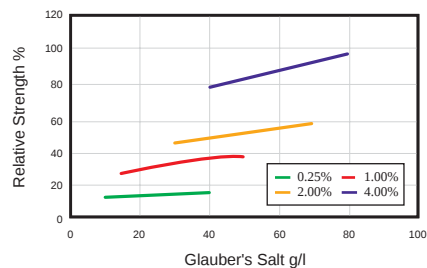
吸盡固著曲線 Exhaustion & Fixation



溫度依存性 Dependency on temperature



芒硝依存性 Dependency on Glauber's salt



# Evercion Deep Red ESL

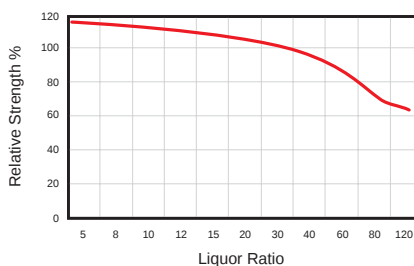
## Fastness before fixing treatment 固色前牢度表

| Evaluation           |             | Depth of shade<br>染色濃度 | Color change<br>變褪色 | Staining 污染     |             |             |                 |                |            | Evaluation                   |          | Depth of shade<br>染色濃度 | Grade<br>級數 |      |
|----------------------|-------------|------------------------|---------------------|-----------------|-------------|-------------|-----------------|----------------|------------|------------------------------|----------|------------------------|-------------|------|
|                      |             |                        |                     | Acetate<br>醋酸纖維 | Cotton<br>棉 | Nylon<br>尼龍 | Polyester<br>聚酯 | Acrylic<br>壓克力 | Wool<br>羊毛 |                              |          |                        |             |      |
| Fastness             |             |                        |                     |                 |             |             |                 |                |            | Fastness                     |          |                        |             |      |
| Washing<br>耐水洗       | ISO C02     | 3.0%                   | 5                   | 5               | 4-5         | 5           | 5               | 5              | 5          | Chlorinated Water耐氯水(20ppm)  |          | 3.0%                   | 4(B)        |      |
|                      | ISO C03     |                        | 5                   | 5               | 4-5         | 5           | 5               | 4-5            | 5          | Peroxide Bleaching雙氧水漂白      |          |                        | 4           |      |
|                      | ISO C04     |                        | 5                   | 5               | 5           | 5           | 5               | 5              | 5          | Rubbing<br>耐摩擦               | Dry 乾    | 3.0%                   | 5           |      |
|                      | ISO C06-C1S |                        | 5                   | 5               | 4-5         | 5           | 5               | 5              | 5          |                              | Wet 濕    |                        | 3           |      |
|                      | ISO C06-C2S |                        | 5                   | 5               | 4-5         | 5           | 5               | 4-5            | 5          | M&S C9A<br>(detergent Light) |          | 0.3%                   | >4-5        |      |
|                      | M&S C4A     |                        | 5                   | 5               | 5           | 5           | 5               | 5              | 5          |                              |          | 3.0%                   | >4-5        |      |
| Water 耐水             |             | 3.0%                   | 5                   | 5               | 4           | 4           | 5               | 4-5            | 5          | M&S C10A (UK-TO)             |          | 3.0%                   | 5           |      |
| Hot Water 耐熱水        |             | 3.0%                   | 5                   | 5               | 5           | 5           | 5               | 5              | 5          | Saliva (DIN) 耐唾液             |          | 3.0%                   | 4-5         |      |
| Sea Water 耐海水        |             | 3.0%                   | 5                   | 5               | 4-5         | 5           | 5               | 5              | 5          | Hot-<br>Pressing<br>耐熱壓      | Dry<br>乾 | Immediately            | 3.0%        | 1-2G |
| Post mercerizing 後絲光 |             | 3.0%                   | 3-4R(Y)             |                 | 4           |             |                 |                |            |                              |          | 4 Hours after          |             | 4-5  |
| Acid hydrolysis 酸水解  |             | 3.0%                   | 4-5                 | 4-5             | 2           | 1-2         | 4-5             | 4-5            | 3-4        |                              | Wet<br>濕 | Immediately            | 3.0%        | 3G   |
| Perspiration<br>耐汗   |             | 3.0%                   | 4-5                 | 5               | 4-5         | 4-5         | 5               | 5              | 5          |                              |          | 4 Hours after          |             | 4-5  |
|                      |             |                        |                     |                 |             |             |                 |                |            | Dry cleaning 耐乾洗             |          | 3.0%                   | 4-5         |      |

