

## Notes

**Warnings :** The information and recommendations presented here were completed with the utmost care, but can't be extended to cover every possible case. They are intended to serve as non-binding guidelines and must be adapted to the prevailing condition. The product whether used singly or in combination with other substances, should be carried out in lab test prior to bulk production. The user needs to assume all risk and liability no matter whatsoever results are.

## Global Service

### Everlight Chemical Industrial Corporation

#### Head Office

6th Fl., 77 Sec. 2, Tun Hua S. Rd, Taipei,  
Taiwan, R.O.C.

Home Page : <http://www.ecic.com>

e-mail : [sales-CCBU@ecic.com.tw](mailto:sales-CCBU@ecic.com.tw)

Tel : 886-2-2706-6006

Fax : 886-2-2706-1254, 886-2-2703-1388

#### Tech. Marketing & Service Div.

e-mail : [tad@ecic.com.tw](mailto:tad@ecic.com.tw)

Tel : 886-3-483-8088

Fax : 886-3-483-4672

ACM010E.2014/09.760

# Everacid®

[www.ecic.com](http://www.ecic.com)

Better Chemistry  
Better Life

EVERACID

English

Everlight Chemical Industrial Corporation

Everacid	A
Everacid	N
Everset	M

## Acid Dyes



  
**Everlight  
Chemical**

## Properties

### Everacid A dyes

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

### Everacid N dyes








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

### Everset M dyes

- based on 1:2 metal complex dyes.
- very good build-up on different types of nylon-including microfibres.
- high light fastness properties at all depths of shades
- very high wet fastness properties including heavy shades.
- medium migration.
- moderate coverage of physical barness.
- good compatibility.
- simple dyeing method.

### Fastness properties

Fastness properties were tested in accordance with SN-ISO 105 or AATCC and carried out under our laboratory conditions. Each shade is illustrated at 1% o.w.f. except black shades which are 2% o.w.f. For all wet and rub fastness tests, the dyed fabric was after treated with the synthetic fixing agent.











Everacid dyes on Nylon		Everacid A dyes						
		Yellow A-FG	Yellow A-4R	Red A-RL	Red A-2B	Bordeaux A-RL	Blue A-RRL	Blue A-RL
								
C.I. No.		Y-49	Y-199	R-337	R-266	-	B-62	B-324
Stability of Solution (g/l)	90°C→25°C	30	40	80	20	60	40	10
Solubility (g/l)	90°C	100	60	100	60	80	40	40
Lightfastness ----- ISO 105-B02 (Xenotest)	0.5% o.w.f.	>6	>6	>6	>6	5	6	>6
	2.0% o.w.f.	>6	>6	>6	>6	6	>6	>6
Lightfastness to perspiration (alkali) ----- ISO 105-B02 (Xenotest) (modified)	0.5% o.w.f.	>6	>6	>6	>6	5	6	6
	2.0% o.w.f.	>6	>6	>6	>6	6	>6	>6
Fastness to Washing ----- ISO 105-C06-B2S (50°C)	E	5	4-5	4	4-5	5	4-5	4
	C	5	5	4-5	4	5	4-5	4
	N	4-5	5	3-4	3	5	3	3
Fastness to Washing ----- AATCC 61-2A (49°C)	E	5	4-5	4	4-5	4-5	5	4
	C	5	4-5	4	3-4	5	5	4
	N	5	5	3-4	2-3	5	4-5	3-4
Fastness to Water ----- ISO 105-E01	E	4-5	5	5	5	5	5	5
	C	4-5	5	5	5	5	5	5
	N	4-5	5	5	5	5	4-5	4-5
Fastness to perspiration (alkali perspiration) ----- ISO 105-E04	E	4-5	5	4-5	5	5	4-5	5
	C	4-5	4-5	4-5	4-5	5	4	4-5
	N	3-4	4-5	4-5	4-5	5	3-4	4-5
Fastness to chlorinated Water(20ppm) --- ISO 105-E03	E	4-5	4-5	4-5	4-5	4-5	3	4-5
Fastness to Rubbing ----- ISO 105-X12	Dry	5	5	5	5	5	5	5
	Wet	5	5	5	5	5	5	5

ABBREVIATIONS => E: effect on shade C: stain on cotton N: stain on nylon ©: Excellent ○: Good △: Moderate



[illegible]



Everset M dyes											Everacid dyes on Nylon			
Black ACE	Yellow M-2R	Red M-2B	Red M-G	Bordeaux M-B	Brown M-B	Blue M-2R	Navy M-R	Grey M-G	Black M-B					
														
