The processes.
One Partner, One System.
Everything that makes textile care successful.

These days, the path to perfect cleanliness and hygiene demands efficiency, profitability, and sustainability. This is why BurnusHychem is the partner and service provider of commercial laundries, offering an integrated system of products, technologies and services that guarantee convincing solutions for every customer requirement.

Bundled competence for our customers.

The high-quality laundry detergents and systems from BurnusHychem are just the foundation of our integrated portfolio of services. We look at our customers’ complete operations and design efficient and economic laundry processes for them:

- With a detergent component system coordinated exactly to suit individual needs.
- With the optimum dosing technology and process monitoring for the machines and components.
- With a comprehensive range of services and competent personal advice.

Laundry detergents for sustainable processes.

Whether you handle hygiene laundry or work clothing — with more than 110 products in our range, we offer solutions for traditional laundry and for our customers’ special requirements. For a long time we have been increasingly developing more sustainable products and processes. Since our peracetic acid-free, low-temperature disinfection laundry process Sterisan® was launched in 2000, many commercial laundries have been using it at 40 °C to 50 °C, depending on the application case.

The detergents from BurnusHychem are “Made in Germany”, which guarantees our customers the high standards in quality, reliability and sustainability that they have come to expect:

- We produce at our two own plants in Steinau an der Straße, which allows us to address all our customers’ requirements flexibly.
- We purchase exclusively quality raw materials, and our products meet the highest demands.
- We formulate our detergents in the upper quality range. Our processes are coordinated optimally to preserve colors and fibers.

Dosing technology with TÜV-certified safety concept.

Only BurnusHychem delivers dosing systems with a certified safety concept. The compact Line® dosing solution combines innovative technology for highly efficient systems with minimum maintenance and service expenditure.

Customer service and more.

Our service and advisory offers include much more than just support for to the laundry processes. We support our customers with the complete know-how and service excellence of BurnusHychem.
Your requirements – our laundry processes.

Every stain is different. Every type of soiling requires its own treatment during the laundry process. The BurnusHychem laundry detergents and processes can be customized and precisely tailored to the specific requirements of commercial laundries. The result: Maximum cleanliness, hygienic safety and color and fiber protection. All of this plus groundbreaking cost-effectiveness and environmental compatibility.

In the overview below, we have outlined the innovative BurnusHychem laundry processes for our professional partners’ wide range of laundry types. Our process technicians are happy to advise you on the appropriate holistic approach for your operations, including dosing technology and process monitoring.

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<thead>
<tr>
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<th>Penta-Aktiv®</th>
<th>Liquisan A® and B®</th>
<th>Liquisan Sprint®</th>
<th>Liquisan Vario®</th>
<th>Sterisan®</th>
<th>Trisanox Liquid®</th>
<th>Lavaplex®</th>
<th>Disinfecting all-purpose detergents</th>
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**Penta-Aktiv®**

Energy-efficient low-temperature bleach based on peracetic acid for 60 °–70 °C processes.

Our proven, well-known systems and methods for ecological laundry processes in conveyor washing machines and washer extractors. Penta-Aktiv® offers an extremely gentle wash with efficient bleaching and disinfection.

The results after washing show a brilliant shade of white. The processes and systems are unproblematic with regards to environmental impact and wastewater legislation.

The high bleaching power of the peracetic acid makes for an efficient, color-protecting bleach for low-temperature processes. For disinfection, Penta-Aktiv® is listed in combination with other products by VAH and RKI. Suitable for all processes in line with RAL 992/1-3, RABC, HACCP etc.

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**Product type**

Disinfection laundry process based on peracetic acid. Can be combined with liquid and powder detergents in application.

**Areas of use**

For highly effective bactericide, fungicide and virucide treatment in line with the strict guidelines of the Robert-Koch-Institut (efficacy levels A and B) in hospitals, retirement and nursing homes, and in the food-processing industry.

**Temperature range**

Depending on whether it is combined with the detergents listed, at 60 °C or 70 °C.

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**Textiles**

These combinations are suited to every type of laundry in hospitals as well as professional wear made of pure cotton or mixed fabrics.

**Usage conditions / special characteristics**

Can be combined with enzymes, such as protease for heavily blood-stained laundry.

