

SPECIALTY CHEMICALS FOR THE TEXTILE INDUSTRY

Our experienced development teams provide our customers with comprehensive technical service and develop customized solutions according to their requirements. We are aware of our responsibility for future generations and are committed to maintaining a healthy balance between economic, environmental and social requirements when developing new products and technologies. For the textile industry, we offer products and technical support along the entire textile production chain.

Our product portfolio ranges from process auxiliaries for sizing, pretreatment, dyeing and printing to finishing when it comes to defining the final product properties and qualities of fabrics and garments. We provide solutions to optimize production processes and help to sustainably protect the environment through products that meet textile standards such as ZDHC, GOTS, OEKO-TEX® and bluesign®.

Sizing



Raw material combinations for maximum effectiveness

Sizing is crucial for weaving warp yarns. We offer efficient products that ensure that high-performance weaving machines do what they are supposed to: produce trouble-free, 24 hours a day, with maximum efficiency. One of the few full-range suppliers in the market for sizing agents. Depending on demand and customer requirements, film-forming polymers on a natural

and synthetic basis are used. Single-component products as well as specialized formulations are available. In addition, we offer sizing additives with smoothing and antistatic effects as well as products with smoothing, adhesive, antistatic components such as warp wax or cold sizing.

We offer a complete range of sizing agents for all fiber types and sizing processes:

- For staple fiber yarns and filament yarns
- For use in the boiler and in the regrowth device
- For use as a warp wax and as a cold sizing on the sectional warping machine

Products:

Our product portfolio includes high-performance sizings based on renewable and synthetic raw materials. In addition, we offer sizing additives and warp waxes. Brands: AVIROL, FIBROPUR, INEX, QUELLAX

Benefits:

- Wide range of sizing agents for all fiber and yarn types
- Improve profitability and quality of web processes
- Many variants of cold sizing agents
- Product solutions for all environmental and wastewater requirements
- Worldwide customer and laboratory service
- Historically grown know-how with well over 50 years' experience in the field of sizing

Pretreatment



Clean work the gentle way

The pretreatment of yarns, knitwear and fabrics is often a science in itself. Before a fiber can be uniformly dyed, pretreatment must be carried out. Here, in addition to the natural accompanying substances, sizing and preparations are also completely removed. The bleaching process, which is also part of the pretreatment, also ensures that untreated

textiles are lightened and can then be dyed in light shades without any problems. Ultimately, pretreatment involves more than just cleaning.

Efficient systems are needed for optimum effects. When it comes to combining all these elements in efficient chemical systems, our ideal partner. With our comprehensive understanding of the processes, our laboratory skills and our knowledge of machinery and materials, we can ensure that you get the best results.

Products:

Mercerizing Agents

Uniform penetration of the alkali into the fiber core.

Brand: FLORANIT

Desizing Agents

Desizing of woven materials sized with starch.

Brand: FORYLASE

Stabilizers

Bleaching processes without loss of tear strength as well as maximum whiteness due to controlled decomposition of the bleaching agent.

Brand: STABILOL

Wetting, washing, fat dissolving and detaching agents

For all types of fibers, universal use.

Brand: COTTOCLARIN, FORYL, SYNTERGENT

Complexing Agents

Complexing, dispersing of alkaline earth and heavy metal ions.

Brand: SECURON, LOCANIT

Neutralizing Agents

Perfect neutralization of alkaline finishing processes.

Brand: SECURON

Optical brighteners

Increase whiteness, various shades of white and different requirements

Brand: ONDALON

Benefits:

- Wide product range for all process stages and all textile fiber types
- Tailor-made problem solutions for all process stages in pretreatment
- Pretreatment products with ECOlogical and/or ECOnomical properties
- Special pretreatment products with toxicological and dermatological certificates for cosmetic and medical purposes
- Special pretreatment products for feather and down processing
- Worldwide customer, laboratory service
- Historically grown know-how with well over 50 years of experience in the field of pretreatment

Dyeing



Auxiliaries that determine the shade

Colors change as quickly as fashion. However, their brilliance and fastness must be preserved. In addition to the right dyes, optimum dyeing auxiliaries are of utmost importance.

Competence in all fiber qualities and machine technologies

Each fiber and each fiber blend requires its own dyeing system. We offer the right system for every dyeing process, matched to your specific machine technology. This results in trouble-free processing and brilliant, color-fast dyeings.

Products:

Lightening and stripping agents

Textile auxiliaries for stripping and lightening dyeings.

Brand: LAMESTRIP

Dispersing and protective colloids

Dispersing and fine dispersion of dyes. Special products for minimizing and removing oligomers in PES dyeings.

Brand: BREVIOL, OSIMOL

Levelling agents

For a more uniform raising and dyeing to avoid color unevenness. Special products for dyeing raw cotton and its blends.

Brand: BREVIOL

Deaerators

For faster wetting of the textile material.

Brand: BREVIOL, FORYL

Defoamers

Reduction of foam formation.

