



**Your partner for
high-quality nonwovens**

norafin.de

OUR GOAL IS ABSOLUTE CUSTOMER SATISFACTION.

QUALITY | SAFETY | INNOVATION | RELIABILITY

HIGH-PERFORMANCE PRODUCT SOLUTIONS | PARTNERSHIP

SUSTAINABILITY & DURABILITY | FLEXIBILITY | KNOW-HOW





YOUR SPECIALIST FOR NONWOVEN SOLUTIONS

Norafin is a globally active company with two production sites on two continents with around 240 employees and sales of around € 50 million*. What drives us to develop the right solutions for specific requirements every day? It is our customers whom we want to bring forward with our know-how and our innovative products. It is our curiosity, which drives us to constantly explore new areas of application and develop new nonwovens for them.

*Effective 2022

It is our responsibility to think about how we are influencing the environment around us and by diligently working to increase our sustainability, we can leave Earth in better shape than we found it. All this drives us to give our best every day.

Innovative. Reliable. Responsible. Together!

SUSTAINABILITY FOR OUR FUTURE

We are committed to the Green Economy concept and consistently combine economic profitability with ecological sustainability. That is why we are constantly looking for ways to make our production processes more resource-efficient while at the same time increasing productivity, and why we attach great importance to the careful use of raw materials throughout the entire production process. In 2023 we took another step towards the future with the certification of our environmental management system according to DIN EN ISO 14001.

Our efforts in this regard are focused on six areas: raw materials, recycling, energy, water, processes and above all, people. For example, we use spunlace technology, which does not require additional chemical binders, and we also treat and reuse our water. In the energy sector, we use performance indicators to identify potential savings. Since 2014 we have been operated a certified energy management system according to DIN EN ISO 50001. It is our goal to use energy consciously and efficiently throughout our production process.

Every day we work on
reducing our footprint and on
creating a more sustainable
path for future generations
to come.



PRODUCTS FROM RENEWABLE RESOURCES

In our production process, it is very important to manage the handling of raw materials. Our research and development team works daily on developing new high-quality nonwovens by using renewable and biodegradable raw materials. This has enabled us, for example, to produce nonwovens from flax fibers on an industrial scale by spunlacing and needlepunch technology. Due to their excellent properties, these nonwovens are used, for example, as composite materials or for interior decoration. Under our two brands Norafin ECOLINE® and Extra Organic® we offer products that contain sustainable and recycled fibers.

The nonwoven solutions, which are based on viscose, flax, lyocell, polyester and PLA fibers, are mostly certified according to STANDARD 100 by OEKO-TEX® (16.0.90034 HOHENSTEIN HTTI/ 22.HDE.87509 HOHENSTEIN HTTI) and labelled accordingly. We also process viscose from sustainably managed forests, which are labelled in accordance with the FSC™ regulations for sustainable forest management.



The mark of
responsible forestry

NATURAL
FOOTPRINT
SUSTAINABLE
BIODEGRADABLE
FEEL-GOOD-CLIMATE
ECOLOGICAL
INNOVATIVE
ORGANIC

green up
your life



FROM THE FIBER TO THE PRODUCT

Norafin processes a wide variety of staple fibers in lengths of 20 – 70 mm, in fiber finenesses between 1 – 15 Dtex and in various surface weights between 15 g/m² and 1,000 g/m². These are fed to the carding machine as a homogenized fiber mat via opening and mixing devices, which opens the fiber tufts down to the individual fiber and creates a uniform web. Norafin then follows two different processing routes to the finished nonwoven fabric: spunlace and needlepunch technology.

During spunlacing, a homogeneous, intertwined textile structure is created by means of water jets. This nonwoven can be produced in various structures by using different drums. Thanks to our production line, we also have the capability to create two layer materials comprised of different nonwoven layers all in one step. Due to the wet processing the consolidated material contains a lot of moisture and is then dried in a screen drum dryer.

On the autonomous needle line, the fiber pile is mechanically consolidated by vertically moving needles. In a second step further layers can be added to the material. If required, thermal fixing in the dryer is possible.

RESEARCH AND DEVELOPMENT

Research and development goals

- translating customer needs into product functions
- transforming innovative ideas into high-quality products (including the entire development process)
- actively managing product life cycles and consistently driving further development up to the next product generation

Thanks to our extensive research and development work, plus our investments in quality and re-engineering, we are able to react quickly to changing market needs. Not only do we conduct research internally, but we also maintain strong partnerships with international universities and research institutes that support us in expanding our technology and product portfolio. The combination of our in-house strength and a strong external network enables us to develop comprehensive solutions for your requirements.





