



CHT
SMART CHEMISTRY
WITH CHARACTER.

FELOSAN BCR

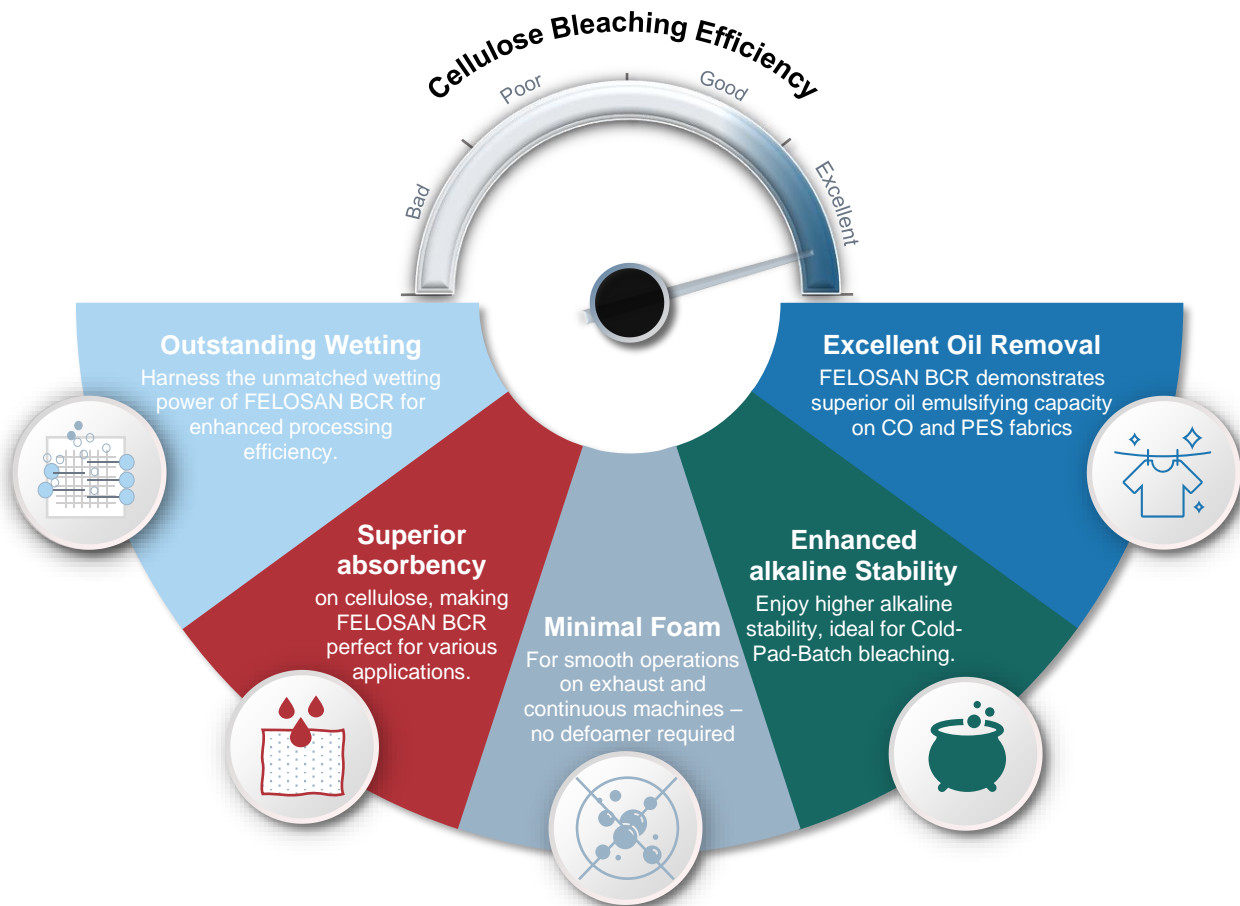
Unmatched hydrophilicity on cotton
Extremely low-foaming
“Best capillary rise”

FELOSAN BCR

Non-ionic / anionic washing and wetting agent

Revolutionize your textile pretreatment processes!

Experience the innovation of FELOSAN BCR, powered by CHT comb polymer technology. Unlock unparalleled washing and wetting capabilities, elevating cellulose treatment to new heights.