Brand: BREVIOL

Destruction of residual peroxide

Removal of peroxide residues after peroxide bleaching.

Brand: LORINOL

Fiber protecting agents

Wool protecting agent for dyeing of wool and its blends with PES.

Brand: BREVIOL

Crease preventing agents

Crease preventing and lubricating agent for dyeing all fibers with all classes of dyes.

Brand: BREVIOL

Fixing agents

Aftertreatment agents to improve the fastness properties.

Brand: LOCANIT, STABIFIX

Reducing agents

Auxiliaries for reductive cleaning, machine cleaning and for stripping of dyeings.

Brand: LORINOL

Oxidizing agents

Auxiliaries to prevent color shifts caused by reductive action.

Brand: LORINOL

Alkali

Special alkali for dyeing cellulosic fibers with reactive dyestuffs using cold pad batch process.

Brand: LOCANIT

Padding auxiliaries

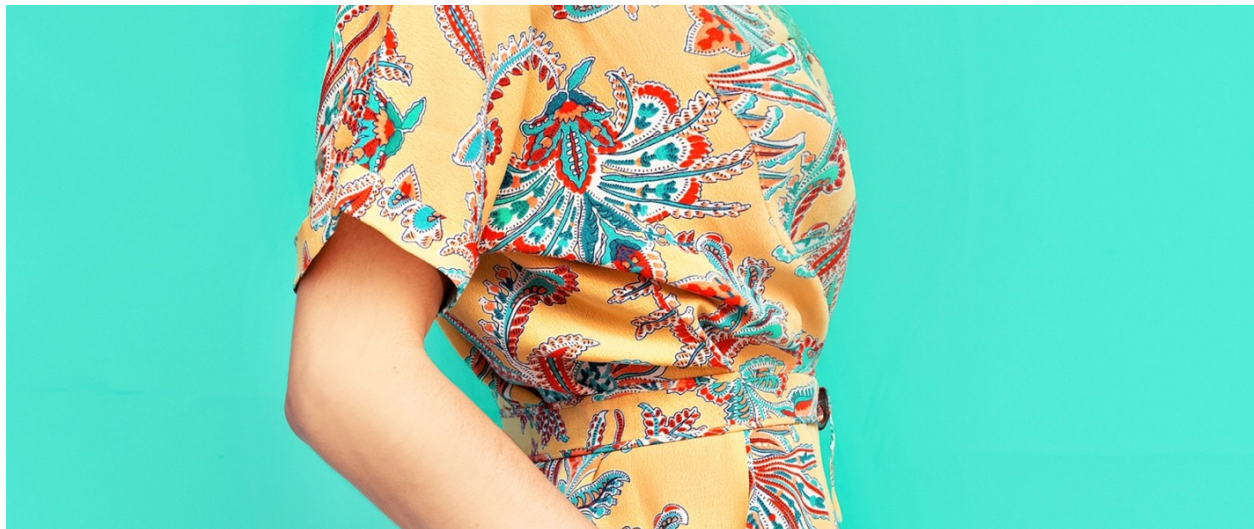
Penetration-promoting dispersants for dyeing cellulosic fibers. Antimigration agents.

Brand: BREVIOL, OSIMOL, SUPERCLEAR

Benefits:

- Worldwide Technical Service
- Wide range of dyeing auxiliaries for different fibers and machine combinations
- Special developments for almost any desired effect on almost any fabric
- Dyeing products with ECOlogical and/or ECOnomical properties
- Worldwide customer, laboratory service
- Historically grown know-how with well over 50 years of experience in the dyeing industry

Printing



Printing auxiliaries for all fiber qualities and machine technologies

Whether flat screen, rotary screen, transfer or inkjet printing, the printing chemistry always follows the same basic principle. To ensure that the inks adhere sharply to the desired areas, dyes and pigments are processed into printing pastes. These are complex preparations of the most varied compositions and viscosities. We have a extensive knowledge in the manufacturing and application of printing pastes.

Thickener

Synthetic or natural is a crucial question in printing chemistry. Do you want to print with acrylates, alginates, guar or other thickeners? We will be happy to help you make the right choice. Preferably, we work with natural, biodegradable substances.

Products:

Printing thickener for all types of fibers and printing machines.

Brand: LAMALGIN, LAMEPRINT, STABIPRINT

Auxiliaries for textile printing

Emulsifiers, deaerators, defoamers, oxidizing agents, reducing agents, tabletop adhesives

Brand: BREVIOL, LORINOL, INEX, STABIPRINT

Cleaning and dye solvent agents

Brand: STABIPRINT

Aftersoaping and washing agents

Brand: STABIPRINT

Benefits:

- Product focus on natural, biodegradable substances
- Printing thickener for all fiber qualities and printing processes
- Improvement of color yield, contour sharpness and fastness of prints
- Printing products with ECOlogical and/or ECOnomical properties
- Worldwide customer, laboratory service

Finishing



Turning product visions into reality

Textile finishing is an indispensable part of the textile value chain. We help fashion designers to realize their ideas and manufacturers to produce garments efficiently. The market is increasingly demanding textile finishes with fashion effects and auxiliaries that enable special usage properties of fabrics, e.g. softer handle and easy care, improved comfort, moisture management, antibacterial finish, water or oil repellency. As in any good relationship, the chemistry must be right. We make sure the chemistry is right and offers a variety of finishing products for customized solutions.