CUSTOMIZED SOLUTIONS

Norafin has been offering high-quality spunlaced and needlepunched nonwovens, innovative material structures and composites since the early 1980s and has established itself as a successful niche supplier in these areas. Our focus is on the development of customer-specific products for a wide range of applications: from cleaning wipes, protective clothing to filtration and face masks. In the national and international context, we stand for innovative, holistic solution concepts and perfectly fitting product functions.

Thanks to our flexible production technologies, you have all possibilities:

- production of special fiber blends in white and individual colors
 - combination of smooth, structured and patterned single and multilayer material structures (calendered, perforated or reinforced with a scrim)
 - management of large and small campaigns for special products
 - various finishing options and further processing steps (e.g. coating, printing, laminating)
 - production of composite nonwovens without the use of binders
 - finishing of nonwovens with functional particles/ fibers (e.g. for electrical conductivity, catalytic effects, gas storage, heatability, integration of sensors)
- processing of a wide range of high-quality special fibers such as meta- and para-aramides, polyimides (PI), polytetrafluoroethylene (PTFE) and natral and regenerated fibers (e.g. flax, hemp and lyocell)

In order to be able to fulfil all your wishes, we work closely with strong business partners.
Challenge us – we provide you with competent solutions.



1 COMPANY. 2 PRODUCTION SITES. 4 PRODUCT LINES. COUNTLESS POSSIBILITIES.

With our extensive know-how, our technologies and our team of specialists, we develop and manufacture technical textiles and innovative product solutions. We cooperate with our partners and customers according to their individual requirements and wishes: Whether pleatable filters, cleaning wipes with special printing, sustainable flax wallpapers, stab protection vests or surgery swabs – we are the specialist for unique nonwoven solutions.



PROTECTIVE LINE

Heat and Fire | Violence and Vandalism



NONWOVENS FOR SPECIAL PROTECTION IN HAZARDOUS SITUATIONS

Protective Clothing
against Heat & Flame

Public Transport

FR Work Wear and
Protective Clothing
against Rain

Ballistic & Stab Protection

Paper Rolls

Norafin®
3D PERFORMANCE

Norafin®
KOMANDA

Norafin®
GUARDIAN

Our nonwovens meet the standards expected in a demanding and performance driven market. They come in a wide variety of compositions: sometimes particularly soft to provide the necessary comfort, sometimes tear-resistant to withstand greater loads, they can be reinforced with scrim to prevent damage, or designed to be flame resistant to meet certain protective standards and above all, to protect people.

Advanced performance features

- improved insulation and high resistance to heat
- industry leading heat protection for single and multi-layer product solutions
- industrial laundering
- isotropic fiber orientation for dimensional stability in all directions
- durable and long-lasting product solutions
- lightweight material constructions for enduser comfort & protection
- high breathability

Our Norafin GUARDIAN® 3D PERFORMANCE® material for fire blockers offers improved abrasion resistance and very good wear resistance compared to commercially available materials.

Nonwovens made with our unique Norafin KOMANDA® technology are characterized by their very high tear resistance. They are industrially washable and can be reused several times.



more information
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PERFORMANCE LINE

Construction and Industry

Our nonwovens are used in a wide variety of special applications in the fields of construction and industry. Our materials provide high processing flexibility, as they are adaptable and drape well, while they offer high strength and durability at the same time. Additionally, their properties are modifiable and can be adapted to the individual requirements for any application.

Outstanding performance features

- insulating, sound-absorbing
- conducts water or electricity
- dimensional stability in all directions
- retentive and absorbent, breathable
- sustainable through biodegradability or the use of recycled fibers
- chemical & solvent resistant, long-lasting
- lightweight product solutions
- high strength
- good drapability to cover edges and corners
- high surface quality
- homogeneity across the entire width of the fabric



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NONWOVENS WITH SPECIAL PERFORMANCE REQUIREMENTS

Sustainable
Room Concepts

Flat Roof
Sealings

Fiber-Reinforced
Plastic Profiles

Plant
Watering



PERFORMANCE LINE

Cosmetics and Health



NONWOVENS FOR APPLICATIONS PARTICULARLY CLOSE TO THE BODY

Functional wound care, surgical pads and swabs

Cosmetic wipes and pads

Cloth masks for face, eyes and décolleté

Norafin  [®]
ECOLINE

We offer an extensive range of products for cosmetics. In the production of cosmetic products, we use soft fibers in order to ensure gentle yet thorough cleansing and cleaning of human skin.

