

## TECHNICAL INFORMATION

### SEGALEVEL E4R Liq

#### Levelling agent for reactive dyeing of cellulosic fibers

Powerful levelling agent that used in dyeing of cellulosic fibers with reactive dyes.

- Controls the migration and fixation of reactive dyes during the reactive dyeing process.
- Due to its buffering effect on dye bath pH, Segalevel E4R Liq. provides better dye fixation during alkaline addition.
- Prevents the dye stains caused by soda ash.
- Improve the solubility of dye and prevents dye stains caused slightly soluble dyes.
- Due to its sequestering effect on water hardness forming salts in dye bath, helps to improve repeatability of dyeing(etc. Blue 19 and Blue 21).

## PROPERTIES

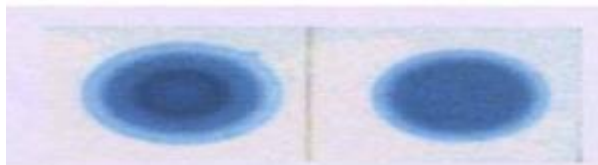
<b>Component</b>	Aromatic polyether sulfonate	
<b>Appearance</b>	Brownish liquid	
<b>Ionic character</b>	Anionic	
<b>pH</b>	7.0–9.0	
<b>Compatibility</b>	Anionic	good
	Nonionic	good
	Cationic	It may cause precipitation
<b>Solubility</b>	Miscible with cold and hot water in any proportion.	
<b>Stability</b>	Degradable with oxidizing	
<b>Foaming performance</b>	moderate	
<b>Durability</b>	Anionic and nonionic	good
	Cationic	possible precipitation

## Mode of action

- Effective use of **Segalevel E4R liq.** in any reactive dyeing process simplifies the dyeing process and shorten dyeing time.
- According to dispersion effect, **Segalevel E4R liq.** controls the regular adsorption of reactive dyes and increase the migration power of these dyes.
- Total amount of electrolyte may be added to dyeing liquor in a safe way. The process is simplified.

### Chormotografic test

#### Diffusion effect



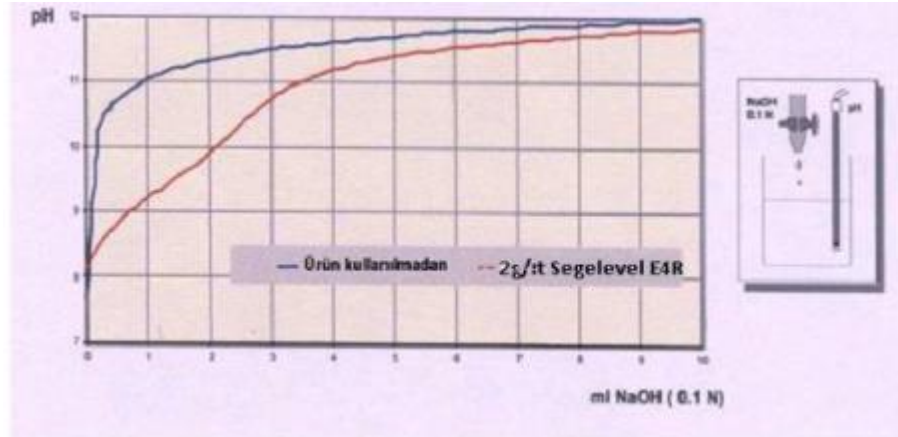
Without any product

2g/L Segalevel E4R liq.

Presence of **Segalevel E4R liq.** in dyeing bath allows the gradual and controlled change in pH during the addition of alkali. Regular fixation of dye is thus obtained which guarantees dyeing levelness.

## Neutralization curve

### Effect on pH



As action on temporary hardness of the dyeing bath; addition of 2g/L **Segalevel E4R liq.** in to the dyeing bath neutralizes an hardness of 18° f // 10° g // 14° e

## Application

**Segalevel E4R liq** is dissolved in cold or warm water easily and without any problem. The solution obtained can be added directly to the dye liquor. The application amount is independent from dye concentration.

We recommended the addition of 1–3 g/L **Segalevel E4R liq**

Increasing the application amount from 1 to 3 g/L **Segalevel E4R liq** is justified in case of difficult dyeing conditions such as:

- Substrates which are difficult to dye level
- Liquor ratio lower than 1:10
- Insufficient precise alkali metering

## Precautions

**Storage:**The storage life in original package at 0–40 °C is 12 months.

Paints, pigments, and most of the chemicals are patented by Sozal Ltd or its subsidiaries in various industrial countries. The information and recommendations presented here have been created with great care, but they may not include every possible situation. These information and recommendations are non-binding guidelines and must be adapted to the conditions in force. Moreover, no liability is accepted for the non-written application areas and methods. Information and protective measures that are required to be specified can be obtained from the Safety Data Sheet.