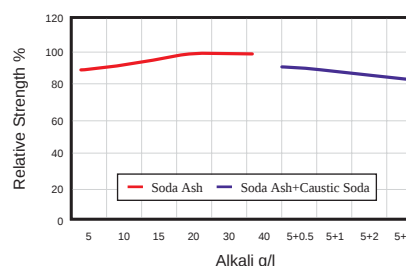
## Light Fastness 日光堅牢度

| Evaluation                                  |  | Dyeing<br>Depth<br>染色濃度 | Color<br>Change<br>20 AFU | Grade<br>ISO<br>Blue Scale | Evaluation                 |                | Dyeing<br>Depth<br>染色濃度 | Color<br>Change<br>20 AFU | Grade<br>ISO<br>Blue Scale |
|---------------------------------------------|--|-------------------------|---------------------------|----------------------------|----------------------------|----------------|-------------------------|---------------------------|----------------------------|
| Artificial Light<br>(Xenon-Arc Lamp)<br>耐日光 |  | 0.1 %                   | 2                         | 3                          | Perspiration Light<br>耐汗日光 | Acid<br>Alkali | 3.0 %                   | 3-4                       | 5                          |
|                                             |  | 0.3 %                   | 2                         | 3-4                        |                            |                |                         | 3                         | 4-5                        |
|                                             |  | 1.0 %                   | 3                         | 4-5                        |                            |                |                         |                           |                            |
|                                             |  | 3.0 %                   | 3-4                       | 5                          |                            |                |                         |                           |                            |
|                                             |  | 6.0 %                   | 4                         | 5-6                        |                            |                |                         |                           |                            |

浴比依存性 Dependency on Liquor ratio



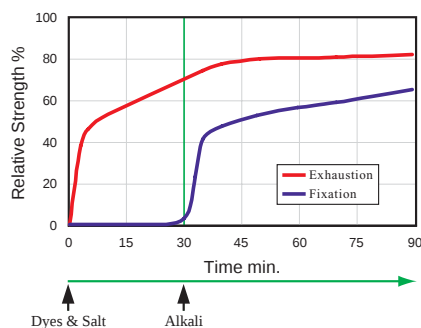
鹼依存性 Dependency on alkali



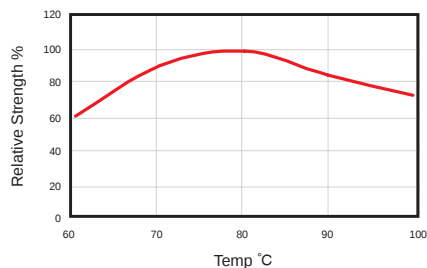
## Dyeing Properties 特性

| Characteristics                                     |                                  | Evaluation |
|-----------------------------------------------------|----------------------------------|------------|
| Reactivity 反應性                                      |                                  | III        |
| Substantivity 親和性                                   |                                  | A          |
| Migration 移染性                                       |                                  | 4          |
| Washing off 洗淨性                                     |                                  | 2-3        |
| Solubility g/l<br>溶解度                               | 50°C Water                       | 100        |
|                                                     | 50°C Water+50 g/l Salt           | 80         |
| High temp.<br>Dyeing<br>高溫染色性                       | Dyed fabric 色布                   | 4          |
|                                                     | Dye Liquor 染浴                    | 4          |
| Color<br>constancy<br>色恆性                           | Tungsten Lamp                    | B          |
|                                                     | TL 84 Lamp                       | B          |
| Metallic ions<br>金屬離子                               | Fe <sup>++</sup> 鐵               | 4-5        |
|                                                     | Cu <sup>++</sup> 銅               | 3BD        |
| Resin<br>finishing<br>樹脂加工                          | Melamine 三聚氰胺                    | 4-5        |
|                                                     | Glyoxal 乙二醛                      | 4-5        |
| Shade change<br>after fixing<br>treatment<br>固色後變色性 | Polyamide 聚乙醯胺                   | 3B         |
|                                                     | Quaternary ammonium salt<br>四級胺鹽 | 4-5        |