—	—	—	—	—	—	—	—	—	—		C.I. No.			
80	100	10	100	20	100	100	100	80	80		90°C→25°C	Stability of Solution (g/l)		
80	100	30	100	100	100	100	100	100	80		90°C	Solubility (g/l)		
6	>6	>6	>6	5	>6	>6	5-6	>6	>6		0.5% o.w.f.	Lightfastness ----- ISO 105-B02		
>6	>6	>6	>6	5-6	>6	>6	6	>6	>6		2.0% o.w.f.	(Xenotest)		
6	>6	>6	>6	5	6	6	5-6	>6	>6		0.5% o.w.f.	Lightfastness to perspiration (alkali) ----- ISO 105-B02		
>6	>6	>6	>6	5-6	>6	>6	6	>6	>6		2.0% o.w.f.	(Xenotest) (modified)		
4-5	5	5	5	5	5	5	5	5	5		E	Fastness to Washing ----- ISO 105-C06-B2S (50°C)		
5	5	5	5	5	5	5	5	5	5		C			
5	5	5	5	5	5	5	5	5	5		N			
5	5	5	5	5	5	5	5	5	5		E	Fastness to Washing ----- AATCC 61-2A (49°C)		
5	5	5	5	5	5	5	5	5	5		C			
5	5	5	5	5	5	5	5	5	5		N			
5	5	5	5	5	5	5	5	5	5		E	Fastness to Water ----- ISO 105-E01		
5	5	5	5	5	5	5	5	5	5		C			
5	5	5	5	5	5	5	5	5	5		N			
5	5	5	5	5	5	5	5	5	5		E	Fastness to perspiration (alkali perspiration) ----- ISO 105-E04		
5	5	5	5	5	5	5	5	5	5		C			
5	5	5	5	5	5	5	5	5	5		N			
4	4-5	4-5	4-5	4	4-5	4-5	4-5	4-5	4-5		E	Fastness to chlorinated Water (20ppm) --- ISO 105-E03		
4-5	5	5	5	5	5	5	5	5	5		Dry	Fastness to Rubbing ----- ISO 105-X12		
4-5	5	5	5	5	5	5	5	5	5		Wet			

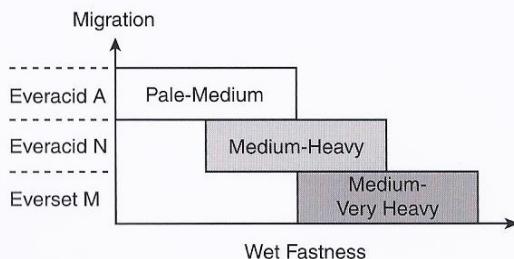
## Preparation of dye solutions

In order to ensure the dyeing quality, it is essential to dissolve the dyestuffs completely. Everacid & Everset powder dyes should first be mixed into a paste with cold, soft water. Whilst stirring thoroughly, boiling or hot water should then be added and if necessary, boiled briefly with live steam.

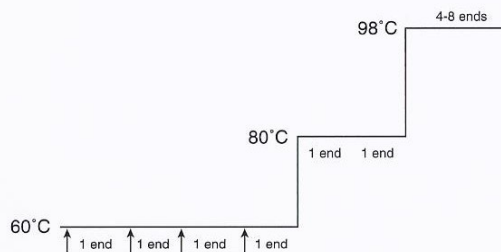
## After treatments

Wet fastness properties of medium and heavy shades can be improved by after treating with a synthetic agent.

## Dye selection



## Jig dyeing



Suggestion :

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

## Exhaustion method



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

dye type property	Everacid A type	Everacid N type	Everset M type
auxiliaries	* acetic acid * ammonium sulphate * levelling agent	* acetic acid * ammonium sulphate * levelling agent	* acetic acid * ammonium sulphate * levelling agent
optimum pH	6-7	5-6	5
coverage	excellent	excellent-good	moderate
levelling	excellent	excellent-good	moderate
application	pale-medium	medium-heavy	medium-very heavy

Remark : Everset Black M-B : pH 4-4.5



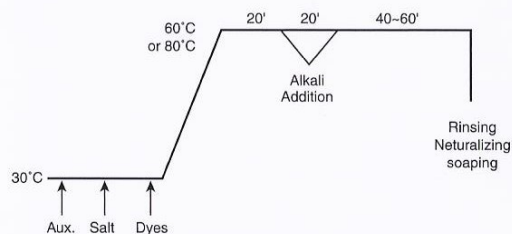
## Dyeing of polyamide / cellulosic fibre blends

Polyamide/cellulosic blends can be dyed by a two bath exhaust dyeing system to give very good wet fastness using Everzol or Evercion dyes for the cellulosic component followed by Everacid A, N or Everset M dyes for the nylon. The Cold-Pad-Batch process using Everzol or Everzol C dyes for the cellulosic component is an alternative method. The removal of all unfixed dye in the washing-off process after the cellulosic dyeing is extremely important.

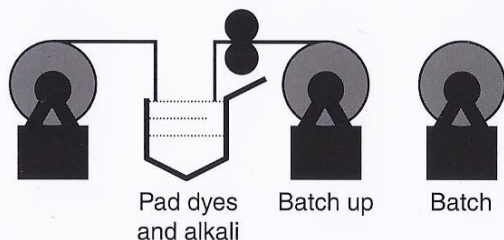
### Standard process for dyeing polyamide / cellulosic fibre blends

1st. (Cotton component)

1-1.Exhaust process for Everzol & Evercion dyes



1-2.CPB process for Everzol or Everzol C dyes.