<table>
<thead>
<tr>
<th>Product Combination</th>
<th>Time(min) / Temperature(°C)</th>
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<tbody>
<tr>
<td>Liquisan A®* and B®</td>
<td>10 / 65</td>
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<tr>
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<td>10 / 60</td>
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<tr>
<td>Tenalan® W</td>
<td>8 / 70</td>
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<tr>
<td>Tena® ST / Tena® PF*</td>
<td>10 / 70</td>
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<tr>
<td>Penta-Basis®</td>
<td>10 / 70</td>
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<tr>
<td>OLISSO® Power</td>
<td>10 / 65</td>
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</tbody>
</table>

* also non-lightening versions
Outstanding washing performance can be achieved extremely economically using our special products Liquisan A® and Liquisan B®. Even in low doses, Liquisan A® provides a basis for highly effective application. Liquisan B® replenishes the alkalinity content. The key to thoroughly dissolving stubborn grease soiling lies in an increase in saponification.

The Liquisan products are highly concentrated and therefore provide for a lasting reduction in transport costs and also significantly reduce the space needed for storage as well as while preparing the dosage.

Liquisan A® is free of anorganic electrolytes and is therefore easy to rinse out. This significantly reduces the amount of rinse water needed. The system is ideally suited for “sprint cycles” in washer extractors with just one rinsing bath.

**Product type**

The "team" for conveyor washing machines and washer extractors: Liquisan A® is a concentrated liquid laundry detergent. Liquisan B® is an alkali concentrate that can considerably improve washing performance when added.

**Temperature range**

Can be used at all temperatures (40 ° — 60 ° — 70 ° — 90 °C).

**Textiles**

The combination of concentrated laundry detergent and alkali concentrate is especially suitable for operating room linen, all types of workwear and hospital and hotel flatwork made from pure cotton or mixed textiles containing polyester and cotton.

**Seal of quality**

Liquisan A® contains no phosphates, is free from inorganic electrolytes and is also available without optical brighteners. Liquisan B® contains no phosphates or perfumes. The surface-active agents in Liquisan A® meet the biodegradability requirements of EU Detergent Regulation 648/2004.

**Properties**

- Highly effective special products for combined use
- Extremely economical due to the small quantities required
- Best rinsing properties thanks to the low electrolyte content
- Contributes to ecological washing processes
- Thoroughly removes stubborn soiling
- Gives laundry outstanding rotary ironing properties
- Improves the finish
The Liquisan Sprint® process is highly sustainable, since it’s frugal with resources. How it works: Paired with our special products Liquisan A® and Liquisan B®, which are incredibly easy to rinse out, the Liquisan Sprint® process achieves the best laundry results with significantly reduced cycle times.

Thanks to an entirely new approach to the process, the potential for savings in water and energy usage can reach up to 30 percent. Improves your laundry results and reduces your water and energy usage.

**Product type**

The highly flexible application range of 40 °, 60 ° and 70 °C. is a trendsetter. As a result, the Liquisan Sprint® process can be used for a wide range of laundry items.

**Technical requirements**

The Liquisan Sprint® process is suitable for all conventional washer extractors. This also includes machines with water/energy recovery functions. The machines do not require any retrofitting. Consequently, there is no additional expenditure for technical equipment.

**Textiles**

Especially beneficial for all types of workwear, including protective clothing for hazard areas, clothing and underwear from residents in retirement and nursing homes and hospital patients.

**Properties**

- Saves resources
- Very economical
- Significantly reduces water and energy consumption
- Saves around 25 per cent compared to conventional processes
- Examples, up to:
  - 25 per cent saving with retirement home residents’ clothing at 40 °C
  - 25 per cent saving with retirement home residents' underwear with chemothermal disinfection
  - 35 per cent saving with white workwear with peracetic acid bleach at 70 °C
  - 35 per cent saving with white workwear with chlorine bleach at 50 °C
  - 30 per cent saving with coloured workwear
- Up to 10 per cent capacity gained through the shorter wash cycle
- Process application with no added investment

In concrete terms: With Liquisan Sprint®, laundries can achieve the levels of water usage with a washer extractor that approach those of a conveyor washer. The process is also very gentle on fabrics.
In hospitals, nursing homes, the food processing industry — hygiene is everything. The same goes for textiles. High demands are placed on preparation. Liquid-form Liquisan Vario® fulfills them. Uniquely flexible, with outstanding cleaning performance and maximum hygienic purity. Independent expert opinions have confirmed its reliable, bactericidal, fungicidal and virucidal effectiveness at 40 °and 60 °C. Liquisan Vario® thereby fulfills the strict guidelines of VAH (DGHM) and RKI.

The new Liquisan Vario® process with its two components is the flexible way to treat hygiene textiles so that they are reliably clean and pure. And it does so with only minimal use of chemicals, water and energy resources. The two system components Liquisan B® und OXYPLEX® plus are optimally designed for the proper, disinfecting processing of hygiene laundry at 40 °and 60 °C. Its application can be individually adjusted to the degree of contamination, hygiene requirements and temperature range.