FELOSAN BCR stands out as the premier choice, offering remarkable hydrophilicity on cotton/cellulose, exceptional wetting ability, alkali stability, minimal foaming, and excellent oil emulsification. Elevate your pretreatment processes with the versatility and performance of FELOSAN BCR.



PATENTED
TECHNOLOGY
& UNIQUE

Product Technology

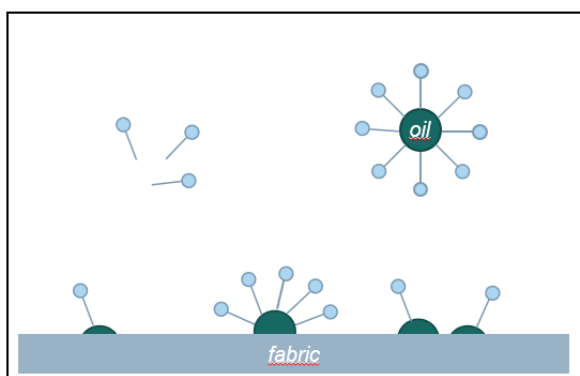
Modified fatty alcohol ethoxylates with anionic comb polymers

The washing power of a detergent depends on its chemical composition and most of all on the concentration of the detergent molecules in the washing bath.

During the washing process, that means when the soiling particles are separated, and oil is emulsified, the surfactant molecules accumulate on the textile. The hydrophobic molecule parts of the detergent enclose the soil or oil particles, which are also hydrophobic, in so-called micelles, remove them from the fabric, and in the ideal case, they keep them dispersed or emulsified in the treatment bath.

The micelle formation depends on the concentration. Micelles can only be formed if there is a sufficient quantity of surfactant molecules in the bath. The more micelles are formed, usually the more soil and oil are removed from the textile.

Soil removal with standard detergents



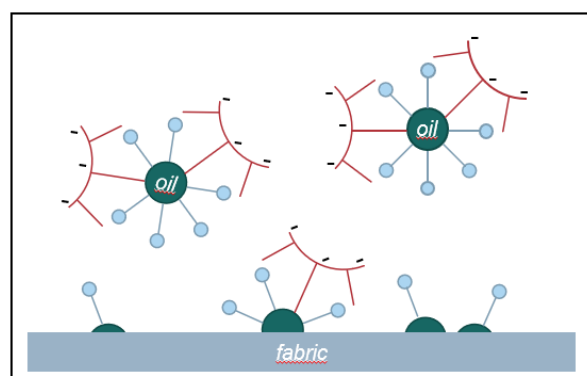
Patented detergent of CHT !

Combining **modified surfactant components with innovative, patented special polymers**, CHT succeeded in developing a new generation of detergents.

The special polymers are integrated into the surfactant micelles and give the following effects:

- ▶ Increase of the effective surfactant concentration by reduction of the critical concentration of micelle formation (CMC)
- ▶ Increase of the effectiveness of washing and cleaning baths of at least 20% compared to conventional detergents.
- ▶ Stabilization of the separated soiling by steric and electrostatic effects.
- ▶ Increase of the emulsion stability of oils/fats/waxes and finishes.
- ▶ Improvement of the hydrophilic effect on the fabric.

Improved soil removal with FELOSAN BCR with the same surfactant concentration



Product properties

Application fields & Benefits

- ▶ FELOSAN BCR consists of synergetic mixture of detergents enabling outstanding absorbency and capillarity on cellulose fabrics after the pretreatment process.
- ▶ Suitable for various pretreatment processes including desizing, scouring, bleaching, washing and demineralization
- ▶ FELOSAN BCR offers excellent wetting capabilities and powerful cleaning action ensuring excellent soil removal
- ▶ Particularly effective in peroxide bleaching of cellulose materials while also serving as an ideal pretreatment option for all other fiber types, including blends with elastane
- ▶ FELOSAN BCR is extremely low foaming so that it can be applied on washing machines and discontinuous dyeing machines with high turbulences.
- ▶ FELOSAN BCR can be applied on automatic dosing units.
- ▶ Caustic stability 60 g/l NaOH 100 % at room temperature
- ▶ FELOSAN BCR is easily biodegradable and APEO free.