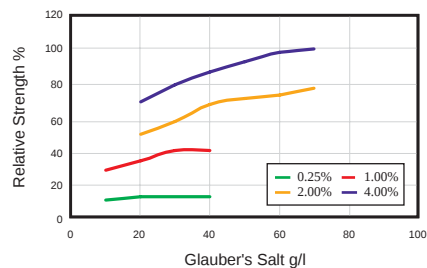
吸盡固著曲線 Exhaustion & Fixation



溫度依存性 Dependency on temperature



芒硝依存性 Dependency on Glauber's salt



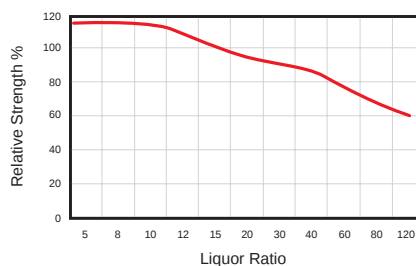
## Fastness before fixing treatment 固色前牢度表

| Evaluation           |             | Depth of shade<br>染色濃度 | Color change<br>變褪色 | Staining 污染     |             |             |                 |                |            | Evaluation                   |          | Depth of shade<br>染色濃度 | Grade<br>級數 |      |
|----------------------|-------------|------------------------|---------------------|-----------------|-------------|-------------|-----------------|----------------|------------|------------------------------|----------|------------------------|-------------|------|
|                      |             |                        |                     | Acetate<br>醋酸纖維 | Cotton<br>棉 | Nylon<br>尼龍 | Polyester<br>聚酯 | Acrylic<br>壓克力 | Wool<br>羊毛 |                              |          |                        |             |      |
| Fastness             |             |                        |                     |                 |             |             |                 |                |            | Fastness                     |          |                        |             |      |
| Washing<br>耐水洗       | ISO C02     | 3.0%                   | 4-5                 | 4-5             | 3-4         | 5           | 5               | 5              | 5          | Chlorinated Water耐氯水(20ppm)  |          | 3.0%                   | 3-4B        |      |
|                      | ISO C03     |                        | 4-5                 | 4-5             | 3-4         | 5           | 5               | 4-5            | 5          | Peroxide Bleaching雙氧水漂白      |          |                        | 4           |      |
|                      | ISO C04     |                        | 4-5                 | 4-5             | 3           | 5           | 5               | 4-5            | 3          | Rubbing<br>耐摩擦               | Dry 乾    | 3.0%                   | 5           |      |
|                      | ISO C06-C1S |                        | 5                   | 5               | 4           | 5           | 5               | 5              | 5          |                              | Wet 濕    | 3.0%                   | 2-3         |      |
|                      | ISO C06-C2S |                        | 5                   | 5               | 4-5         | 5           | 5               | 5              | 5          | M&S C9A<br>(detergent Light) |          | 0.3%                   | >4-5        |      |
|                      | M&S C4A     |                        | 5                   | 5               | 4-5         | 5           | 5               | 5              | 5          |                              |          | 3.0%                   | >4-5        |      |
| Water 耐水             |             | 3.0%                   | 5                   | 4-5             | 3-4         | 5           | 5               | 5              | 5          | M&S C10A (UK-TO)             |          | 3.0%                   | 4-5         |      |
| Hot Water 耐熱水        |             | 3.0%                   | 5                   | 4-5             | 4-5         | 5           | 5               | 5              | 5          | Saliva (DIN) 耐唾液             |          | 3.0%                   | 4-5         |      |
| Sea Water 耐海水        |             | 3.0%                   | 4B                  | 5               | 4-5         | 5           | 5               | 5              | 5          | Hot-<br>Pressing<br>耐熱壓      | Dry<br>乾 | Immediately            | 3.0%        | 3-4B |
| Post mercerizing 後絲光 |             | 3.0%                   | 2Y                  |                 | 4           |             |                 |                |            |                              |          | 4 Hours after          |             | 4-5  |
| Acid hydrolysis 酸水解  |             | 3.0%                   | 4                   | 4               | 3-4         | 3           | 4               | 3-4            | 3-4        |                              | Wet<br>濕 | Immediately            | 3.0%        | 3-4B |
| Perspiration<br>耐汗   | Acid 酸      | 3.0%                   | 4B                  | 5               | 3           | 3-4         | 5               | 4              | 4-5        |                              |          | 4 Hours after          |             | 4-5  |
|                      | Alkali 鹼    |                        | 4-5                 | 5               | 4           | 5           | 5               | 5              | 5          | Dry cleaning 耐乾洗             |          | 3.0%                   | 4-5         |      |

