

**TEXTILE
SOLUTIONS.**

**Textile
Care
Solutions.**

CHT

**SMART CHEMISTRY
WITH CHARACTER.**

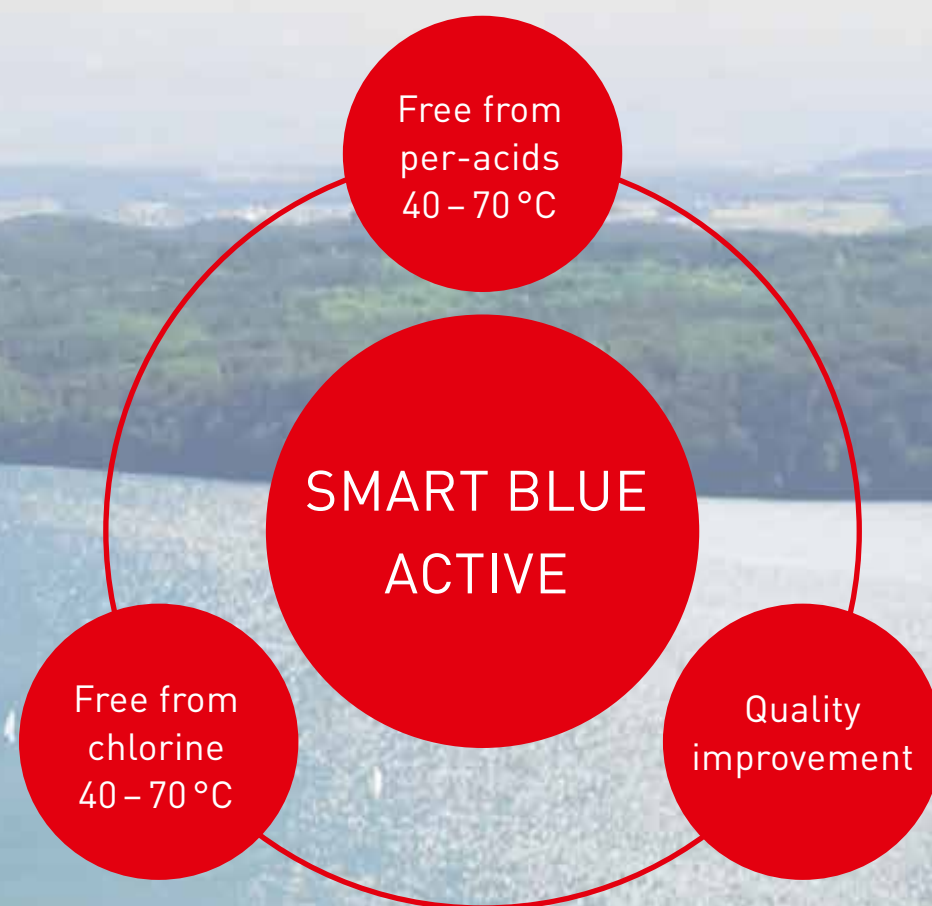
SMART BLUE ACTIVE

**THE INTELLIGENT PROCESS
FOR SUSTAINABLY CLEAN
AND EFFICIENT WASHING
PROCESSES**

A FLEXIBLE WASHING SYSTEM WITHOUT CHLORINE BLEACH AND PER-ACIDS

SMART BLUE ACTIVE, the safe and sustainable washing system without use of chlorine bleach and per-acids. With SMART BLUE ACTIVE you save energy, resources and up to 30% chemicals.

This sustainable complete solution additionally enables you to avoid AOX in the wastewater and to prolong the durability of your textiles to a great extent. With safe handling and storage your washing process will be even smarter in the future.



START INTO THE FUTURE WITH THE SMART SOLUTION

Washing processes are very complex but the CHT Group took up the challenge and optimised the individual factors step by step – presented in the Sinner's circle below: With the intelligent solution SMART BLUE ACTIVE we offer a real added value and ensure your business success in the long run.



SUSTAINABILITY – WE TAKE OVER RESPONSIBILITY

The CHT Group is a worldwide top player offering chemical specialties. Due to our global core range Textile Finishing we have been a strong partner of the textile industry for many years.

