



VARIO BLEACH 3E

VARIATION of discontinuous pretreatment processes

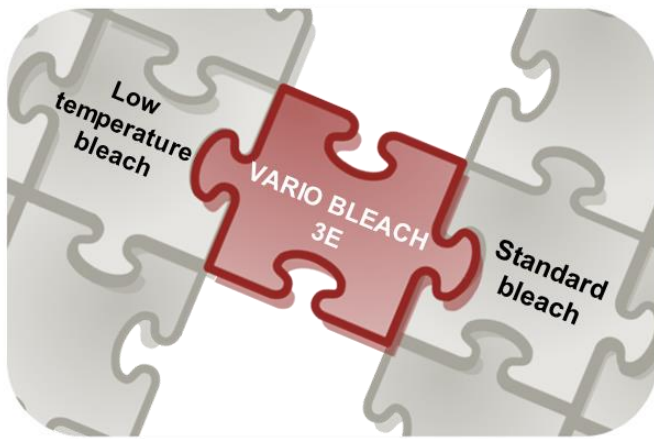
CHT
SMART CHEMISTRY
WITH CHARACTER.

VARIO BLEACH 3E

Meeting varying demands

When we developed VARIO BLEACH 3E we wanted to create one product for numerous demands.

From low temperature bleach up to quality improvement during the HT bleach – with VARIO BLEACH 3E nearly all discontinuous bleaching processes can be created in a simple and inexpensive way.



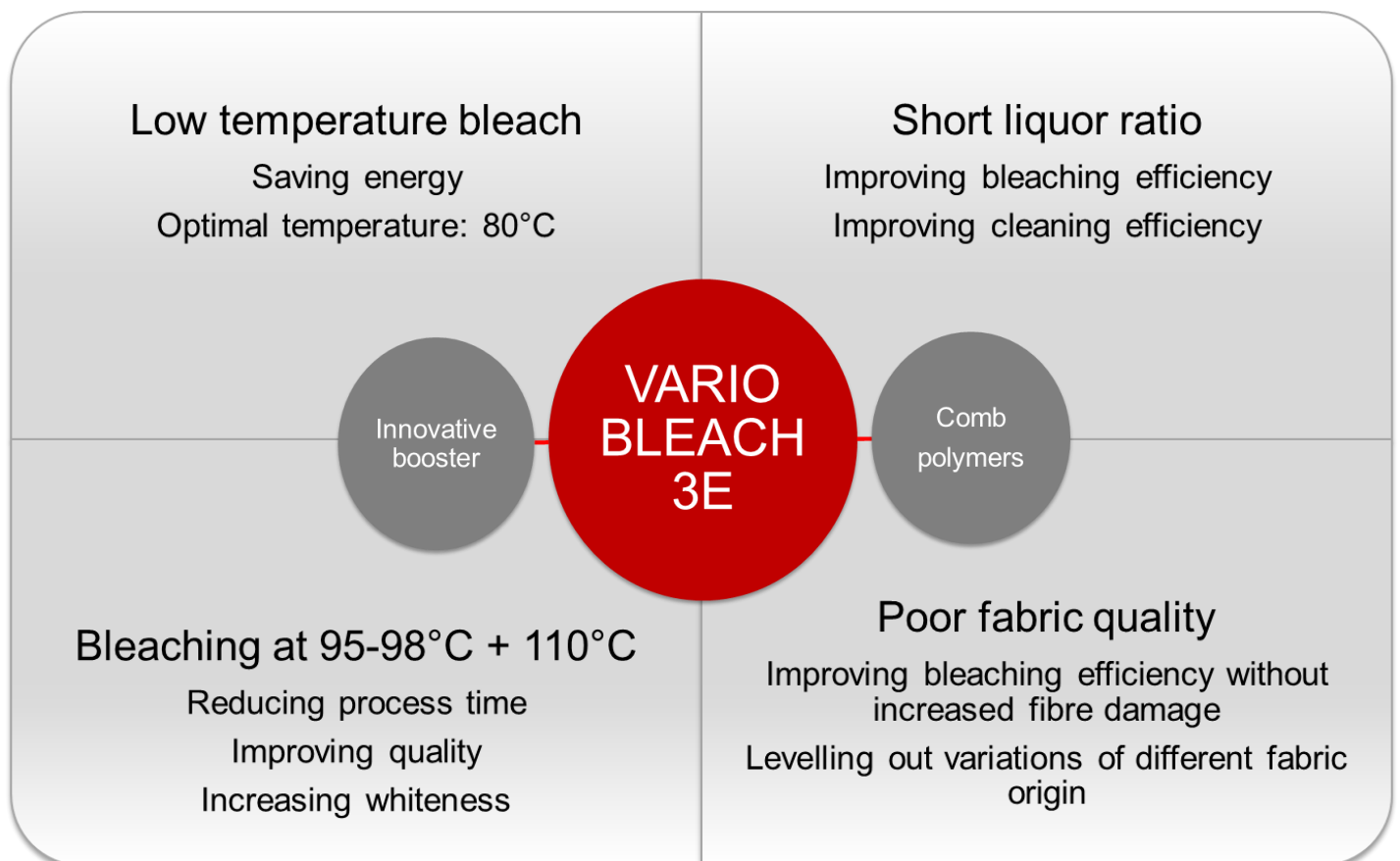
Energy savings by means of low temperature bleach? Many industrial trials proved this. With VARIO BLEACH 3E even full white on cotton can be achieved. The booster in VARIO BLEACH 3E has no impact on optical brighteners.