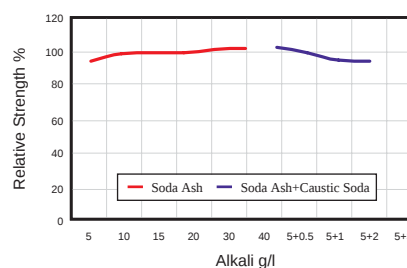
## Light Fastness 日光堅牢度

| Evaluation                                  |  | Dyeing<br>Depth<br>染色濃度 | Color<br>Change<br>20 AFU | Grade<br>ISO<br>Blue Scale | Evaluation                 |                | Dyeing<br>Depth<br>染色濃度 | Color<br>Change<br>20 AFU | Grade<br>ISO<br>Blue Scale |
|---------------------------------------------|--|-------------------------|---------------------------|----------------------------|----------------------------|----------------|-------------------------|---------------------------|----------------------------|
| Artificial Light<br>(Xenon-Arc Lamp)<br>耐日光 |  | 0.1 %                   | 2                         | 3-4                        | Perspiration Light<br>耐汗日光 | Acid<br>Alkali | 3.0 %                   | 3-4                       | 4-5                        |
|                                             |  | 0.3 %                   | 3                         | 3-4                        |                            |                |                         | 3                         | 4                          |
|                                             |  | 1.0 %                   | 3-4                       | 4                          |                            |                |                         |                           |                            |
|                                             |  | 3.0 %                   | 4                         | 4-5                        |                            |                |                         |                           |                            |
|                                             |  | 6.0 %                   | 4                         | 4-5                        |                            |                |                         |                           |                            |

