



SeaCell™LT

The power of seaweed in a fiber







Seaweed



Crushed seaweed

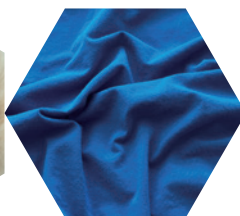


Ground seaweed

The organic seaweed powder is added during the liquid stage of the cellulose before being spun into a fiber.



Fiber



Fabric



Wood pulp



Sustainable wood

## From nature to fabric

In response to the increasingly harmful impacts of our environment, and after years of intensive research, smartfiber AG has succeeded in developing SeaCell™LT, a fiber made from renewable resources.

The fiber is produced solely from sustainable raw materials – wood and seaweed – using methods that save both energy and resources, making the fiber completely biodegradable.

Harvesting of the seaweed is a gentle, selective and, most importantly, sustainable process. It removes only the part of the seaweed that is able to regenerate. The seaweed is entirely untreated and all its ecological value is retained.



## Active ingredients from sea to skin

The seaweed is pure and rich in essential substances such as vitamins, trace elements, amino acids and minerals.

The natural moisture level of the skin enables an active exchange of those beneficial substances between the fiber and the skin.

The fibers high level of antioxidants effectively catches free radicals, to which we are exposed to in our daily lives and can damage our skin cells.

## A patented high-tech process that guarantees long-lasting quality

SeaCell™LT is produced using the Lyocell process, an innovative and eco-friendly production method. Production takes place in a closed loop with no chemicals released as waste.

This meets the expectations of our industry both today and in the future. It is one reason why the European Union awarded the procedure with the 2000 European Environmental Award in the category “technology for sustainable development”.

The innovative fibers are produced exclusively for smartfiber AG on modern fiber production plants at Lenzing AG in Austria. A highly specialized team of engineers and scientists supervises the production process on site.

Our patented process embeds the seaweed firmly into a cellulose fiber. As a result, the positive properties of the seaweed are permanently preserved within the fiber, even after multiple washing cycles.

## Added value for a wide range of applications

If you are looking for an environmentally sound fiber that offers maximum comfort together with additional benefits, SeaCell™LT is the natural choice.

The fiber is suitable for a vast range of applications, from sport and fashion clothing, underwear and loungewear to home textiles and combines easily with any other fiber.

It adds a smooth, silky feel to any fabric, together with the comfort and care elements required from a generation with an active, health-conscious lifestyle.





## The guaranteed effects of SeaCell™LT

Numerous institutes have confirmed and certified the quality and effectiveness of SeaCell™LT.

Due to its ecological and sustainable production, SeaCell™LT received the EU-Ecolabel and meets the requirements according to OEKO-Tex 100 certified for baby products.

In addition many other organisations have endorsed and awarded the SeaCell™LT innovation, which can be found on our website [www.smartfiber.de](http://www.smartfiber.de).

### Technical data

SeaCell™LT 1.7 dtex 38 mm or 6.7 dtex 60 mm

Cellulose fiber with incorporated seaweed (*Ascophyllum nodosum*) produced according to the Lyocell-process.

Fibre composition in conditioned state (% by weight):

Cellulose	≥ 85 %
Seaweed powder	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	22
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

Cellulose is wood pulp made out of beech tree/eucalyptus.



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