## Everacid trichromatic dyes.

### Trichromatic dyes for pale-medium shades

Everacid Yellow A-4R

Everacid Red A-RL

Everacid Blue A-RL

Or Everacid Yellow A-4R

Everacid Red A-2B

Everacid Blue A-RRL

### Trichromatic dyes for medium-heavy shades

Everacid Yellow N3R

Everacid Red N-2BL

Everacid Blue N-RL

Everacid Orange N-GTL

Everacid Rubine N-5BL

Everacid Cyanine N-5R

Supplementary:

Everacid Yellow N-MR

Everacid Red N-RFN

Everacid Blue N-AFN

## Everset trichromatic dyes.

### Trichromatic dyes for medium-very heavy shades .

Everset Yellow M-2R

Everset Red M-G

Everset Grey M-G

Supplementary

Everest Red M-2B

Everset Blue M-2R

### Deep Black Shades.

Everacid Black LD

Everacid Black LDN

Everacid Black MR

Everset Black M-B

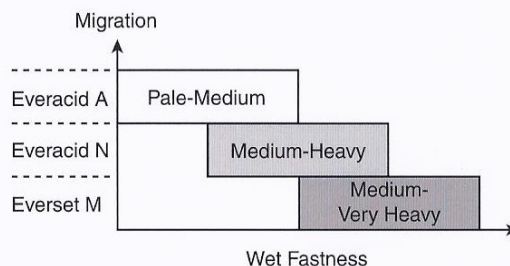
## Preparation of dye solutions

In order to ensure the dyeing quality, it is essential to dissolve the dyestuffs completely. Everacid & Everset powder dyes should first be mixed into a paste with cold, soft water. Whilst stirring thoroughly, boiling or hot water should then be added and if necessary, boiled briefly with live steam.

## After treatments

Wet fastness properties of medium and heavy shades can be improved by after treating with a synthetic agent.

## Dye selection

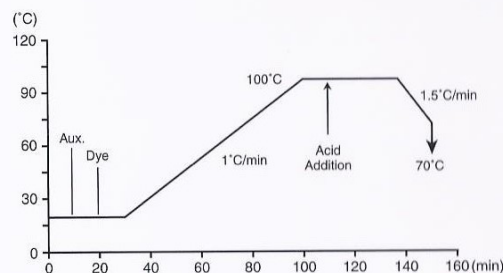


## Notes

**Warnings :** The information and recommendations presented here were completed with the utmost care, but can't be extended to cover every possible case. They are intended to serve as non-binding guidelines and must be adapted to the prevailing condition. The product whether used singly or in combination with other substances, should be carried out in lab test prior to bulk production. The user needs to assume all risk and liability no matter whatsoever results are.

### 2nd. (Nylon component)

Exhaust process for Everacid A, N, Everset M dyes.



### Dyeing of polyamide/elastomer fibre blends

Elastomer fibres such as Lycra ( DuPond ) are poly-urethane based and can be dyed by acid dyes. Bright, transparent elastomeric fibres do not require dyeing as the colour from the dyed nylon shows through.

However, the dull or matted elastomeric yarns need to be dyed to give the blend fabric a solid appearance. A good preparation and scour is essential.

Everacid N, Everset M dyes are highly recommended.

Dyeing method :

Transparent elastomeric fibres :

90°C X 45 ~ 60' under pH 5.5 ~ 6.5

Dull elastomeric fibres :

98 ~ 105°C X 45 ~ 60' under pH 4.5 ~ 5.5

It will be essential to aftertreat the dyed polyamide/elastomer fibre blend in order to improve the wet or chlorinated water fastness in the case of swim-wear.

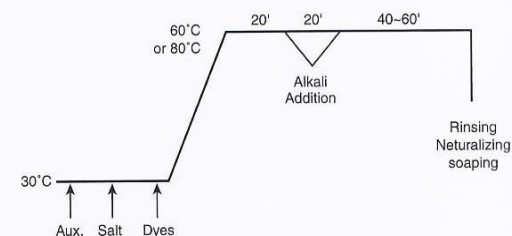
## Dyeing of polyamide / cellulosic fibre blends

Polyamide/cellulosic blends can be dyed by a two bath exhaust dyeing system to give very good wet fastness using Everzol or Evercion dyes for the cellulosic component followed by Everacid A, N or Everset M dyes for the nylon. The Cold-Pad-Batch process using Everzol or Everzol C dyes for the cellulosic component is an alternative method. The removal of all unfixed dye in the washing-off process after the cellulosic dyeing is extremely important.

### Standard process for dyeing polyamide / cellulosic fibre blends

#### 1st. (Cotton component)

##### 1-1. Exhaust process for Everzol & Evercion dyes



##### 1-2. CPB process for Everzol or Everzol C dyes.