浴比依存性 Dependency on Liquor ratio



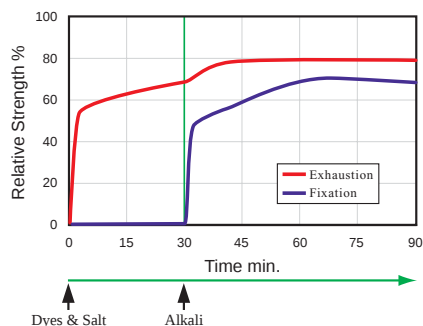
鹼依存性 Dependency on alkali



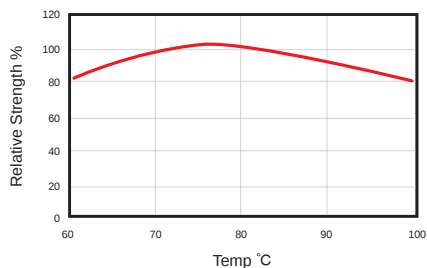
## Dyeing Properties 特性

| Characteristics                                     |                                  | Evaluation |
|-----------------------------------------------------|----------------------------------|------------|
| Reactivity 反應性                                      |                                  | III        |
| Substantivity 親和性                                   |                                  | A          |
| Migration 移染性                                       |                                  | 3-4        |
| Washing off 洗淨性                                     |                                  | 3          |
| Solubility g/l<br>溶解度                               | 50°C Water                       | 100        |
|                                                     | 50°C Water+50 g/l Salt           | 100        |
| High temp.<br>Dyeing<br>高溫染色性                       | Dyed fabric 色布                   | 4          |
|                                                     | Dye Liquor 染浴                    | 4-5        |
| Color<br>constancy<br>色恆性                           | Tungsten Lamp                    | Y          |
|                                                     | TL 84 Lamp                       | G (Y)      |
| Metallic ions<br>金屬離子                               | Fe <sup>++</sup> 鐵               | 4-5        |
|                                                     | Cu <sup>++</sup> 銅               | 2-3(B)     |
| Resin<br>finishing<br>樹脂加工                          | Melamine 三聚氰胺                    | 3          |
|                                                     | Glyoxal 乙二醛                      | 3-4        |
| Shade change<br>after fixing<br>treatment<br>固色後變色性 | Polyamide 聚乙醯胺                   | 3-4        |
|                                                     | Quaternary ammonium salt<br>四級胺鹽 | 4-5        |

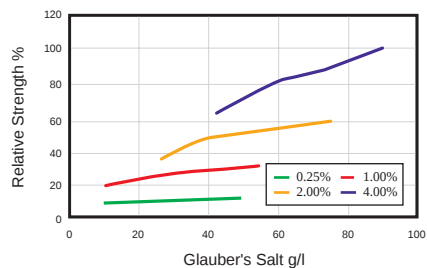
吸盡固著曲線 Exhaustion & Fixation



溫度依存性 Dependency on temperature



芒硝依存性 Dependency on Glauber's salt



# Evercion Crimson ESL



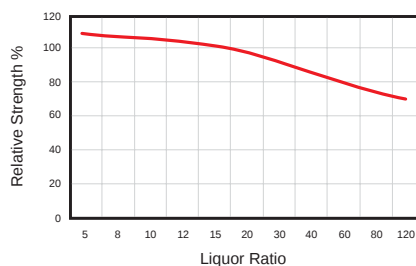
## Fastness before fixing treatment 固色前牢度表

| Evaluation           |             | Depth of shade<br>染色濃度 | Color change<br>變褪色 | Staining 污染     |             |             |                 |                |            | Evaluation                   |               | Depth of shade<br>染色濃度 | Grade<br>級數 |     |
|----------------------|-------------|------------------------|---------------------|-----------------|-------------|-------------|-----------------|----------------|------------|------------------------------|---------------|------------------------|-------------|-----|
|                      |             |                        |                     | Acetate<br>醋酸纖維 | Cotton<br>棉 | Nylon<br>尼龍 | Polyester<br>聚酯 | Acrylic<br>壓克力 | Wool<br>羊毛 |                              |               |                        |             |     |
| Fastness             |             |                        |                     |                 |             |             |                 |                |            | Fastness                     |               |                        |             |     |
| Washing<br>耐水洗       | ISO C02     | 3.0%                   | 4-5                 | 5               | 4-5         | 5           | 5               | 5              | 5          | Chlorinated Water耐氯水(20ppm)  |               | 3.0%                   | 4-5         |     |
|                      | ISO C03     |                        | 4-5                 | 5               | 5           | 5           | 5               | 5              | 5          | Peroxide Bleaching雙氧水漂白      |               |                        | 4-5         |     |
|                      | ISO C04     |                        | 4-5                 | 5               | 4-5         | 5           | 5               | 5              | 4-5        | Rubbing<br>耐摩擦               | Dry 乾         | 3.0%                   | 5           |     |
|                      | ISO C06-C1S |                        | 4-5                 | 5               | 4-5         | 5           | 5               | 5              | 5          |                              | Wet 濕         | 3                      |             |     |
|                      | ISO C06-C2S |                        | 4-5                 | 5               | 4-5         | 5           | 5               | 5              | 5          | M&S C9A<br>(detergent Light) |               | 0.3%                   | 4-5         |     |
|                      | M&S C4A     |                        | 4-5                 | 5               | 5           | 5           | 5               | 5              | 5          |                              |               | 3.0%                   | 4-5         |     |
| Water 耐水             |             | 3.0%                   | 4-5                 | 5               | 4-5         | 4-5         | 5               | 5              | 5          | M&S C10A (UK-TO)             |               | 3.0%                   | 4-5         |     |
| Hot Water 耐熱水        |             | 3.0%                   | 4-5                 | 5               | 5           | 5           | 5               | 5              | 5          | Saliva (DIN) 耐唾液             |               | 3.0%                   | 5           |     |
| Sea Water 耐海水        |             | 3.0%                   | 4-5                 | 5               | 5           | 5           | 5               | 5              | 5          | Hot-<br>Pressing<br>耐熱壓      | Dry 乾         | Immediately            | 3.0%        | 3   |
| Post mercerizing 後絲光 |             | 3.0%                   | 3*                  |                 | 3-4         |             |                 |                |            |                              | 4 Hours after | 4-5                    |             |     |
| Acid hydrolysis 酸水解  |             | 3.0%                   | 4-5                 | 4-5             | 3           | 3           | 5               | 4-5            | 4-5        |                              | Wet 濕         | Immediately            | 3.0%        | 3   |
| Perspiration<br>耐汗   | Acid 酸      | 3.0%                   | 4-5                 | 5               | 4-5         | 4-5         | 5               | 5              | 5          |                              |               | 4 Hours after          |             | 4-5 |
|                      | Alkali 鹼    |                        | 4-5                 | 5               | 4-5         | 5           | 5               | 5              | 5          | Dry cleaning 耐乾洗             |               | 3.0%                   | *           |     |

