

THE SMARTEC SYSTEM

CHT Wash Solutions

UNIQUE IDEAS. UNIQUE SOLUTIONS.





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WASH SOLUTIONS FOR MODERN TEXTILE CARE

In times of increasing energy costs and the responsible use of natural resources, effective processes become more and more important.

For modern textile care this does not mean to aim for optimal washing results at minimised afterwashing rates only, but to cause lowest possible impact on the washed goods and on the environment by optimised process control and efficient application of chemistry.

The modern textile spectrum is enormously broad and fulfils most of the technical demands in practice and fashion with a huge number of materials, production procedures and finishing processes. The processing of the textile variety has to be considered as a challenge for modern textile care, which can be mastered only by being flexible and using innovative concepts.

Against this background a concept by means of which washing procedures can be adapted easily and variably to most different demands offers absolute advantages. CHT/BEZEMA Group developed such a system with the possibility of an individual structuring of the procedure without compromises – the SMARTEC system.

The SMARTEC system is based on the simple and obvious principle to use only the chemistry really needed for washing and to adapt it at best to the specific demands – depending on type of laundry and kind of soiling. The system is completed by the SMARTEC dosing technology for a maximum flexibility in organising the washing procedure.

In the present brochure we present to you our SMARTEC system for textile care – its idea, products and application.

THE ROLE OF CHEMISTRY IN WASHING

The washing process is a complex one where numerous physical and chemical influences are interacting. It can be shown in a simplified way by means of the Sinner's circle reduced to the factors of temperature, time, (washing) mechanics and chemistry.

In a washing process, parameters like temperature, time and mechanics are always attempted to be minimised to allow the procedure to be as effective as possible, to save energy and to largely prevent wear and tear of textile materials by mechanical strain. However to obtain the best possible result great importance is attached to chemistry.

- Solubilising soil particles in molecular form (hydrolysis, oxidation, neutralisation, complexation of metal ions)
- Destruction of chromophoric structures where soil cases are attached to the fibre which cannot be or only partially removed
- Killing of micro-organisms, viruses, spores, fungi

CHEMISTRY PERFORMS DIFFERENT AND IMPORTANT TASKS:

- Wetting, rapid and complete penetration of the washing goods by the liquor
- Wetting and separation of dirt particles
- Keeping of solid and liquid dirt particles in the washing liquor, prevention of redeposition of already separated dirt particles



SOILING OF LAUNDRY

Normally, the soiling of laundry is very heterogeneous and might consist of several different components like pigments (e.g. dust and soot), oils and fats, proteins, plant extracts or mineral salts.

There are combinations of certain chemicals for optimal elimination for every possible dirt particle. Usually surfactants, alkalis, sequestering agents and dispersing agents, and in some cases, bleaching substances or optical brighteners are necessary.

Surfactants are absolutely essential as they lower the surface tension of water and give the washing liquor a wetting capacity. In addition they emulsify oils, fats and other hydrophobic dirt particles and make them soluble.

Alkalis fulfil several functions: In alkaline washing liquors fibres and dirt particles have a higher negative charge and reject one another. The soil attachment to the laundry is reduced and the dirt particles are dissolved more easily in the washing liquor. Certain kinds of soiling, for example, natural fats, are hydrolytically split by alkalis, and then they are more soluble. The effectiveness of bleaching agents based on oxygen are increased by alkalis.

Polyvalent metal ions like hardening agents or heavy metals which are often found in large quantities in the process water and in the soil itself cause many problems: hardening agents like calcium are the reason for the sedimentation of inorganic salts (incrustations) in laundry and machines. They link pigment particles, make them less soluble so that they are more difficult to eliminate from the fibre. Heavy metals like iron, however, stimulate the formation of oxygen radicals during bleaching and increase the risk of fibre damage. Sequestering agents cover metal ions like a case and inhibit these negative effects. The anti-redeposition power of the washing liquor is considerably improved, and the laundry can be used and worn for a much longer time.

Bleached cotton optimally cleaned also absorbs a small part of blue spectrum of the incident light, and therefore it has a slight yellowish cast. Optical brighteners on the fibre transform ultraviolet parts of the incident light into blue fluorescent light. Due to this additional blue light, the laundry seems to have a more brilliant white to the human eye.