Application recommendation

Discontinuous pretreatment

Desizing	0.5 – 1.5 g/l
Caustic scouring	0.5 – 1.5 g/l
Peroxide bleach	0.5 – 1.5 g/l
Washing	0.5 – 2.0 g/l
Washing of elastomer blends	1.0 – 2.0 g/l

Continuous pretreatment

Desizing	2.0 – 3.0 g/l
Caustic scouring	2.0 – 8.0 g/l
Peroxide bleach	2.0 – 8.0 g/l
Washing	1.0 – 5.0 g/l
Washing of elastomer blends	2.0 – 5.0 g/l



Best Capillary Rise!



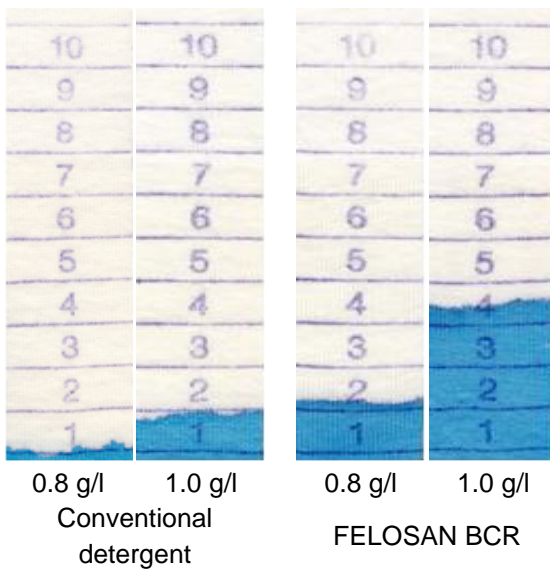
Discover unmatched hydrophilicity on cotton!

Peroxide bleach on 100 % CO knit fabric on JET

Recipe peroxide bleaching

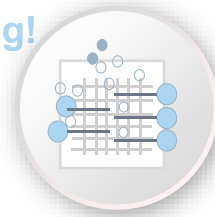
Detergent / FELOSAN BCR	0.8 g/l
Stabilizer	0.5 g/l
NaOH 50 %	2.0 g/l
H2O2 35 %	3.0 g/l

LR: 1:10, bleaching at 98 °C for 30 min, rinse hot and cold + neutralization



► Increase of washing effectiveness of at least 20 %

Outstanding Wetting!

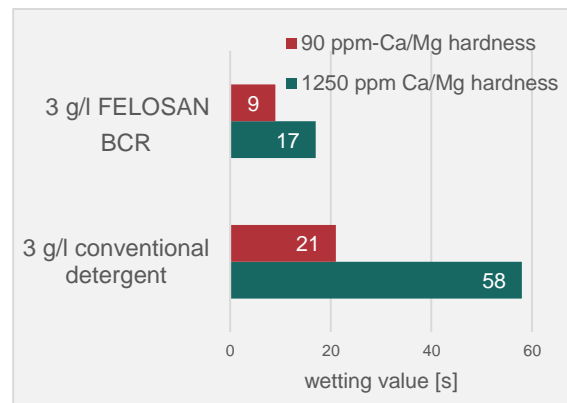


FELOSAN BCR offers excellent wetting power which enable perfect penetration of the greige fabric independent of the pH value and even in presence of hardness.

Alkaline application

(e.g. Cold Pad Batch bleaching)

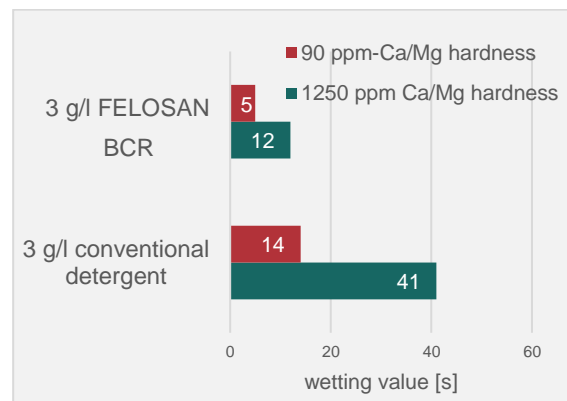
pH 12



Slightly acid application

(e.g. enzymatic desizing)

pH 5 – 7



Enhanced alkaline stability, Extra low-foaming!