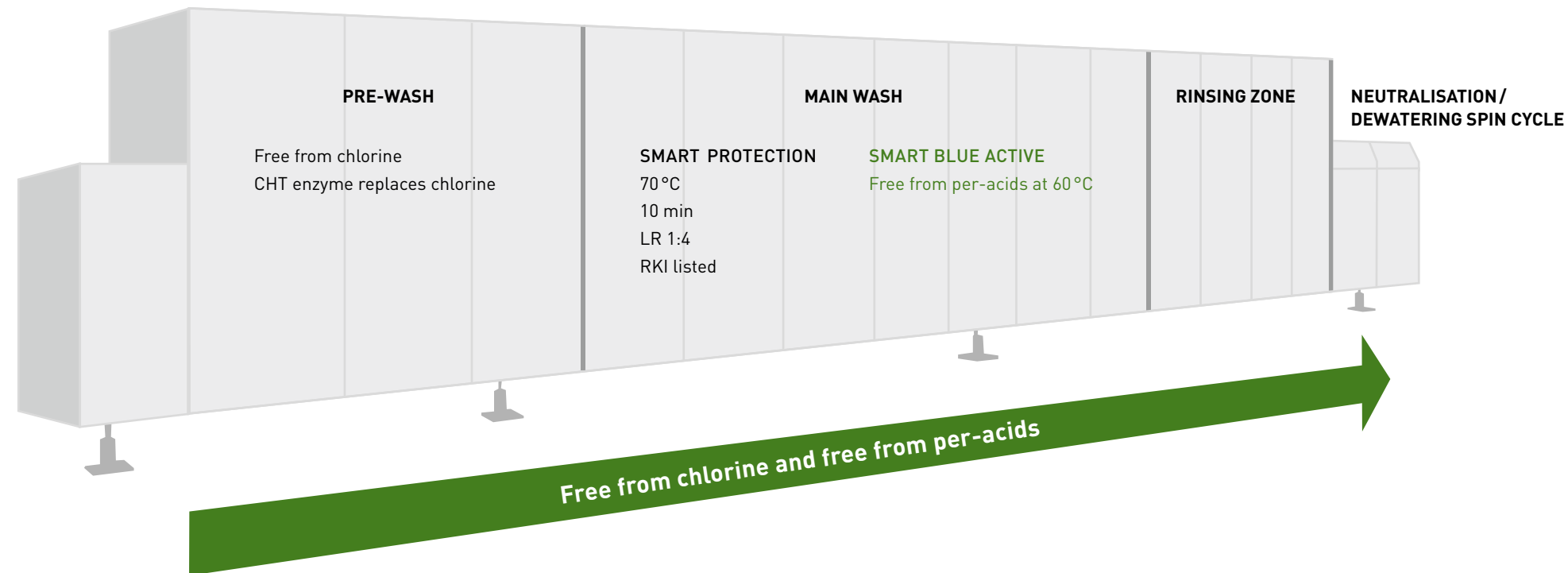
For more than 10 years we have been the sole company supporting the textile chain including Textile Care with a complete know-how. To us sustainable management and acting is an obligation towards present as well as future generations interlinking corporate and social responsibility with environmental protection.

We aim at offering our customers products and process solutions which contribute their share to a sustainable development. In the Business Field Textile Care we have e.g. been able to develop a surfactant based on renewable raw materials – just another example for the permanent innovations of the CHT Group.

WITH SMART BLUE ACTIVE YOUR WASHING PROCESS IS SAFE AND SUSTAINABLE

White laundry is highly demanded in many fields. Stubborn stains often occur in hospitals, hotels and restaurants as well as in the meat industry. So far, laundries have only been able to remove such stains with bleaching agents containing chlorine. With SMART BLUE ACTIVE this belongs to the past since your washing processes can be optimised in such a sustainable way that you achieve excellent washing results without chlorine or per-acids.

The soilings are pre-detached in a pre-wash with an enzyme mix at a neutral to slightly alkaline pH value. The final soil release and disinfection are achieved in the main wash at a washing temperature of 70 °C with the highly proven SMART PROTECTION process listed at the Robert Koch Institute.



If you would like to reduce the washing temperature in the main wash even more, you can add the specifically developed booster BEIBLEACH BLUE ACTIVE which serves as perfect match to the SMART PROTECTION process.

The SMART BLUE ACTIVE washing process will soon be applied for a listing at the Robert Koch Institute for efficiency range AB at a washing temperature of 60 °C.

INCREASE YOUR EFFICIENCY WITH CLEARLY SUCCESSFUL WASHING PROCESSES

Washing trials showed that a permanent use of chlorine strongly decreases the durability of cotton textiles, whereas a cotton fibre has still excellent DP values even after 100 washing cycles with the CHT enzyme. Chlorine-free washing with the CHT enzyme has thus also really positive economic effects.



COTTON FIBRES HAVE A MUCH LONGER DURABILITY

The cellulose molecule is a polysaccharide composed of linked glucose units. In the measuring process for checking the durability state of the cotton fibre the number of chain members is given by the so-called DP value. The damage factor can be determined from the relation between the initial DP value to the DP values from several washing trials.

	Terry cloth Q1	Terry cloth Q2	WCS*	CO poplin
DP value of initial material	2017	2064	2039	1618
DP value after 100 washing cycles with chlorine	1016	1048	971	914
Damage factor	1.0	1.0	1.1	1.0
DP value after 100 washing cycles with SMART BLUE ACTIVE	1888	1873	1818	1538
Damage factor	0.1	0.1	0.2	0.1

* Washing cycle control strips

Damage factor	
0.01 – 0.20	very good, undamaged
0.21 – 0.30	good, gently bleached
0.31 – 0.50	slightly damaged
0.51 – 0.75	damaged
above 0.75	strongly damaged



ECONOMIC PROCESS

- High efficiency already as of 40 °C
- Savings in energy and resources
- Savings in chemicals
- Less fabric damage

PURE WHITENESS

- High whiteness degrees
- Optimum hygiene
- Fibre protection
- Longer durability of textiles

PROTECTION OF THE ENVIRONMENT

- No AOX in the wastewater
- Free from chlorine and per-acids
- Safe handling
- Safe storage

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