Not only the fact that the kind and extent of soiling vary greatly depending on branch and customers, but also the special demands on certain textiles, as for example, in the field of working clothes and last but not least specific customers' requests absolutely demand to be able to tailor washing processes to suit these needs.

A system which allows the processor to apply all chemical components assisting the washing process in a flexible way clearly has an advantage. It does not only permit to set priorities but it also makes possible to exclude all unnecessary elements so that resources can be preserved, costs reduced as well as the impact on the environment.



Pigments



Dust and Soot



Oils and Fats



Proteins



Plant Extracts

SMART SOLUTIONS – SMART CHEMISTRY

It is only the correct combination of singular components that makes the washing process successful. Ready for use mixtures of these components in one product are always a compromise often giving acceptable results, but optimal results for every problem are only obtained by means of a specifically adjusted solution.

Therefore, the SMARTEC system combines all the components necessary for washing individually. Surfactants, alkalis, sequestering agents or optical brighteners are dosed only on demand and in the correct quantity. Higher or lower amounts are used depending on the situation, because if the application of chemistry is not adapted, resources are consumed unnecessarily and the wear and tear of laundry is increased.

Products for the finishing of laundry with a large number of innovative elements round off the SMARTEC system and offer a complete system for all fields of modern textile care.

SMARTEC components are always liquid because it is the only consistency which guarantees precise dosing at any time. SMARTEC dosing systems make available washing auxiliaries without problems, in exact quantities and with reliability.

Our SMARTEC system makes you profit from the know how due to which CHT/BEZEMA Group has become one of the leading suppliers of auxiliaries in all fields of textile production and textile finishing.

WETTING – SEPARATION OF SOIL – EMULSIFICATION OF FATS

Concentrated, liquid, readily biodegradable:

The surfactant formulae of **BEICLEAN** convince you by their high wetting power and their very efficient fat and oil emulsifying capacity. If a rapid and complete liquor penetration and effective antifoaming effect are demanded, the **BEIPEN** products make the grade.

BEICLEAN FDO NEW
BEICLEAN NFG
BEICLEAN FRESH
BEIPEN CDS



DISPERSION OF SOIL – SEQUESTERING OF METALS – NEUTRALISATION OF HARDENING SUBSTANCES

The sequestering agents and dispersing agents of the **BEIPLIX** series prevent sediments caused by hardening substances and protect from laundry damage by heavy metal catalysts. Their excellent dispersing effect increase the cleaning power on soiling containing pigments.

BEIPLIX ANO
BEIPLIX ESW
BEIPLIX TIM
BEIPUR PKS
BEIPUR ANP
BEIPUR ASN



ELIMINATION OF STAINS – BLEACH – DISINFECTION

Thorough elimination of stains, optimal whiteness degree and reliable disinfection with **BEIBLEACH** products permit a safer process and guarantee consistently good results for the highest requirements.

BEIBLEACH WP 35
BEIBLEACH POWER ACTIVE
BEICLEAN CONTROL
BEICLEAN HWA



IMPROVEMENT OF WHITENESS DEGREE AND BRILLIANCE

Perfectly white laundry is the visible sign for highest washing quality. The optical brightener **BEIBLANC** gives the brilliant white which makes the difference.

BEIBLANC RUB



NEUTRALISATION OF LAUNDRY

Highly effective acid mixtures with sequestering effect:

BEIACID products safely neutralise residual alkali, provide a skin-friendly pH on laundry and offer protection from mangle problems and yellowing.

BEIACID WSG

BEIACID NCS

BEIACID NVM 200



SOFTENING AND SMOOTHING

Agreeable soft handle with excellent absorbency, higher wearing comfort and improvement of the smoothness after drying, with skin caring components or with perfume resistant to tumbling on demand – with **BEISOFT** you increase the quality of your laundry and you will be able to conserve it for a longer time due to less mechanical strain and reduced wear and tear.

