

SMARTFIBER

At SMARTFIBER, we connect innovative technological processes with natural raw materials.

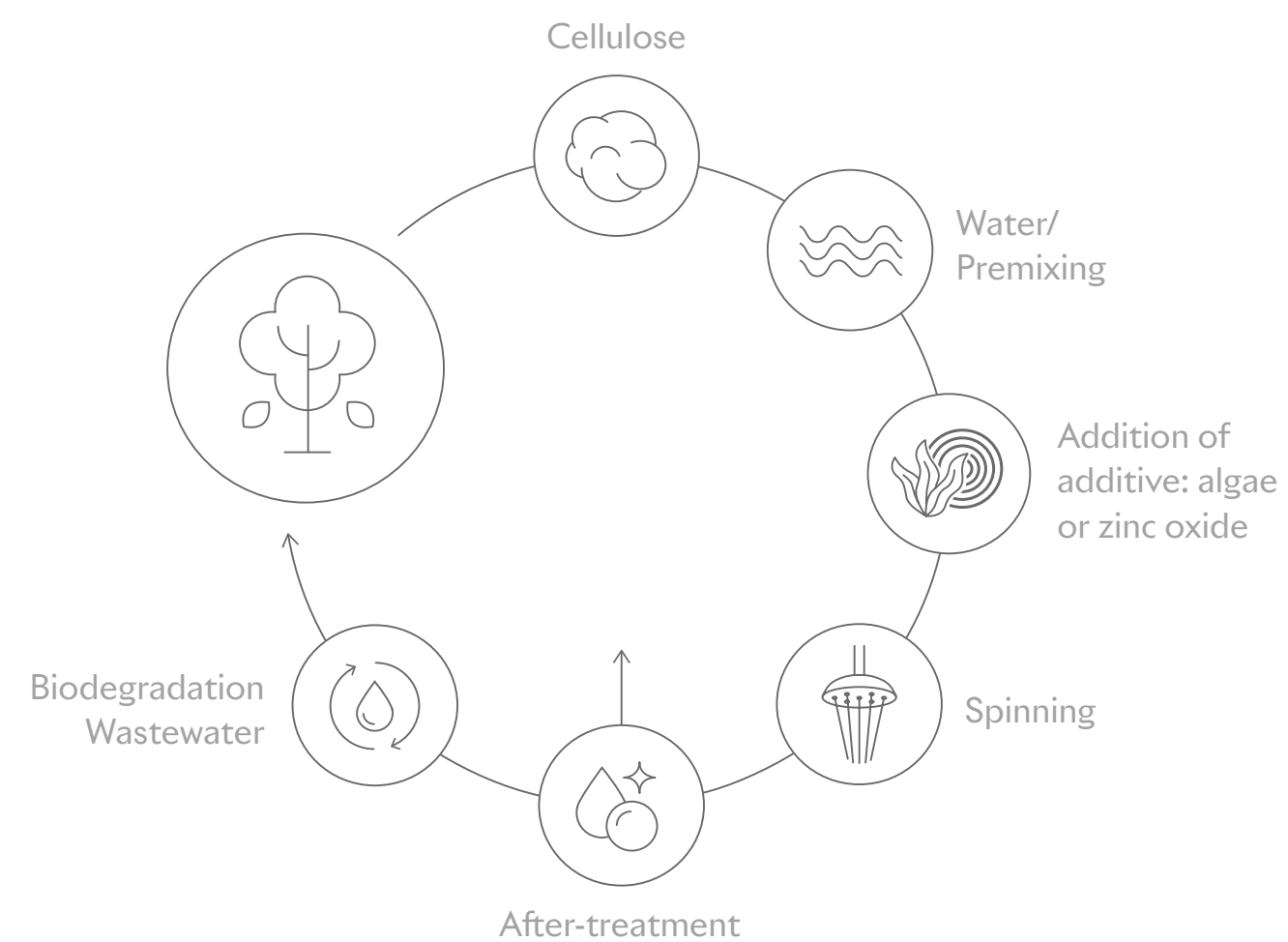
This is how we create our high-quality cellulose fibers. We enrich these fibers using natural ingredients with unique benefits as a means of setting new standards for the textile market.

The Natural Way to Rebalance our Planet

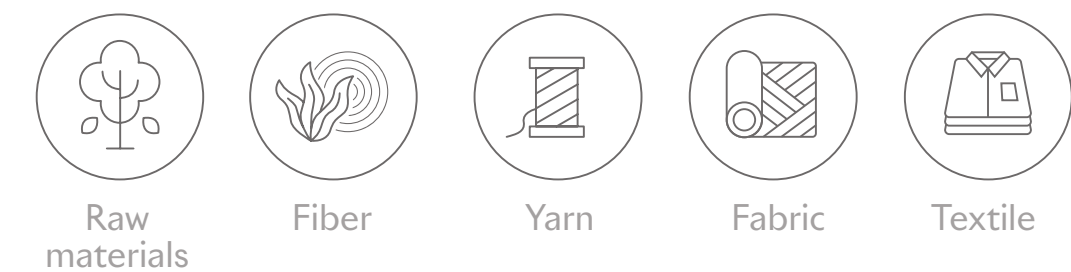
The closed-loop system ensures that we operate in a sustainable manner.