At standard bleaching temperatures the whiteness degree can be increased and the process time can be reduced with VARIO BLEACH 3E. On different fabric qualities VARIO BLEACH 3E leads to an improved levelness.

Everyone knows that with very short liquor ratios the soiling degree in the bleaching bath is very high. The patented comb polymers integrated in VARIO BLEACH 3E support the cleaning effect.

Compared with many products on the market the booster in VARIO BLEACH 3E does not result in a detectable higher fibre damage.

VARIO BLEACH 3E can be very easily integrated in existing bleaching recipes (discontinuous hydrogen peroxide bleach).



Low temperature bleach

Saving energy
Optimal temperature: 80°C

Short liquor ratio

Improving bleaching efficiency
Improving cleaning efficiency

Innovative
booster

VARIO
BLEACH
3E

Comb
polymers

Bleaching at 95-98°C + 110°C

Reducing process time
Improving quality
Increasing whiteness

Poor fabric quality

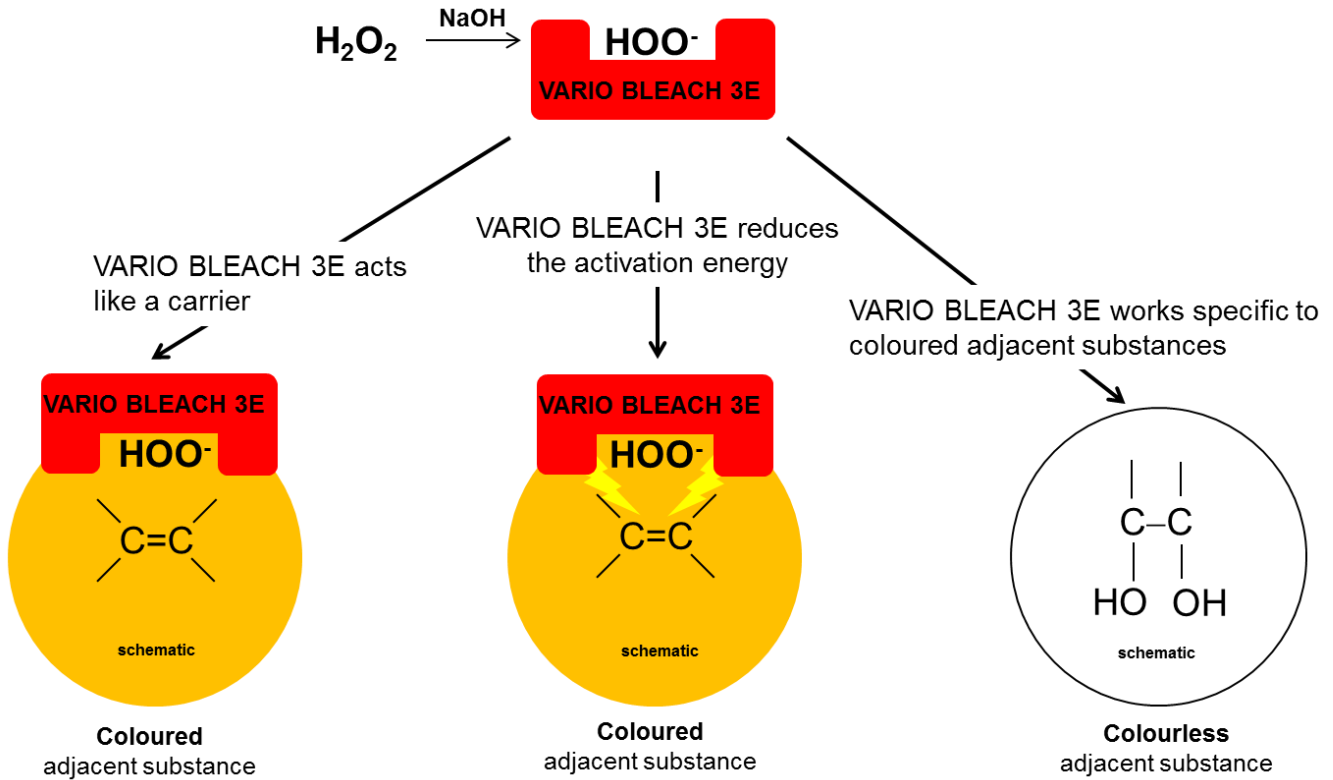
Improving bleaching efficiency without
increased fibre damage
Levelling out variations of different fabric
origin