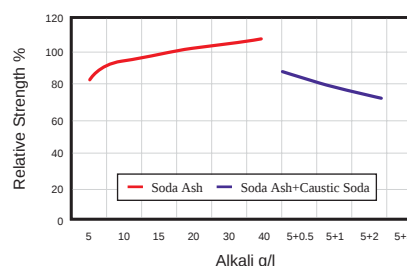
## Light Fastness 日光堅牢度

| Evaluation                                  |  | Dyeing<br>Depth<br>染色濃度 | Color<br>Change<br>20 AFU | Grade<br>ISO<br>Blue Scale | Evaluation                 |                | Dyeing<br>Depth<br>染色濃度 | Color<br>Change<br>20 AFU | Grade<br>ISO<br>Blue Scale |
|---------------------------------------------|--|-------------------------|---------------------------|----------------------------|----------------------------|----------------|-------------------------|---------------------------|----------------------------|
| Artificial Light<br>(Xenon-Arc Lamp)<br>耐日光 |  | 0.1 %                   | 2-3                       | 3-4                        | Perspiration Light<br>耐汗日光 | Acid<br>Alkali | 3.0 %                   | 3                         | 5                          |
|                                             |  | 0.3 %                   | 3                         | 4                          |                            |                |                         | 3-4                       | 4                          |
|                                             |  | 1.0 %                   | 3-4                       | 4-5                        |                            |                |                         |                           |                            |
|                                             |  | 3.0 %                   | 4                         | 5-6                        |                            |                |                         |                           |                            |
|                                             |  | 6.0 %                   | 4-5                       | 6                          |                            |                |                         |                           |                            |