BEISOFT RGH

BEISOFT BTN

BEISOFT PLX-L

DEHALAN W6



STARCHING AND SHAPING

Liquid products of the series **BEIAPPRET** based on natural rice starch provide for lustre effects and conditioning, e.g. on table cloths. With or without addition of polymer for stiffening effects of different degrees with excellent running behaviour on the mangle.

BEIAPPRET RWS



IMPREGNATION – STAIN REPELLENCY – PROTECTION FROM CHEMICALS

Highly efficient, reliable and yielding: The fluorocarbon compounds of the **BEIPHOB** series offer the highest performance in water repellent, oil repellent and stain repellent finishing at high or low temperatures with focus on barrier effect or with soil release effects.

BEIPHOB NPF

BEIPHOB FCW-1

BEIPHOB SR ULTRA-A

BEIPHOB 25-F



SMARTEC – COMPETENCE IN DOSING TECHNOLOGY

The right quantity of the right product at the right place and time –
Dosing demands accuracy.

During the last few years the processes of textile care have been constantly optimised. The development of highly efficient detergents, innovations in engineering and improved washing procedures allowed processors to realise savings at an equal or even better washing result. Furthermore it is possible by means of automatic dosing systems to add many different washing auxiliaries, an arbitrary number of them in an accurate and reliable way at every step of the washing process. A specific adjustment to different laundry types and soiling degrees is possible without any problems.

The SMARTEC dosing technology as a component of the CHT Wash Solutions is adjusted, at its best, to the SMARTEC single component system.

Most recent technical components, perfected design, high quality manufacture and chemical and process technological know-how transferred into practice, assure a low-maintenance operation and gives convincing washing results. The SMARTEC dosing systems make possible maximal flexibility for the structuring of washing procedures and are universally suitable for all types of machinery.

“PLUG & DOS”

The SMARTEC dosing technology persuades by its rapid and easy installation and needs very little space. The compact main unit is delivered as ready-made component part. After connection of energy, water and compressed air the unit is then ready for use. The handling of the system with touch screen is simple. Dosing processes and profiles are shown graphically on a clear layout display.

SERVICE

The system solution of SMARTEC includes a comprehensive service starting in the planning phase. Experienced laundry experts receive your problem, and give you competent advice. The process orientated solution proposals are based on our large chemical and textile know-how. Our laboratories, equipped with the most modern techniques, support the analysis for individual system solutions. The setting up and commissioning by highly qualified staff members guarantee a production procedure without problems. The control of the dosing plant with connection to internal networks also allows the transfer of disturbances. To solve the problem we offer a remote maintenance.



CHARACTERISTICS AND PROPERTIES OF THE SMARTEC DOSING TECHNOLOGY

- Safe product transfer
- Low-maintenance membrane pumps
- Controlled conveyance of the media by pressure and flow measurement
- Inlet of prediluted products by “flush-in” technology
- Operation by touch screen
- Analysis of operating data, also via non-system networks
- Exact logging of all dosing processes
- Easy handling
- Compact construction
- High quality manufacture
- Application possible on washing lines and on washer-extractors
- Simultaneous dosing on several machines
- “Plug & dos”



FINISHINGS FOR YOUR SENSES

CHT/BEZEMA Group offers an up-to-date system for modern textile care which combines basic softeners with the additional functions of “well-being” and fragrance. Textiles which have been

treated with this kind of textile care guarantee an improved “well-being” and the best wearing comfort.

BASIC SOFTENER – BEISOFT BTN

Textile care aims at maintaining the original character of a piece of clothing as long as possible. Active substances in the form of softeners, which are applied to the fabric in the last rinsing bath after washing, encase the fibres and reduce the friction between the individual fibres, thus providing an agreeable softness of the textile. Additional effects, such as hydrophilic character or antistatic behaviour, may be purposefully controlled by a suitable selection of active substances.



ADDITIONAL FUNCTION “WELL-BEING” – BEISOFT PLX

In recent years, “well-being” has established itself as lasting tendency and is part and parcel of our modern world with the striving for a balance to everyday life. Tight clothes or other textiles with direct skin contact (towels, bedclothes, etc.) are an ideal carrier for pleasant and skin-caring active substances which are also often used in cosmetics. Aloe Vera has a healing effect on wounds, is anti-inflammatory, skin-softening and moisturizing. It is one of the oldest medical plants which has been applied for centuries both internally and externally. Vitamin E promises to inhibit skin-ageing and is considered to be hygroscopic. After every washing cycle the caring substances are applied again in the last rinsing bath.