**Product type**
Liquid 2 component system for processing hygiene textiles.

**Areas of application**
Textiles from the healthcare field, in particular from hospitals, nursing and retirement homes, textiles from the food industry.

**Temperature ranges**
The Liquisan Vario® process with the system components Liquisan B® and OXYPLEX® plus is optimally designed for the proper, disinfecting processing of hygiene textiles at 40 ° and 60 °C.

**Seal of quality**
The bactericidal, fungicidal and virucidal effectiveness has been proven by two independent expert opinions in accordance with VAH (DGHM) directives and RKI guideline. The 2-component cleaning system was proven effective in meeting all requirements in 25 and 50 cumulative cleaning treatments.

**Other**
The Liquisan Vario® process can be combined with all other products from the BurnusHychem portfolio and can thereby be tailored to meet individual needs.

**Benefits**
- Greatest flexibility at 40 ° and 60 °C
- Ensured cleaning, whitening and disinfection
- Minimal energy use
- Maximum textile care
- Conserves resources
Sterisan®
The low-temperature laundry process that is gentle on fibres, colours and resources.

The innovative Sterisan® process yields ecological and economical benefits for its users. It is based on an active oxygen component and produces a sustainable cleaning, bleaching and disinfecting effect even in a low temperature range of 40 °C.

The Sterisan® system has been used to great success in large laundry services for more than 15 years — at a temperature of just 40 °C for washing and disinfecting. An important contribution to the sustainable usage of resources. According to a study conducted by the Freiburg ÖKO-Institut, the Sterisan® system earned the highest marks for ecological aspects out of the three hygienic laundry processes tested. It saves roughly 50 % in water usage. Primary energy usage costs one-third less.

Particularly hydrophobic problem stains are efficiently removed in an environmentally friendly way and with very little damage from no chlorine. Bleach’s high efficacy can be achieved starting at 40 °C and is even ideally suited for colors and outerwear (for example in retirement homes).

Benefits
- **Saves resources**
  - Drastically reduces water consumption on continuous systems and in washer extractors
  - Considerably reduces energy consumption compared to the usual 70 °C and 90 °C processes
- **Very gentle**
  - Extremely gentle on fibres and colours, helping to prolong the life of the textiles
  - Treated textiles last up to 50% longer
- **Reliable process**
  - Strong grease dissolving power
  - Safe bleaching and disinfecting effect
  - Optimally adjusted dosage technology
- **Sustainable and Eco-compatible**
  - Increased wash loads possible with blended fabrics
  - No cost and time-consuming cool-down step
  - No formation of eco-critical AOX compounds
  - Lowers wastewater temperatures to below 35 °C
  - Compatible with existing wastewater treatment and recovery systems

Product type
Washing process for hygienic cleaning, bleaching and disinfection.

Textiles
Ideal for all cotton textiles and blended fabrics, especially for flatwork and other laundry items from retirement and nursing homes and hotels for processing on continuous systems. Also suitable for heavily soiled workwear in the food industry in washer extractors, especially problem textiles in the fish and meat processing industries.

Seal of quality
Sterisan® meets the strict hygiene regulations of VAH (DGHM). The Sterisan® process is also highly effective against MRSA (Methicillin-resistant Staphylococcus aureus).
Whether in hospitals, nursing and retirement homes or in the food processing industry: Wherever hygiene textiles need to meet strict requirements, the three-component system of Trisanox Liquid® guarantees consistent microbiological quality during processing.

The result: visibly clean and hygienically safe with the highest degree of washing performance at a low alkaline level. An innovative laundry system with reduced hazard potential during transport and storage, even in regions with extreme climatic conditions.

Trisanox Liquid® guarantees cleanliness and hygiene at as low as 60 °C. Without adding any peracetic acid. And the environment benefits as well. After all, Trisanox Liquid® doesn’t contain any peractic bleaching agents or borax and it produces only a small increase in salinity.

Hygienic laundry treated with Trisanox Liquid® meets the strict requirements of the RAL 992/2 and/or the RAL 992/3.

**Product type**
Liquid 3 component system for processing hygiene textiles.

**Areas of application**
Textiles from the healthcare field, in particular from hospitals, nursing and retirement homes, textiles from the food industry, hand towel rolls, wet room cloths.

**Temperature ranges**
The Trisanox Liquid® system consists of three components and is formulated to ensure a proper disinfecting treatment of hygiene textiles at 60 °C.