浴比依存性 Dependency on Liquor ratio



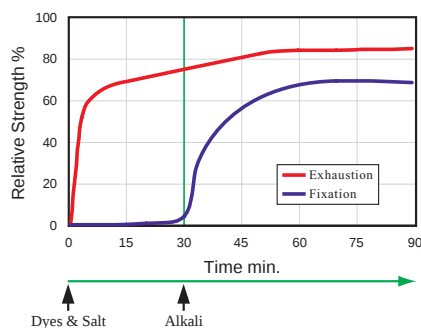
鹼依存性 Dependency on alkali



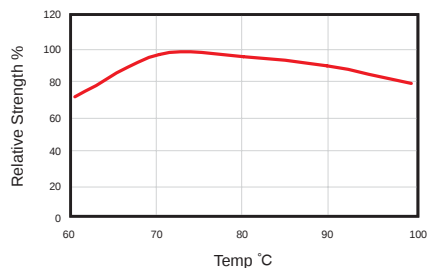
## Dyeing Properties 特性

| Characteristics                                     |                                  | Evaluation |
|-----------------------------------------------------|----------------------------------|------------|
| Reactivity 反應性                                      |                                  | III        |
| Substantivity 親和性                                   |                                  | A          |
| Migration 移染性                                       |                                  | 3-4        |
| Washing off 洗淨性                                     |                                  | 2          |
| Solubility g/l<br>溶解度                               | 50°C Water                       | 70         |
|                                                     | 50°C Water+50 g/l Salt           | 60         |
| High temp.<br>Dyeing<br>高溫染色性                       | Dyed fabric 色布                   | 1-2R       |
|                                                     | Dye Liquor 染浴                    | 4G         |
| Color<br>constancy<br>色恆性                           | Tungsten Lamp                    | R          |
|                                                     | TL 84 Lamp                       | R          |
| Metallic ions<br>金屬離子                               | Fe <sup>++</sup> 鐵               | 4-5        |
|                                                     | Cu <sup>++</sup> 銅               | 3-4        |
| Resin<br>finishing<br>樹脂加工                          | Melamine 三聚氰胺                    | 4Y         |
|                                                     | Glyoxal 乙二醛                      | 4R         |
| Shade change<br>after fixing<br>treatment<br>固色後變色性 | Polyamide 聚乙醯胺                   | 4Y         |
|                                                     | Quaternary ammonium salt<br>四級胺鹽 | 5          |

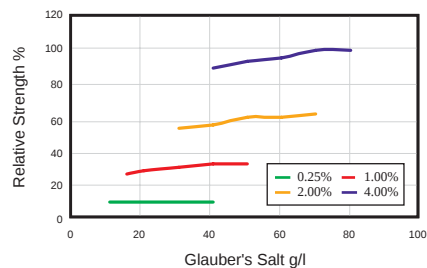
吸盡固著曲線 Exhaustion & Fixation



溫度依存性 Dependency on temperature



芒硝依存性 Dependency on Glauber's salt



# Evercion Navy ESL

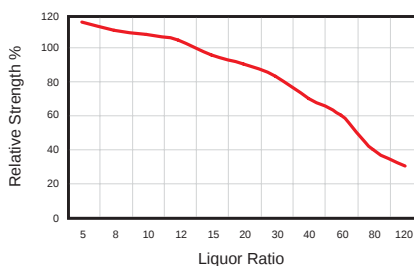
## Fastness before fixing treatment 固色前牢度表