Properties

Innovative booster technology

Many classic hydrogen peroxide boosters or activators have a crucial disadvantage since they may lead to a significant fibre damage depending on the process conditions.

The innovative booster technology used in VARIO BLEACH 3E has a specific effect on coloured adjacent substances and does therefore not cause any fibre damage.



Particular feature: Low temperature bleach for full white

Many industrial trials proved that it is even possible to achieve a full white on cotton for high demands in the low temperature process.

As a consequence, the bleaching process is not only energy-efficient, but can also be carried out without crease-prevention agents.

FELOSAN FOX	0,8 %
VARIO BLEACH 3E	1,5 %
H2O2 50 %	7,5 %
Heat up to	60 °C
NaOH 100 %	2,5 %
TUBOBLANC HA	0,6 %
TUBOBLANC COL	0,2 %

Bleaching	70 °C	60 min	↓
Rinse	70 °C	10 min	↓

NEUTRACID NCS	0,6 %
Neutralisation	50 °C 10 min

↓

Whiteness CIE	156
Base white	82
Fluorescence	74

Application

VARIO BLEACH 3E is preferably applied in the discontinuous pretreatment of cellulose fibres.

VARIO BLEACH 3E is gentle to the fibre at any bleaching temperature and is applied to increase the efficiency of the bleach.

Pretreatment for colouring	HT bleach	Bleach at 95 - 98 °C	Low temperature bleach
FELOSAN FOX	0.5 - 1.0 %	0.5 - 1.0 %	0.5 - 1.0 %
VARIO BLEACH 3E	0.5 - 1.0 %	0.5 - 1.0 %	1.0 - 1.5 %
NaOH 100 %	1.3 - 1.5 %	1.5 %	2.5 %
H ₂ O ₂ 50 %	2 - 2.5 %	2 - 2.5 %	2.5 - 3 %
Bleaching temperature	110 °C	95 - 98 °C	80 °C
Bleaching time	5 - 15 min	15 - 20 min	30 - 60 min
NEUTRACID NCS	0.5 %	0.5 %	0.5 - 0.7 %
Neutralisation/demineralisation, removal of hardness	60 °C 10 min	60 °C 10 min	60 °C 10 min
CHT-CATALASE BF	0.3 %	0.3 %	0.3 %
Peroxide killer	40 °C 15 min	40 °C 15 min	40 °C 15 min

VARIO BLEACH, BEZAKTIV GO, VARIOSOAPING

CHT/BEZEMA offers you a great variety of further products and concepts to optimize your processes. Our technical service will be pleased to advise you.

- VARIO BLEACH 3E – optimisation of the discontinuous pretreatment
- BEZAKTIV GO / VARIOSOAPING – dyeing and soaping at 40 °C

