

# Evoran series

## **Evoran RC-ALK**

## Reduction clearing agent after polyester dyeing in alkaline medium.

### **INTRODUCTION**

The redox potential which forms in the presence of caustic soda is sufficient to destroy most disperse dyes but not adequate to attack vat, naphthol and many reactive and direct dyes. After polyester dyeing, conventional reduction clearing is done with hydrose and caustic in alkaline medium.

Stalwart has developed **Evoran RC-ALK** that has high dispersing power at all temperatures and its reducing action is developed in alkaline medium above 90°C so that unfixed disperse dye on the fibre surface is destroyed and the degraded products are finely dispersed in the washing liquor, thus preventing staining of the ground. Replaces the usual detergent in the reduction clearing of dyeing and printing with disperse dyes on polyester fibres.

#### **FEATURES**

- Low foaming.
- Possess excellent thermal stability.
- Is also suitable for reduction clearing of PES & PES/CEL blends.
- Promotes removal of unfixed dyes.
- No influence on shade/color.
- Replaces hydrosulphite and the usual detergent in the reduction clearing of dyeings and prints with disperse dyes on polyester fibres.

#### **PROPERTIES**

Appearance Colourless clear liquid

pH (1%) approx.4.0

Compatibility with

Cationic Good Anionic Good Non-ionic Good

## STALWART ADVANCE MATERIAL INDS

Application & Business Center, B–120, Ansa Industrial Estate, Saki Vihar Road, Sakinaka, Andheri (E), Mumbai – 400 072. email: <a href="mailto:sales@stalwartadvance.com">sales@stalwartadvance.com</a>; Customer care:1800 121 3497



Stability to

hard water Good electrolyte Good temperature Good

#### SCOPE OF APPLICATION:

## 1. Reduction clearing of dyeing on PES

#### 1.1 Discontinuous method

Set the clearing bath at 50°C with

1 - 3 g/l **Evoran RC-ALK** 1.5 – 1% caustic soda solid

Heat to 80°C - 90°C and

Treat for 15 - 20 mins at 80°C - 90°C

Cool to 50°C

Rinse once at 40°C - 50°C

Rinse cold, neutralize with acetic acid if necessary.

#### 1.2 Continuous method

Rinse cold

Rinse hot at 80°C - 90°C Treat at 80°C with

2 – 6 g/l Evoran RC-ALK 1 – 2 % caustic soda solid

Rinse cold, neutralize with acetic acid if necessary.

## Reinforcement:

Strengthen every 20 mins with ca.1/3 the amount of Evoran RC-ALK and ca.1/6 the amount of alkali.

## 2. Reduction clearing of prints on PES

Rinse cold

 $\begin{array}{lll} 1^{st} \ bath: & at \ 20^{\circ}\text{C} - 30^{\circ}\text{C} \ with \ 1 \ g/I \ Ultreza \ DLP \\ 2^{nd} \ bath: & at \ 40^{\circ}\text{C} - 50^{\circ}\text{C} \ with \ 2 \ g/I \ Ultreza \ DLP \\ 3^{rd} \ bath: & at \ 70^{\circ}\text{C} - 80^{\circ}\text{C} \ with \ 2-6 \ g/I \ \textbf{Evoran RC-ALK} \end{array}$ 

1–3 g/l caustic soda solid

Rinsing baths\*\* with decreasing temperature from 80°C to cold

Last bath: rinse cold if necessary with acetic acid.

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<sup>\*\*</sup>with alginates or synthetic thickeners (soft water is recommended for rinsing baths)



#### 3. Reduction clearing of dyeing on PES/CEL blends

### 3.1 Discontinuous method for disperse/vat dyes

Rinse the dyeing well, oxidize vat dyes as usual Soap at the boil with the usual detergent

Rinse warm once Set a fresh bath with

1 - 2 g/l **Evoran RC-ALK** 0.5 – 1.5 % caustic soda solid

And treat for 15 - 20 minutes at 80°C - 90°C

Rinse once at 40°C - 50°C

Rinse cold, neutralize with acetic acid if necessary.

### 3.2 Discontinuous method for disperse/reactive dyes

Rinse the dyeing well Set a fresh bath with Evoran RC-ALK

1 - 2 g/l **Evoran RC-ALK**0.5 - 1 % caustic soda solid
1 g/l sodium tripolypho

sodium tripolyphosphate

And treat for 15 - 20 minutes at 70°C - 80°C

Rinse once at 40°C - 50°C

Rinse cold, neutralize with acetic acid if necessary.

### 3.3 Continuous method for disperse/vat dyes

Rinse warm at 50°C and oxidize as usual Soap at 95°C with the usual detergent Reduction clear at 70°C - 80°C with

2 – 6 g/l Evoran RC-ALK 1 – 2 g/l caustic soda solid Rinse warm at 50°C

Rinse cold, neutralize with acetic acid if necessary.

## 3.4 Continuous method for disperse/reactive dyes

These dyeing can be cleared in the same manner but without soaping at the boil. Add 1-2 g/l sodium tripolyphosphate to the clearing liquor.

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### 4. Reduction clearing of prints on PES/CEL by the continuous method

Rinse cold

 $1^{st}$  bath : at  $40^{\circ}$ C with 2 g/I Ultreza DLP  $2^{nd}$  bath : at  $60^{\circ}$ C with 2 g/I Ultreza DLP  $3^{rd}$  bath : at  $50^{\circ}$ C -  $70^{\circ}$ C with 2 g/I **Evoran RC-ALK** 

0.5 g/l caustic soda flake

 $4^{th}$  bath : at 80°C with 4 g/l Evoran RC-ALK

1 g/l caustic soda solid

 $5^{\text{th}}$  bath: at  $80^{\circ}$ C as bath 4  $6^{\text{th}}$  bath: at  $60^{\circ}$ C with water  $7^{\text{th}}$  bath: with cold water

8<sup>th</sup> bath: with cold water, neutralize with 0.5 ml/l acetic acid.

### STORAGE AND HANDLING

Precautions for safe handling	Do not eat, drink or smoke while handling the product.
Conditions for safe storage	Store in a cool, dry & ventilated area away from the sources of heat.
Shelf Life	6 months.

Note: Kindly refer SDS for further information on Storage & Handling.

Evoran is a registered trade name of Stalwart Advance Material Inds.

The information and recommendations presented here were based on our general experience and correspond to the state of our knowledge. They are intended to service as non-binding guidelines and must be adapted to the prevailing conditions. We cannot accept liability for any injury, loss or damage resulting from reliance upon such information.