



Less Water
Less Energy
Less Time

SKYBLUE

economic bleaching technique



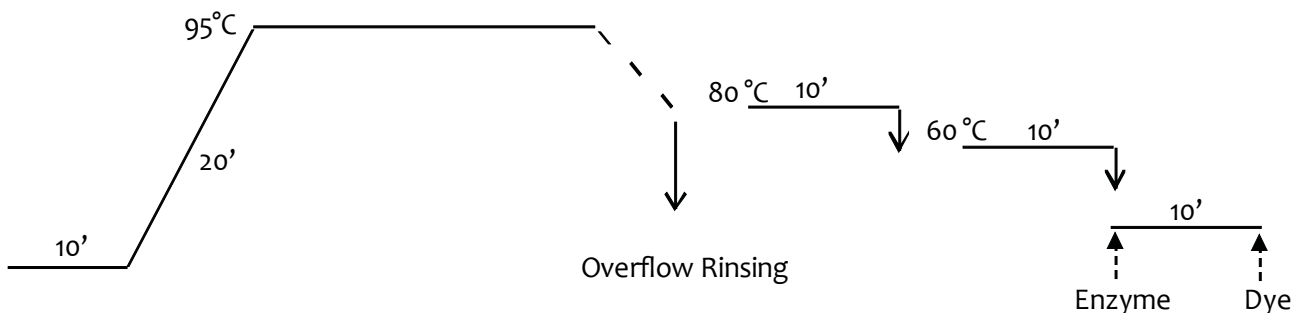
- Due to universe water shortage and environmental pollution concern of all community, Eksoy focused on development of unique chemicals to save water, energy, time and labor.
- **SKYBLUE** is an outcome of these efforts, which combines all chemicals, mentioned below;

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

and offers following merits;

- Maximum hydrophility,
- Prime degreasing effect,
- Lower final pH, around pH=8,2
- Neutralization step is skipped and wash-off time is shrinked to minimum or totally lifted up.

TRADITIONAL BLEACHING PROCESS



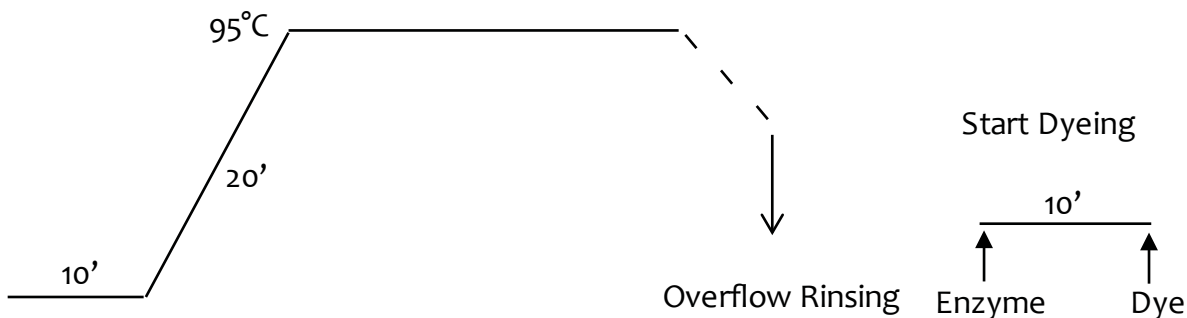
- After traditional bleaching, bath needs to be boiled and fine neutralization should be done.
- As bleaching ends at pH 8 Strong neutralization and core neutralization mistakes are avoided such as;
 - Whiteness differences within same lot or in-out differences in OBA bleached yarn,
 - Rings of color differences in yarn dyeing on alkali sensitive colors.
- Water,electricity and time saving reaches to 40-50%.
- As no boil-off is done after bleaching .For every 100 kg cotton 154 kg steam cost is saved.

DISADVANTAGE OF CLASSICAL SYSTEM

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

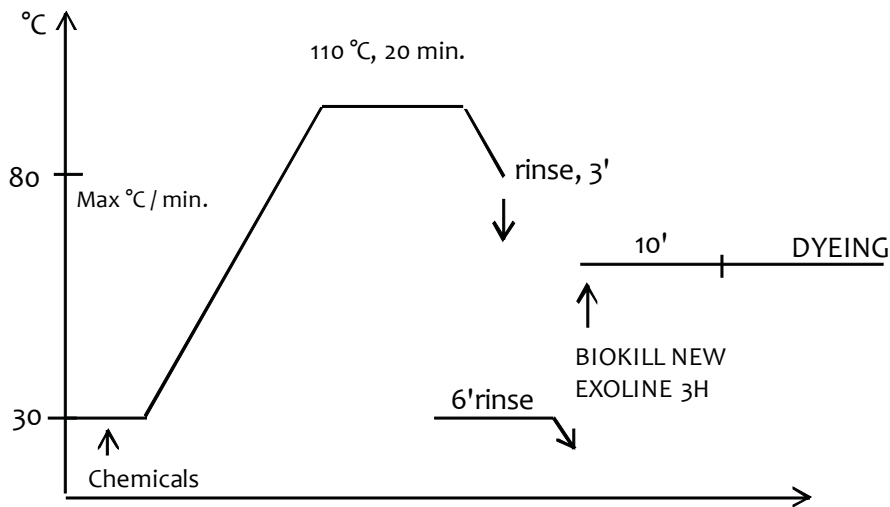
WITH SKYBLUE

- After bleaching, pH value of the bath drops to 7,5 - 8.
- No neutralization needed.
- No effect related to uneven neutralization or core-alkali
- Less water and energy.



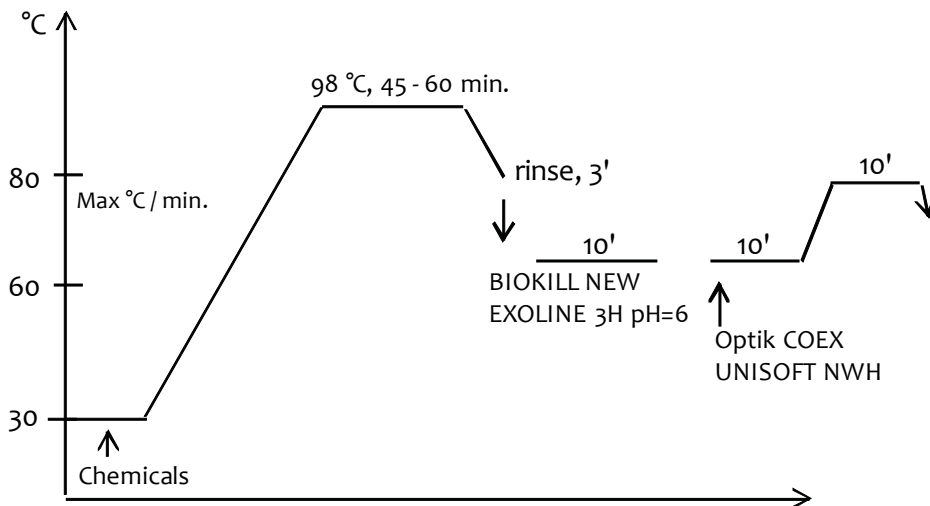
- After bleaching with SKYBLUE, dyeing is started without neutralization.

HIGH TEMPERATURE



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