Navigate safely and carefree through your demanding pretreatment processes! FELOSAN BCR feels at home where a classic non-ionic washing agent has a hard time. It offers constant and uniform wetting and washing power in highly alkaline and electrolytic pre-treatment processes and therefore maximum safety. It is therefore ideal for cold-pad batch bleaching and can also be used in alkaline scouring processes.

In developing FELOSAN BCR, we have succeeded in creating a washing agent that can be used in both continuous and discontinuous pre-treatment processes without the addition of defoamers. Even in jet machines with high turbulence, the low-foam character is maintained throughout the entire heating, cooling and rinsing cycle.

Alkaline stability NaOH 100 %

Measurement in g/l NaOH 100 %
At room temperature

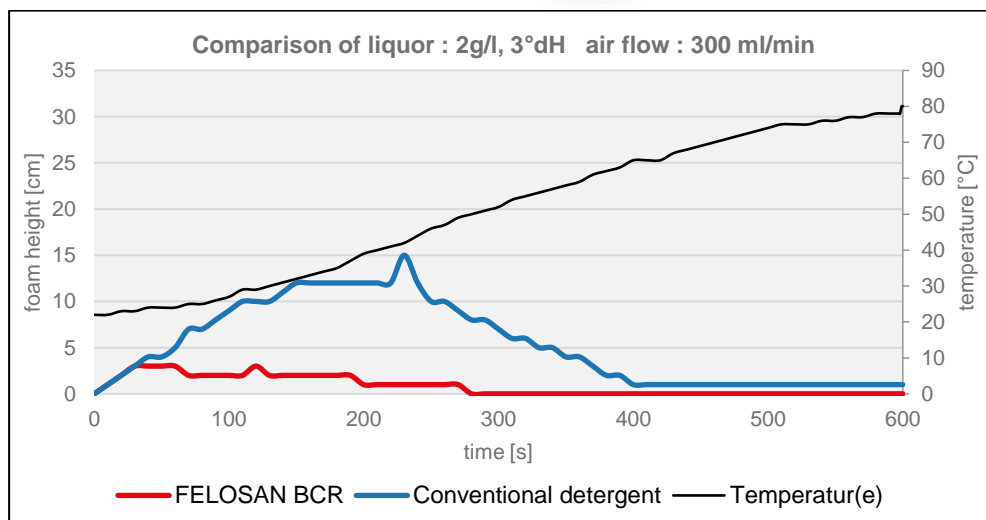


	FELOSAN BCR	Conventional detergent
After 30 min	70	40
After 1 hour	60	40
After 5 hours	60	30

Foam behaviour

Foam diagram by SMS 350

Application amount: 2 g/l



When determining the foaming behaviour of detergents at the foam tester SMS 350 a defined amount of air is blown through a sintered porous glass filter into the testing liquor. The thus created foam rises through a glass tube, the actual foam height is detected via an ultrasonic sensor and recorded. In this way the foam development can be observed continuously during heating and thus the foaming behaviour of detergent to be tested can be assessed at each temperature (max. 80 °C).



Excellent Oil Removal!

On 100 % Polyester fabric

Different machine knitting and loom oils are dyed with a grease dyestuff (Ceresred 7B). The tinted oils are applied onto the polyester fabric and washed out with the product to be tested.

Test on Polyester fabric

3,0 g/l FELOSAN BCR
1,0 g/l soda ash
Liquor ratio: 1:20
Washing: 30 minutes at 60 °C
Rinse: 60 °C / 40 °C / 2 x cold

On 100 % Cotton fabric

Different machine knitting and loom oils are applied on unbleached cotton fabric, washed out with the auxiliaries to be tested and the remaining oil residues are dyed with a grease dyestuff (Ceresred 7B).

Test on Cotton fabric

2,0 g/l FELOSAN BCR
1,0 g/l soda ash
Liquor ratio: 1:20
Washing: 30 minutes at 98 °C
Rinse: 80 °C / 50 °C / 2 x cold

The different colour intensity of the stains after washing allows to judge the oil emulsifying capacity of the auxiliaries. Less can be seen of the oil stains the better is the oil emulsifying capacity

Oil	Test on 100 % PES		Test on 100 % CO	
	Washed without auxiliary	Washed with FELOSAN BCR	Washed without auxiliary	Washed with FELOSAN BCR
Silvertex W 22				
Soritol CLP 150 EP				
BP Energol GRXP 150				



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