The innovative cellulose fibers SMARTCEL and SEACELL are produced within a closed-loop-technology that allows circularity. Along the production process no chemicals are released. This technology allows us to combine our fibers with any other fiber, making it universally compatible. Our fibers offer limitless options in textile innovations.

The patented fibers are made from eco-friendly, low-resource, and 100% biodegradable natural materials. That is why this process won the "Process Innovation" award at the European Business Awards for the Environment.



We support you along the entire value chain.



Our years of experience and long-standing cooperation with various partners mean that we know the processes along the entire value chain inside out. We support you in developing bespoke textile product innovations at every stage – from raw material sourcing, fiber and yarn development knitted, woven and non-woven fabric until the finished textile.



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SMARTCEL

Native to forests and derived from wood pulp:

SMARTCEL's cellulose fibers are enriched with a vital zinc oxide and have unique benefits.

SMARTCEL is a patented, eco-friendly fiber that has limitless applications in textiles. The fibers are suitable for a broad spectrum of uses e.g. in hospitality, hygienic industrial textiles, home- and sportswear.



- Antibacterial
- UV protection
- Skin-friendly
- Anti-odor
- Eco-friendly
- Completely biodegradable
- Non-washable additives*

* Washing test with 100 cycles:
drop in effectiveness 2% to 21%

100%

biodegradable



Your Way to Care

SMARTCEL is a cellulose fiber enriched with vital zinc oxide which has protective, antibacterial and nurturing effects on the skin.

The zinc oxide embedded in SMARTCEL leads to properties that have a positive effect on the skin. Especially for people with sensitive skin or ailments such as eczema or neurodermatitis SMARTCEL enhances their quality of life.

Zinc oxide also protects the skin against harmful UVA and UVB rays which can damage our skin cells. Moreover, SMARTCEL has antibacterial and odor-minimizing properties which keep textiles feeling fresher for longer.

Technical data

Fibre composition in conditioned state (% by weight):

SMARTCEL

Cellulose	≥ 73 %
Zinc oxide	16 %
Fiber finish	0.32 %
Moisture content	≤ 12 %
Appearance	white, deepdull

Average textile physical fiber data:

Titer	dtex	2.5	6.7
Cut length	mm	38	60
Tenacity dry	cN/tex	25	23
Elongation dry	%	11	11
Tenacity wet	cN/tex	20.3	17
Elongation wet	%	13.7	14
BISFA wet modulus	cN/tex/5%	6.4	4.8
Degree of whiteness	Tappi	88	72

SMARTCEL fibers have been tested and approved by several independent institutes for their quality and effectiveness.

SEACELL

Sourced from the ocean and harvested in fjords using sustainable practices:

The fiber innovation SEACELL is a cellulose fiber, enriched with brown seaweed. The seaweed releases antioxidants and vitamins, which leads to a nourishing and revitalizing effect on the skin.

We offer SEACELL with two sustainably sourced pulp options: Lyocell and Modal. Both are then embedded with the brown algae from the sea.



Value the Power of Nature

- Nourishing and revitalizing
- Natural and eco-friendly
- Skin-friendly
- Rich in antioxidants and vitamins (non-washable additives*)
- Completely biodegradable and compostable
- Moisture-regulating
- Greatest level of comfort

* Washing test with 50 cycles: drop in effectiveness 12% to 22%

SEACELL allows your skin to harness the power of nature as its fibers are rich in minerals, antioxidants and vitamins. This means that the fibers are not only good for your skin, but good for the environment, too.

SEACELL is a patented, eco-friendly fiber that has limitless applications in textiles. The fibers are suitable for a broad spectrum of uses in sports and leisure textiles – from underwear and loungewear to soft furnishings. This technology allows us to combine SEACELL fibers with any other fiber, making it universally compatible.

The use of SEACELL fibers lends other textile materials that soft, silky feel and provides maximum levels of comfort. Making it a groundbreaking fiber insofar as it meets the demands of a new generation who leads an active and health-conscious lifestyle.

Technical data

Cellulose fiber with incorporated seaweed (*Ascophyllum nodosum*) produced according to the modified viscose and lyocell process. Fibre composition in conditioned state (% by weight):

SEACELL Lyocell

Cellulose	≥ 85 %
Seaweed powder (~19% measured in volume)	4 %
Fiber finish	0.32 %
Moisture	≤ 12 %
Appearance	light brown

Average textile physical fiber data:

Titer	dtex	1.7	6.7
Cut length	mm	38	60
Tenacity dry	cN/tex	29	21
Elongation dry	%	11.2	9
Tenacity wet	cN/tex	25	17
Elongation wet	%	16.1	14
BISFA wet modulus	cN/tex/5%	7.6	5.5

SEACELL Modal

Cellulose	≥ 83 %
Seaweed powder (~19% measured in volume)	4 %
Fiber finish	0.3 %
Moisture	≤ 12 %
Appearance	light brown

Average textile physical fiber data:

Titer	dtex	1.7
Cut length	mm	38/60
Tenacity dry	cN/tex	≥ 25
Elongation dry	%	11-14
Tenacity wet	cN/tex	≥ 13
Elongation wet	%	11-14
BISFA wet modulus	cN/tex/5%	≥ 4

SEACELL fibers have been tested and approved by several independent institutes for their quality and effectiveness.