Outstanding performance features

- high skin compatibility
- stability in all directions
- ultra-thin materials with high rigidity, even when wet
- increased absorbency
- good water absorption and release behavior
- pleasant wearing comfort due to particularly soft feel
- well suited for subsequent printing and finishing processes
- high color stability of colored nonwovens
- wash-resistant and odorless

Norafin ECOLINE® – these are all nonwoven solutions produced from 100% ecological fibers such as flax, cotton, FSC™ certified viscose or their blends. Because sustainability is an important issue for us. Therefore, we are constantly developing new solutions that are produced from sustainable raw materials – resource-efficient and with high-performance features.



more information
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FILTRATION LINE

Filter media for air, gases and liquids



FILTER NONWOVENS FOR THE NORMAL AND HIGH TEMPERA- TURE RANGE

Pleatable filter
media for the high
temperature range

Non-pleatable filter
media for the high
temperature range

| Liquid filtration

Norafin  [®]
CRYSTALEN

Norafin CRYSTALEN[®] stands for nonwovens to filter gases and liquids. We supply filter media that optimize the product lifecycle, the filtration efficiency and operating costs. With our capability to process a variety of fibers (microfibers, PPS, aramids, polyimides etc.) and with our proprietary production process, our nonwovens show a consistent filter surface characterized by a higher number of finer pores and homogeneous cross-section leading to an increased filter performance. Thus, Norafin is able to respond to market requirements on an individual level.

Norafin CRYSTALEN[®] stands for:

- high quality filter media
- stability
- purity
- durability

Outstanding performance features

- homogeneity of the surface allows for an easier dedusting and increased filter efficiency
- high fiber density ensures very good efficiency even at low basis weights
- isotropic fiber orientation in the spunlacing process guarantees high stability
- high-temperature-resistant solutions through the use of high-performance fibers
- pleatable filter media
- chemical and solvent resistance
- FDA/EU10 2011 compatible filter media



more information
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CLEANING LINE

Surface Maintenance & Cleaning | Body Hygiene

Cleanliness and hygiene are basic human needs. Just as we pay attention to our own personal hygiene, we also demand a clean, sanitized living and working environment. Our high-quality nonwovens offer the right solutions for every situation.

While we attach importance to particularly soft and skin-friendly materials for our personal body care, other factors such as tear resistance or structured surfaces play a special role in the household as well as in the industrial areas. Thanks to our various process technologies, we are able to produce high-performance nonwovens for every application.

Outstanding performance features

- tear resistance in all directions due to isotropic fiber orientation
- sustainability through multiple use and compost ability (depending on material composition)
- high durability
- strong absorbency
- up to 100% natural fibers possible
- soft material texture
- solvent resistance
- abrasion resistance
- high skin compatibility

NONWOVENS FOR CLEANING PROCESSES

| Sustainable cleaning cloths

| Norafin Komanda cleaning cloths

| Multifunctional cleaning cloths

| Washing gloves

Norafin  ECOLINE

Norafin  3D PERFORMANCE

Norafin  KOMANDA



more information
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SOLUTION- AND CUSTOMER-ORIENTED

In addition to individual converting options in width and length, we also offer precise, custom cuts of your product. This gives the customer the flexibility to order free-form cuts of their fabrics in all shapes and sizes. **Please contact us for further information!**



Norafin (Americas) Inc.
in Mills River, North Carolina



Norafin Industries (Germany) GmbH
in Mildenau, Germany

FOR US, LIFE, VITALITY AS WELL AS THE PROTECTION OF PEOPLE AND THE ENVIRONMENT ARE OUR TOP PRIORITIES.

We pursue these goals with durable, sustainable and high-performance nonwovens that are successfully used in a variety of ways in everyday life – products by people for people, for a safe and long life.

Feel free to use the product finder on our website to get to know our products and their properties better.



more information
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WE MADE HISTORY!

2020

Founding of the subsidiary Norafin Technologies GmbH for the sale of customized nonwoven products at the Mildenaу site

2018

Norafin (Americas) Inc. celebrates the inauguration of a new production facility with a state-of-the-art water jet system as well as modern laboratory and office space.

2014

Certified energy management system according to DIN EN ISO 50001 of Norafin Industries (Germany) GmbH

2013

Expansion of the production site and headquarters in Mildenaу. Expansion of production capacity through the investment in a second waterjet line. A new production hall, a new laboratory and new offices are built.

2009

Inauguration of the equipment plant

2007

Founding of Norafin (Americas) Inc.

1997/1998

Start of the production facility in Mildenaу

1995

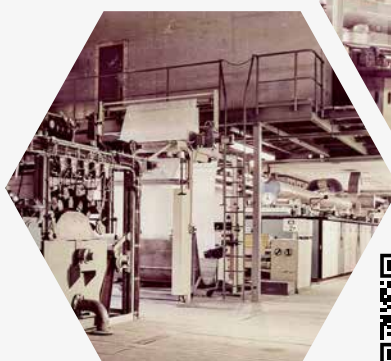
Rebranding as „Norafin Vliesstoff GmbH“

1980-1985

Development of the first water jet line in Europe



Norafin



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