Products:

Antistatic agents

Antistatic agents counteract electrostatic charges and safeguard process sequences.

Brand: KATAX, NONAX

Polymer products for antipilling, filling and grip finishing

Provide different grip effects depending on the grip requirements.

Brand: STABIFORM, STABIFLEX, STABICRYL

Additives for crease- and shrink-resistant finishing

Highest demands on dimensional stability and easy care properties. Increased wearing comfort.

Brand: STABITEX

Flame retardants

Auxiliaries for flame retardant finishing of textile surfaces.

Brand: NONAX FR

Special additives

Foaming agents for finishing liquors and coatings. Textile auxiliaries for the prevention of roller deposits.

Brand: NONAX

Water-, oil repellency agents

Durable water and oil repellent finish for all types of textiles; anti-staining finish.

Brand: REPELLAN, PELLAN

Fluorine-free water repellency

Durable water-repellent finish for all types of textiles.

Brand: TEC, DEVAN REPEL, DEVAN EXTENDER

Crosslinker

Extender which improves the wash durability of oil and water repellents.

Brand: REPELLAN, PELLAN

Hydrophilizing agents

The use of hydrophilizing agents makes synthetic fibers more absorbent.

Brand: NONAX

Antislip agents

Non-slip agents for all types of fibers.

Brand: NONAX

Softeners

Auxiliaries which individual customer requirements for fabric handle, surface smoothness, sew-ability, hydrophilicity and elasticity can be met. For all textile materials and application methods.

Brand: ADALIN, ADASIL, AQUASOFT, BELFASIN, BELSOFT, SETILON

Antibacterial finishing

Auxiliaries for the permanent and antibacterial finishing for all kind of textiles.

Brand: NONAX, QUAT

Benefits:

- Worldwide Technical Service
- Wide range of equipment aids
- Comprehensive range of finishing effects on textiles for all application methods
- Quality products that are recognized worldwide
- Finishing agents with ECOlogical and/or ECOnomical properties
- Historically grown know-how with well over 50 years of experience in the field of equipment

Denim



Jeans and Garment

Denim occupies a special place among clothing textiles. The indigo color and the fashionable wash-out effects make the difference. For generations, jeans have been a basic in the closet and are constantly reinvented with new designs and effects. For the production of denim, We offer a wide range of products from sizing, pretreatment, dyeing to finishing. Our goal is to support our customers with innovative auxiliaries, so that they can sustainably position themselves in the market and help shape new trends. In doing so, we adhere to the highest standards in our industry and are committed to strict compliance with all regulations and quality programs.

The most ecological way from cotton to jeans.

Brands are becoming more environmentally conscious in their choice of materials and suppliers and are taking into account the growing importance of sustainable textile production. Reducing wastewater and its ingredients is an important part of saving costs, increasing quality and protecting the environment. By using BREVIOL® Denim Technology (BDT) in indigo and sulfur dyeing, the amount of water needed to wash out the unfixed dye is reduced to a minimum. BREVIOL® Denim Technology (BDT) is based on a polymer that reacts with both the dye and the fiber. This technology not only protects the planet, but is also a cost-saving solution, as less water is used in the process and the amount of dyes used can be reduced.

Benefits:

- Water and energy savings advantages
- Less wastewater contamination, including watercolor
- Provide reduced indigo and sulfur dye usage & cost savings due to lower indigo and sulfur dye consumption, as almost 100% of the applied dye remains on the yarn

- Improve Dye Fastness properties & the ability to produce darker Dye shades
- Less & even zero dye bleeding during re-beaming, sizing & finishing processes
- Provide an Ecological Overdyeing Process with / without a Steamer
- Produce Special and better Ring Dyeing Effects
- Total elimination of bronzing effect.

Tissue



BELSOFT® CARE for tissue with soft handle

As the name suggests: BELSOFT® CARE convinces with its very special functionality. After finishing, the tissue inspires with a soft and supple handle – thanks to a genuine premium surface texture of velvety smoothness. At the same time, its tear resistance is fully retained. In addition, our low-foaming, shear-stable and water-dispersible emulsion enhances the end product in many ways:

- Volume enhancing effect for tangibly more value
- Preservation of absorbency (hydrophilicity)
- Use of valuable plant extracts
- Use of individual fragrances

Hygiene



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- **Hygiene – We develop solutions**
- We are proud that our mission extends to protecting people, first responders and medical personnel. As a specialty chemical manufacturer, our mission is to understand complex problems and help shape safe, timely and effective solutions. To this end, we offer a variety of textile auxiliaries with toxicological and dermatological certifications for hygiene and medical applications.
- Read more information about our products in our flyer: