



Less Water  
Less Energy  
Less Time

# SKYBLUE

ECONOMIC BLEACHING  
TECHNIQUE

  
**SUSTAINABLE**

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

*spirit to textiles*

## SKYBLUE

Due to universe water shortage and environmental pollution concern of all community, Eksoy focused on development of unique chemicals to save water, energy, time and labor.

• **SKYBLUE** is an outcome of these efforts, which combines all chemicals, mentioned below;

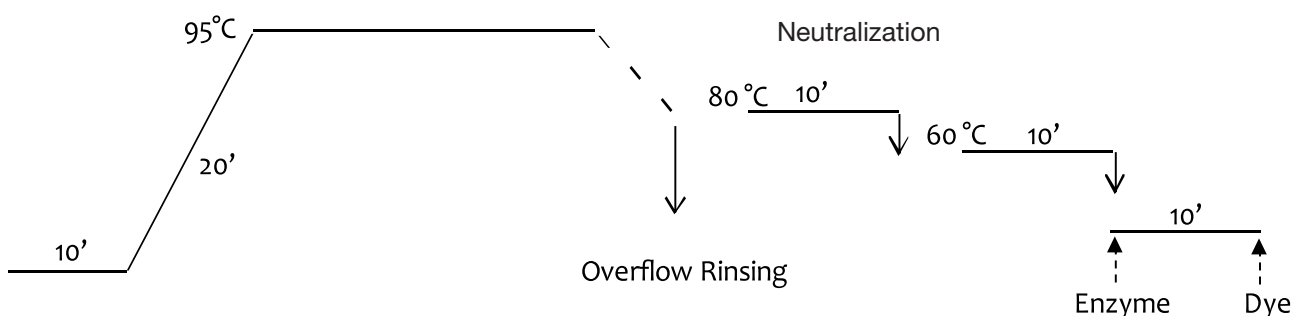
- Scouring agent,
- Degreasing agent,
- Stabilizer,
- Peroxide activator,
- Final pH reducer,

and offers following merits;

- Maximum hydrophilicity,
- Prime degreasing effect,
- Lower final pH, around pH=8,2
- Neutralization step is skipped and wash-off time is shrunk to minimum

or totally lifted up.

## TRADITIONAL BLEACHING PROCESS



- After traditional bleaching, bath needs to be boiled and fine neutralization should be done.
- As bleaching ends at pH 8 Strong neutralization and core neutralization mistakes are avoided such as;
  - Whiteness differences within same lot or in-out differences in OBA bleached yarn,
  - Rings of color differences in yarn dyeing on alkali sensitive colors.

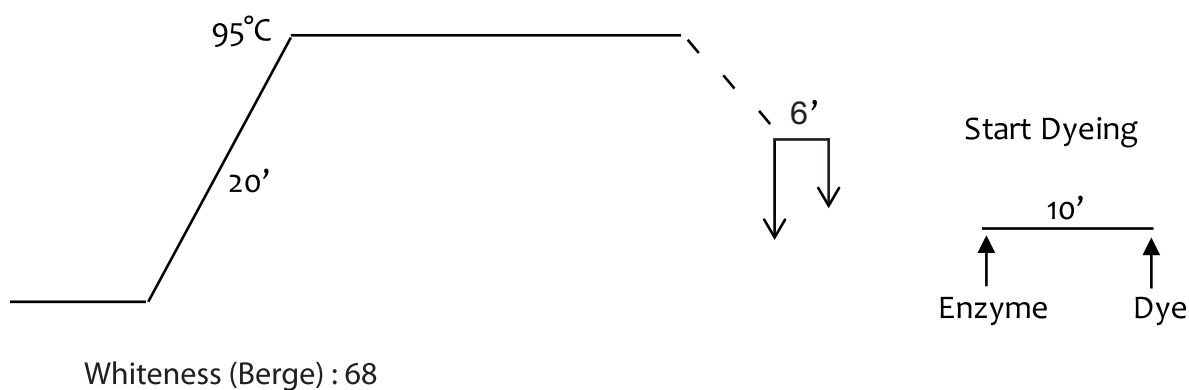
### **DISADVANTAGE OF CLASSICAL SYSTEM**

- Core neutralization cannot be always perfectly achieved and further problem occurs during dyeing or printing.
- If it is full-white process with OBA neutralization, it causes yellowing.

### **WITH SKYBLUE**

- After bleaching, pH value of the bath drops to 8 - 8,5
- No neutralization needed.
- No effect related to uneven neutralization or core-alkali.
- Less water and energy.

### **A BLEACHING WITH SKYBLUE**

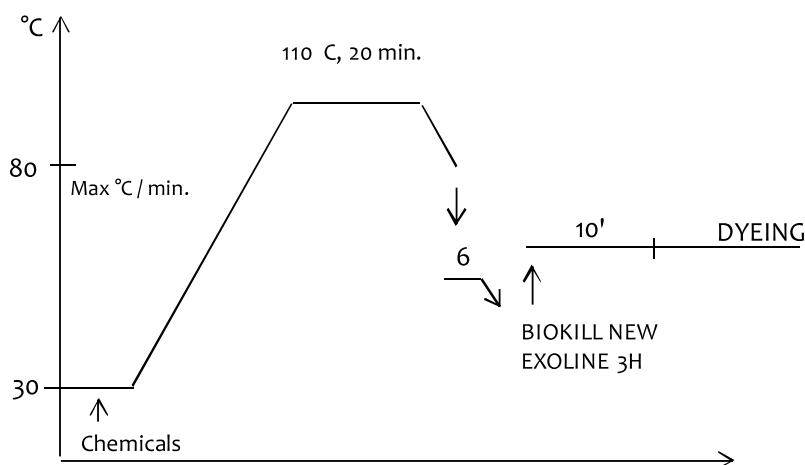


- After bleaching with **SKYBLUE**, dyeing is started without neutralization.

### **SKYBLUE SAVES** for a plant 10 tons/day production

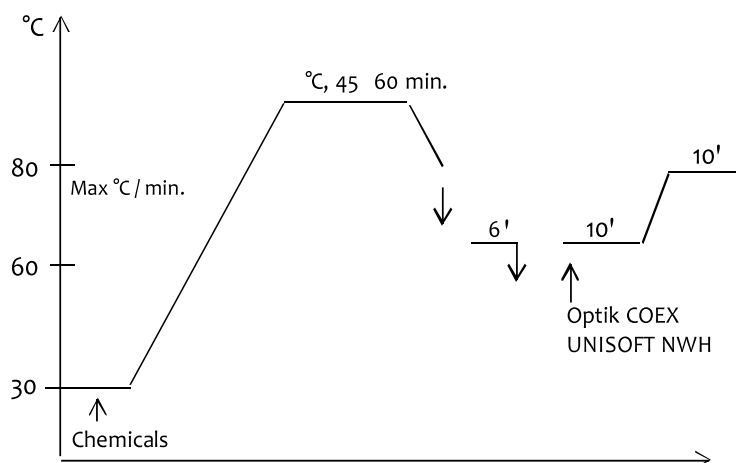
- 15% over capacity
- 46.400 \$ from energy (COST EFFECTIVE)
- Less pollution - SUSTAINABLE

### HIGH TEMPERATURE



Chemicals	Ready to Dyeing, %	Full OBA Bleaching, %
A – SKYBLUE	1 - 1,5	1 - 1,5
B – NaoH, 48 Be'	1 - 1,5	1,5 - 2,5
C– Peroxide, 50 %	2,5 - 3,5	6 - 9
Optik CO Ex	-	x

### ATMOSPHERIC CONDITION



Chemicals	Ready to Dyeing, %	Full OBA Bleaching, %
A – SKYBLUE	1 - 1,5	1 - 1,5
B – NaoH, 48 Be'	1 - 2	2,5 - 3
C– Peroxide, 50 %	3,5	8
Optik CO Ex	-	x