ADDITIONAL FUNCTION FRAGRANCE – BEISOFT PLX-L

Fragrances raise emotions, they may ‘calm’ or stimulate. Laundry with a fresh fragrance is generally linked with “well-being”. A long lasting fresh fragrance of the treated laundry is guaranteed by microcapsule technology. Microcapsules are microscopically small formations consisting of a core and a casing. The core material of fragrance capsules consists of perfume oils or other effect substances (essential oils). In the field of textile care this technology has a particular advantage: the fragrance is actually only released if the treated textile is mechanically strained and the capsules are thus destroyed (e.g. through rubbing during wearing or towelling off). This “release-on-demand technology” provides a long-lasting freshness effect.



PROTECTIVE FINISHING

TEXTILE PROTECTION AND CREASE RECOVERY – BEISOFT RGH

If used regularly, products such as **BEISOFT RGH** protect the textiles from premature wearing. Due to the reduced friction the softened fibres are still smooth and have clearly less wearing features even after numerous washing cycles. Special, microemulsified silicone polymers also reach the core of tightly twisted yarn leading thus to clearly improved crease recovery. The polymeric substances activate retractive forces within the fibres supporting the self-smoothing properties. This “crease-less” effect facilitates a much smoother fabric appearance with less creases, in particular on tunnel finishers.



CHEMICAL-REPELLENT AND WATER-REPELLENT FINISH – BEIPHOB

The repellence of water, oil and chemicals is an important demand made on workwear and personal protective wear of many fields. Washfast finishes are demanded which reliably prevent the penetration of various liquids through the textile and protect the person wearing these clothes from damaging effects. In the past, the mere protective function of the clothes was most important but modern functional clothes must also offer wearing comfort and further properties besides a perfect protective effect. The **BEIPHOB** products of CHT/BEZEMA Group show the highest performance even with low application amounts and are suitable for all important application fields: **BEIPHOB NPF** is a reliable product with best oleophobic and hydrophobic effects at drying temperatures above 135 °C. If gentle drying conditions are required, **BEIPHOB FCW-1** will have a perfect protective effect even in the low temperature range. The protection of classic fluorocarbon finishes is based on the repellence of liquids. However, if these liquids are mechanically pushed underneath the protective layer, they can hardly be washed off. **BEIPHOB SR ULTRA-A** offers an excellent protective and barrier effect – and by means of the integrated soil-release technology even oil and fat soilings which have been ingrained into the fabric can be easily removed again.



ANTIMICROBIAL FINISH WITH SILVER

Textile surfaces are the ideal breeding ground for microorganisms. The combination of a large surface as well as moisture and temperature offers optimum prerequisites for an undamped growth of microbes. Unpleasant odours, mould stains, changes in shade and even fibre destruction may be the consequence of such microbial depositions. Especially for professional textile care the demands made on hygiene are particularly high. The laundry is to be not only clean but “chemically pure”! By means of antimicrobial finishes new hygiene benchmarks can be set in this field. We use products based on silver since they are highly efficient and can therefore be dosed extremely economically. Moreover, they have been examined by independent toxicologists and accepted as active chemical substances for Öko-tex Standard 100 product class 1.



APPLICATION PROPOSALS ¹⁾

TABLE LINEN, WHITE, WITH STARCH

Prewashing

	g/kg
BEICLEAN FDO NEW	4.0 – 8.0
BEIPUR ANP	3.0 – 5.0

Liquor ratio 1:5
10 min at 40 °C



Main washing

	g/kg
BEICLEAN FDO NEW	2.0 – 5.0
BEIPUR ANP	2.0 – 4.0
BEIBLEACH WP 35	4.0 – 6.0
BEIBLANC RUB	0.6 – 1.2

Liquor ratio 1:4
15 min at 80 °C



1st rinsing

Liquor ratio 1:5
4 min at 50 °C

2nd rinsing

Liquor ratio 1:5
4 min cold



Intermediate hydro-extraction

Neutralising, starching

	g/kg
BEIAPPRET RWS	10.0 – 20.0
BEIACID WSG	1.5 – 3.0

Liquor ratio 1:4
5 min at 30 °C

1) examples for washer-extractors



WORKWEAR, COLOURED, FROM THE AUTOMOTIVE / WORKSHOP FIELD

Main washing

	g/kg
BEICLEAN NFG	8.0 – 15.0
BEIPUR NL 50	4.0 – 8.0
BEIPLEX ANO	4.0 – 8.0

Liquor ratio 1:5
25 min at 70 °C

Cooling down to 50 °C

1st rinsing

Liquor ratio 1:5
4 min at 40 °C

2nd rinsing

Liquor ratio 1:5
4 min cold

Intermediate hydro-extraction

Neutralising

	g/kg
BEISOFT RGH	2.0 – 5.0
BEIACID WSG	1.5 – 3.0

Liquor ratio 1:4
4 min at 30 °C



WORKWEAR, WHITE, BLENDS

Prewashing

	g/kg
BEICLEAN NFG	2.0 – 6.0
BEIPUR ANP	2.0 – 4.0

Liquor ratio 1:5
10 min at 40 °C



Main washing

	g/kg
BEICLEAN NFG	1.0 – 3.0
BEIPUR ANP	1.5 – 4.0
BEIBLEACH POWER ACTIVE	2.5 – 5.0
BEIBLANC RUB	0.5 – 1.0

Liquor ratio 1:4
12 min at 60 °C



1st rinsing

Liquor ratio 1:5
4 min at 50 °C

2nd rinsing

Liquor ratio 1:5
4 min cold



Intermediate hydro-extraction

Neutralising

	g/kg
BEISOFT RGH	2.0 – 5.0
BEIACID WSG	1.0 – 2.0

Liquor ratio 1:4
4 min at 30 °C



SIGNAL CLOTHING WITH PROTECTIVE FINISH

Main washing

	g/kg
BEICLEAN NFG	8.0 – 15.0
BEIPUR ANP	2.0 – 6.0
BEIPLEX ANO	3.0 – 5.0

Liquor ratio 1:5
20 min at 60 °C



1st rinsing

Liquor ratio 1:5
4 min at 40 °C

2nd rinsing

Liquor ratio 1:5
4 min cold



Intermediate hydro-extraction

3rd rinsing

Liquor ratio 1:5
4 min cold



Protective finish

	g/kg
BEIPHOB NPF	5.0 – 10.0
BEIACID WSG	1.0 – 2.0

Liquor ratio 1:4
4 min at 30 °C



GLOSSARY

BEIACID NCS

Acid donor based on citric acid for neutralising in alkaline washing processes. For adjusting neutral to slightly acid pH values in aqueous treatment liquors, e.g. after alkaline washing processes. Guarantees the adjustment of pH values even with a prolonged storage. The acid quantity remaining after having dehydrated the fabric is almost completely available for neutralising the core alkalinity.

BEIACID NVM 200

Acid donor based on carboxylic acids for the neutralisation of alkaline washing processes. BEIACID NVM 200 is not volatile and completely available for the neutralisation of the core alkalinity during drying. The product is phosphorus free and completely biodegradable.

BEIACID WSG

Mix of organic and inorganic acids for neutralising in alkaline washing processes. For adjusting neutral to slightly acid pH values in aqueous treatment liquors, e.g. after alkaline washing processes. Guarantees the adjustment of pH values even with a prolonged storage. The acid quantity remaining after having dehydrated the fabric is almost completely available for neutralising the core alkalinity.

BEIAPPRET RWS

High quality, universally applicable starch on natural basis with addition of polymer. Due to the optimised mixture of starch particles in different sizes BEIAPPRET RWS is stored in all spaces of the fabric structure. A high yield with an excellent starch effect is obtained.

BEIBLANC RUB

Optical brightener for cellulose and polyamide fibres as well as natural silk and wool. Gives a bright white effect and prevents the laundry from greying. Insensitive to acid with neutral to reddish white shade.

BEIBLEACH POWER ACTIVE

Highly efficient, liquid bleaching and disinfectant which has already an excellent bleaching effect at temperatures above 40 °C. The powerful bleaching effect which is yet gentle to the fibres eliminates the causes of unpleasant odours and maintains the degree of whiteness. Due to the low treatment temperatures and moderate alkalinity the shades of coloured textiles are being protected.

The combination of BEIBLEACH POWER ACTIVE, BEIPUR PKS or BEIPUR ANP and BEICLEAN NFG has been registered for a listing for the chemothermal laundry disinfection at the Robert-Koch-Institut (RKI) according to § 18 IfSG (Infection Protection Act) with the efficiency range AB.

BEIBLEACH WP 35

Highly efficient, liquid bleaching and oxidizing agent based on oxygen. Has an excellent bleaching effect on any kind of stains and soilings in alkaline liquors as of 70 °C. The powerful bleaching effect which is yet gentle to the fibres eliminates the causes of unpleasant odours and maintains the degree of whiteness.

For any kind of laundry made of cellulose fibres and cellulose/polyester blends.

BEICLEAN 2004

Highly effective, liquid all-in-one detergent. Due to its pH value BEICLEAN 2004 is excellently suitable for the washing of textiles needing a sensitive or an easy care treatment. Those are in particular textiles and laundry of nursing homes. BEICLEAN 2004 has been developed for the care treatment of white laundry and contains optical brighteners.

BEICLEAN CARE

Highly effective all-in-one liquid detergent concentrate. Due to its pH value BEICLEAN CARE is excellently suitable for the washing of textiles needing a sensitive or an easy care treatment such as textiles containing wool and laundry of nursing homes.

BEICLEAN CONTROL

Bleaching activator for hydrogen peroxide with wetting and emulsifying properties. BEICLEAN CONTROL serves as activator for a controlled release of peracetic acid in the washing bath and guarantees thus an optimal bleaching effect and laundry disinfection as of 60 °C. Therefore, the product must always be combined with BEIBLEACH WP 35 and BEIPUR PKS.

BEICLEAN FDO NEW

Highly efficient surfactant formulation with citrus terpenes with particularly distinct solubilising capacity for oil and fat soilings, particularly caused in the kitchen and through food.

Due to its composition of non-ionic surfactants with excellent emulsifying properties in combination with fat solubilisers based on renewable raw materials even obstinate soilings are removed eliminating unpleasant odours caused by them.

BEICLEAN FRESH

Low foaming, synergistic mix of special non-ionic surfactants. Universally applicable on any kind of laundry with an excellent emulsifying effect on oil and fat soilings.

BEICLEAN HWA

Bleaching activator for hydrogen peroxide with wetting and emulsifying properties. BEICLEAN HWA serves as activator for a controlled release of peracetic acid in the washing bath and guarantees thus an optimal bleaching effect and laundry disinfection as of 60 °C. Therefore, the product must always be combined with BEIBLEACH WP 35 and BEIPUR WAK or BEIPUR PKS.

BEICLEAN NFG

Foam-free surfactant mix with excellent wetting and emulsifying capacity. Due to the distinct dispersing capacity and pigment protection this product is optimal for workwear and protective workwear. Guarantees optimal washing mechanics on any machine, even with a very high liquor turbulence. Solvent-free, suited for any fibre type.

BEIPEN CDS

Highly efficient wetting and deaerating agent with simultaneously excellent foam-inhibiting properties. Improves the liquor penetration, particularly with tight laundry types and those which are difficult to wet such as workwear and kitchenwear. Improves the washing mechanics through an excellent, long-lasting antifoaming effect, even with low application amounts.

BEIPHOB 25-F

Efficient impregnation agent based on C6 fluoro-carbon, applicable on natural and synthetic fibres and their blends which are to be made water-repellent, oleophobic and soil-resisting. Depending on the drying conditions excellent water, oil and spray values are obtained.

BEIPHOB FCW-1

Fluorocarbon dispersion for impregnation and for the hydrophobic, oleophobic and stain release finish of textiles. Excellent water-repellent and oil-repellent effects, even at low drying temperatures. Optimal performance with a tumbler drying above 60 °C drying temperature.

BEIPHOB NPF

Fluorocarbon dispersion for impregnation and for the hydrophobic, oleophobic and stain release finish of textiles with an excellent cost effectiveness.

Excellent water, oil and spray values at standard drying temperatures above 120°C.

BEIPHOB SR ULTRA-A

Modified fluorocarbon compound for stain release finish. Provides textiles with water-repellent and oil-repellent properties. Unlike standard fluorocarbon finishes a soil-release effect is being achieved with BEIPHOB SR ULTRA-A which facilitates the subsequent cleaning of the treated textile.

BEIPLX ANO

Highly efficient sequestrant and dispersing agent with excellent sequestering and dispersing capacity towards hardeners and metal salts in an alkaline medium. Greatly increases the soil suspending property of the washing liquor and is therefore ideally suited for the application on strongly soiled laundry. Thanks to the excellent dispersing properties of the product even obstinate pigment soilings are removed from the laundry.

BEIPLX ESW

Highly efficient sequestrant which has a particularly distinct sequestering capacity towards alkaline earth and heavy metal ions due to its composition. Thus, fabric incrustations and machine deposits are efficiently avoided, even in case of extraordinarily high strain through hardeners and silicates.

BEIPLX TIM

Sequestering agent with excellent stabilising and dispersing effect. Due to its sequestering power BEIPLX TIM can bind high charges of hardening substances in the washing liquor and mask heavy metal ions with a catalytic effect in the bleaching bath. BEIPLX TIM has a stabilising effect on the bleaching liquor containing hydrogen peroxide, and thus makes textiles more durable, particularly cotton articles, and allows to obtain a higher ground white degree.

BEIPUR ANP

Liquid alkali donor for any water hardness with very good sequestering and dispersing capacity towards hardeners, metal salts and pigment soilings. Improves the removal of protein soilings and natural fats.

BEIPUR ASN

Liquid alkali donor for all water hardness ranges with a very good sequestering and dispersing power in presence of hardening substances, metal salts and pigment soilings.

BEIPUR NL 50

Liquid alkali donor and detergent booster for any textile made of cotton and blends; improves the removal of protein soilings and natural fats.

BEIPUR PKS

Liquid alkali donor for any water hardness with very good sequestering and dispersing capacity towards hardeners, metal salts and pigment soilings. Improves the removal of protein soilings and natural fats.

BEISOFT BTN

Moderately hydrophilic softener with antistatic effect.

Produces an excellent, very soft and bulky handle on cotton articles and blends without impairing the degree of whiteness. Due to its superfatting effect the frictional forces between the textile fibres are decreased, the mechanical strain of the fabric during wearing is reduced and thus, the durability of the textile is increased.

BEISOFT PLX-L

Hydrophilic washing finish with skin-caring components and fragrance.

Yielding, universally applicable softener for articles made of cellulose fibres and blends. Optimal rewettability, in particular for cotton articles and terry towelling. The wearing comfort and "well-being" character of the fabric are improved by the aloe vera addition. Agreeable, long-lasting fresh scent, protected from premature evaporation by means of microencapsulation.

BEISOFT RGH

Microemulsion based on a freshly developed and patented organomodified polysiloxane. Excellent soft handle, in particular with tightly twisted yarns and heavy qualities. Positive influence on the elasticity and resiliency, thus reduction of crease formation and clearly better finish behaviour ("crease-less" effect).

BEISOFT SH

An economic softener for articles for cellulose fibres and mixed fabrics for the hygienic finishing. With application of BEISOFT SH in addition to an excellent softening handle an antibacterial effect is obtained on merely all sorts of laundry. The silver component in the product effectively prevents micro-organisms from proliferating on the substrate. The antimicrobial finishing with BEISOFT SH is a valuable component of the treatment of functional textiles with regard to hygiene and prevention.