| Evaluation           |             | Depth of shade<br>染色濃度 | Color change<br>變褪色 | Staining 污染     |             |             |                 |                |            | Evaluation                  |                  | Depth of shade<br>染色濃度 | Grade<br>級數 |               |
|----------------------|-------------|------------------------|---------------------|-----------------|-------------|-------------|-----------------|----------------|------------|-----------------------------|------------------|------------------------|-------------|---------------|
|                      |             |                        |                     | Acetate<br>醋酸纖維 | Cotton<br>棉 | Nylon<br>尼龍 | Polyester<br>聚酯 | Acrylic<br>壓克力 | Wool<br>羊毛 |                             |                  |                        |             |               |
| Fastness             |             |                        |                     |                 |             |             |                 |                |            | Fastness                    |                  |                        |             |               |
| Washing<br>耐水洗       | ISO C02     | 3.0%                   | 4-5                 | 4-5             | 4           | 5           | 5               | 5              | 5          | Chlorinated Water耐氯水(20ppm) |                  | 3.0%                   | 3-4B        |               |
|                      | ISO C03     |                        | 4-5                 | 4-5             | 3-4         | 5           | 5               | 4-5            | 5          | Peroxide Bleaching雙氧水漂白     |                  |                        | 4           |               |
|                      | ISO C04     |                        | 4-5                 | 4-5             | 3-4         | 5           | 5               | 5              | 5          | Rubbing<br>耐摩擦              | Dry 乾            | 3.0%                   | 5           |               |
|                      | ISO C06-C1S |                        | 4-5                 | 5               | 4           | 5           | 5               | 5              | 5          |                             | Wet 濕            |                        | 2-3         |               |
|                      | ISO C06-C2S |                        | 4-5                 | 5               | 4           | 5           | 5               | 5              | 5          | M&S C9A                     |                  | 0.3%                   | >4-5        |               |
|                      | M&S C4A     |                        | 4-5                 | 5               | 4           | 5           | 5               | 5              | 5          | (detergent Light)           |                  | 3.0%                   | >4-5        |               |
| Water 耐水             |             | 3.0%                   | 5                   | 4-5             | 3-4         | 5           | 5               | 4-5            | 5          | M&S C10A (UK-TO)            |                  | 3.0%                   | 4-5         |               |
| Hot Water 耐熱水        |             | 3.0%                   | 5                   | 4-5             | 4-5         | 5           | 5               | 5              | 5          | Saliva (DIN) 耐唾液            |                  | 3.0%                   | 4-5         |               |
| Sea Water 耐海水        |             | 3.0%                   | 4B                  | 5               | 4-5         | 5           | 5               | 5              | 5          | Hot-<br>Pressing<br>耐熱壓     | Dry 乾            | Immediately            | 3.0%        | 3-4B          |
| Post mercerizing 後絲光 |             | 3.0%                   | 2Y                  |                 | 4           |             |                 |                |            |                             |                  | 4 Hours after          |             | 4-5           |
| Acid hydrolysis 酸水解  |             | 3.0%                   | 4                   | 4               | 3-4         | 3           | 4               | 3-4            | 3-4        |                             | Wet 濕            | Immediately            | 3.0%        | 3-4B          |
| Perspiration<br>耐汗   | Acid 酸      | 3.0%                   | 4B                  | 5               | 3           | 3-4         | 5               | 4              | 4-5        |                             |                  |                        |             | 4 Hours after |
|                      | Alkali 鹼    |                        |                     | 4-5             | 5           | 4           | 5               | 5              | 5          | 5                           | Dry cleaning 耐乾洗 |                        | 3.0%        | 4-5           |

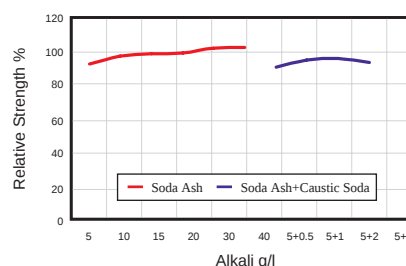
## Light Fastness 日光堅牢度

| Evaluation                                  |  | Dyeing<br>Depth<br>染色濃度 | Color<br>Change<br>20 AFU | Grade<br>ISO<br>Blue Scale | Evaluation                 |                | Dyeing<br>Depth<br>染色濃度 | Color<br>Change<br>20 AFU | Grade<br>ISO<br>Blue Scale |
|---------------------------------------------|--|-------------------------|---------------------------|----------------------------|----------------------------|----------------|-------------------------|---------------------------|----------------------------|
| Artificial Light<br>(Xenon-Arc Lamp)<br>耐日光 |  | 0.1 %                   | 1-2                       | 3-4                        | Perspiration Light<br>耐汗日光 | Acid<br>Alkali | 3.0 %                   | 2-3                       | 4-5                        |
|                                             |  | 0.3 %                   | 2-3                       | 3-4                        |                            |                |                         | 2-3                       | 4-5                        |
|                                             |  | 1.0 %                   | 2-3                       | 4                          |                            |                |                         |                           |                            |
|                                             |  | 3.0 %                   | 3                         | 4-5                        |                            |                |                         |                           |                            |
|                                             |  | 6.0 %                   | 3-4                       | 4-5                        |                            |                |                         |                           |                            |

浴比依存性 Dependency on Liquor ratio



鹼依存性 Dependency on alkali



## Note

Handwriting practice lines consisting of 20 horizontal dotted lines.

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－技術服務處

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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