**Seal of quality**
The bactericidal, fungicidal and virucidal effectiveness has been proven by two independent expert opinions in accordance with the VAH (DGHM) directive and RKI guideline. The Trisanox Liquid® cleaning process was proven effective in meeting all requirements in 25 and 50 cumulative cleaning treatments.

**Other**
With the Trisanox Liquid® process, the three components can be adjusted independently of one another depending on the degree of contamination and hygiene requirements. This helps avoid the unnecessary use of chemicals and reduces costs to a minimum.

**Benefits**
- Innovative modular system
- Ensured cleaning, whitening and disinfection
- Does not contain the usual peracetic acids
- No unpleasant acetic acid smell
- Safe to handle even in extreme climate conditions
- Contains no VOC assessable substances
  (VOC = Volatile Organic Compound)
Lavaplex®
The care product for delicate textiles

In professional textile hygiene, as in wet cleaning, the goal is to produce clean, hygienic laundry. Professionals need high quality and completely reliable products to ensure that their customers are satisfied.

The LAVAPLEX® wet cleaning process guarantees that the relevant types of laundry comply with the requirements of the RAL GZ 992/4 quality label. In addition, the system is listed in accordance with VAH (DGHM) for 40°C. With our professional system, successful laundering is preprogrammed, particularly for delicate textiles such as high-performance fabrics, suede, leather or synthetics. The LAVAPLEX® system makes it possible to wash more laundry, because you generally don’t need to pretreat anything manually with wet cleaning.

The process consists of eight components and can be specifically configured for the relevant area of application.

The benefits

All stains from things like food, drinks and bodily fluids are immediately removed with LAVAPLEX®. And even when it comes to finish treatments for textiles with special instructions, LAVAPLEX® has the solution. Water-based cleaning makes sure that clothing worn by residents of retirement and nursing homes get completely clean, smell pleasantly fresh, shine in their original colors and feel nice to the touch.

The LAVAPLEX® COMPONENTS ARE

- **LAVAPLEX® BASIS**
  - Brightener-free liquid detergent for gentle wet cleaning of delicate textiles.
- **LAVAPLEX® DESINFECT**
  - Laundry disinfectant for textiles that can be washed at 40°C. Used in combination with LAVAPLEX® Basis.
- **LAVAPLEX® FINISH**
  - After-treatment to give wet-cleaned textiles a soft feel. Improves the finishing effect.
- **LAVAPLEX® HYDROPROTECT**
  - Impregnating agent to make washable outer garments water and dirt repellent.
- **LAVAPLEX® FLAMMPROTECT**
  - Makes cellulose textiles and blended fabrics with a high percentage of cellulose flame resistant.
- **LAVAPLEX® APPRETUR**
  - Finishing agent and fibre protection for wet-cleaned textiles, improves fabric feel and crease recovery properties.
- **LAVAPLEX® LANA**
  - Special mild liquid detergent which is especially gentle on fibres for the most delicate wool and silk.
- **LAVAPLEX® SARTOR**
  - Self-emulsifying leather greasing agent to rejuvenate washed leather and furs.
Disinfecting all-purpose detergent
The cost-effective and easy alternative for small laundries.

Our process has applications in all areas where hygiene is particularly important and 90 °C heavy-duty laundering isn’t possible: with concentrated formulas and specific to the level of soiling — safe and easy to use. Ideally suited for manual dosage. Can be used without taking up much space. No dosage mechanism necessary.

The disinfecting detergent from Burnushychem offers excellent washing results for all types of laundry (except delicates) and is suitable for washer extractors — very stable in storage and safe disinfection.

Product type
One-component system based on powder form. Efficacy on the basis of peroxide compounds.

Areas of use
For highly effective bactericide, fungicide and virucide treatment in line with the strict guidelines of the Robert-Koch-Institut (efficacy levels A and B) and/or VAH (DGHM). Textiles in hospitals, in nursing and retirement homes, and in the food-processing industry.

Temperature ranges
Between 40 °C and 60 °C.

Textiles
These combinations are suited to every type of laundry in hospitals as well as professional wear made of pure cotton or mixed fabrics.

Benefits
- Concentrated formulas
- Simple handling
- Excellent wash quality
- Highly stable in storage
- Safe disinfection performance

DUROPLEX® future 15 min / 60 °C
15 min / 60 °C

DUROPLEX® / Monosan® 20 min / 60 °C

Monosan® PF 20 min / 60 °C
20 min / 60 °C

SENSOX® 20 min / 40 °C
20 min / 40 °C

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