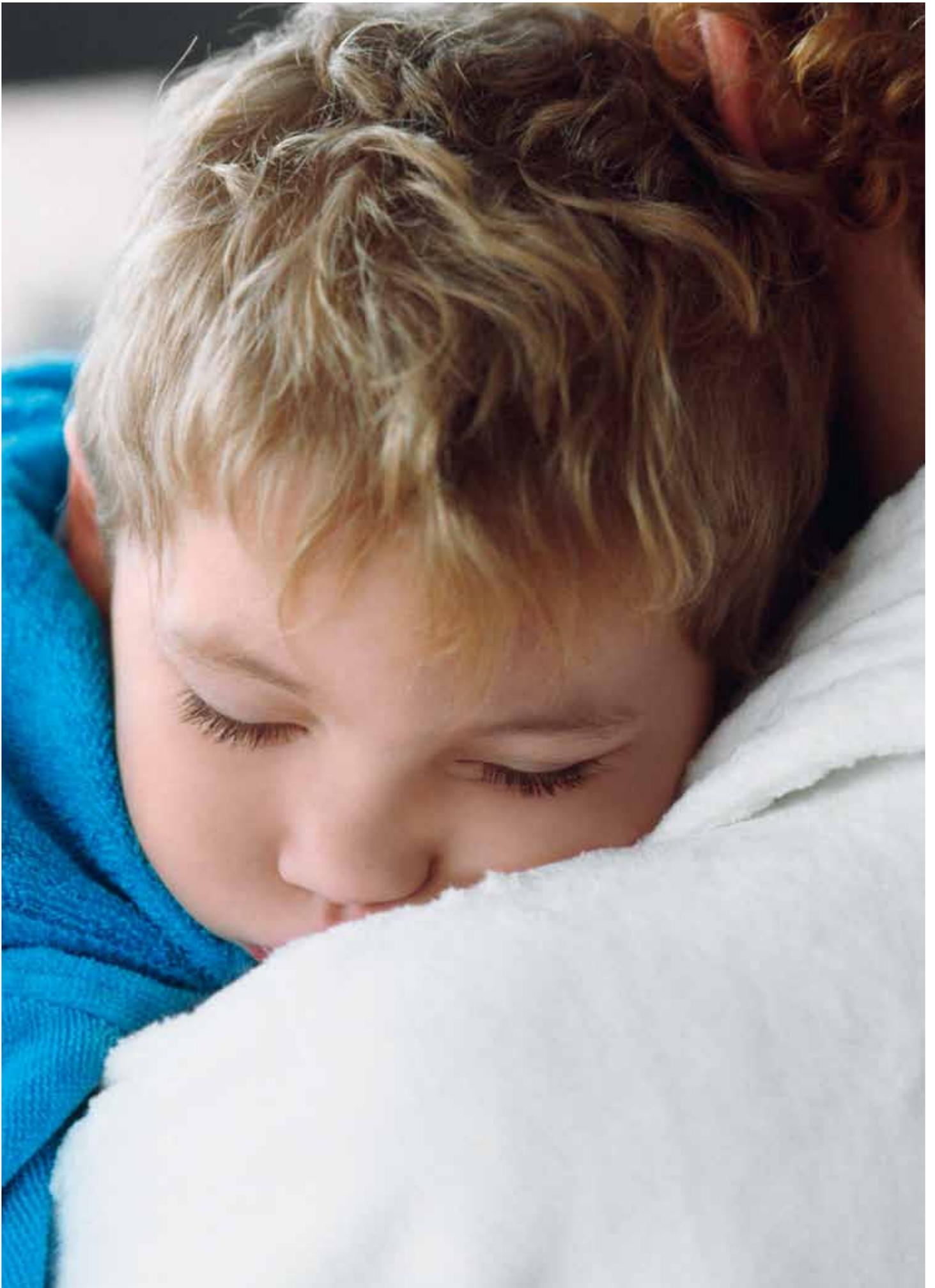
BEISTAT AZ NEU

Universally applicable antistatic based on with a high efficiency. Suited for any fibre type, preferably used on synthetic fibres and their blends.

No impact on handle, no yellowing, even at high drying and fixation temperatures.

DEHALAN W6

Universally applicable softener for the application on down and feathers and in commercial textile care. By application of DEHALAN W6 a soft handle is obtained together with an agreeable fragrance on the substrate.



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