

circle

Circular Hanging Textiles from Almedahls
with OceanSafe technology



almedahls



BECAUSE

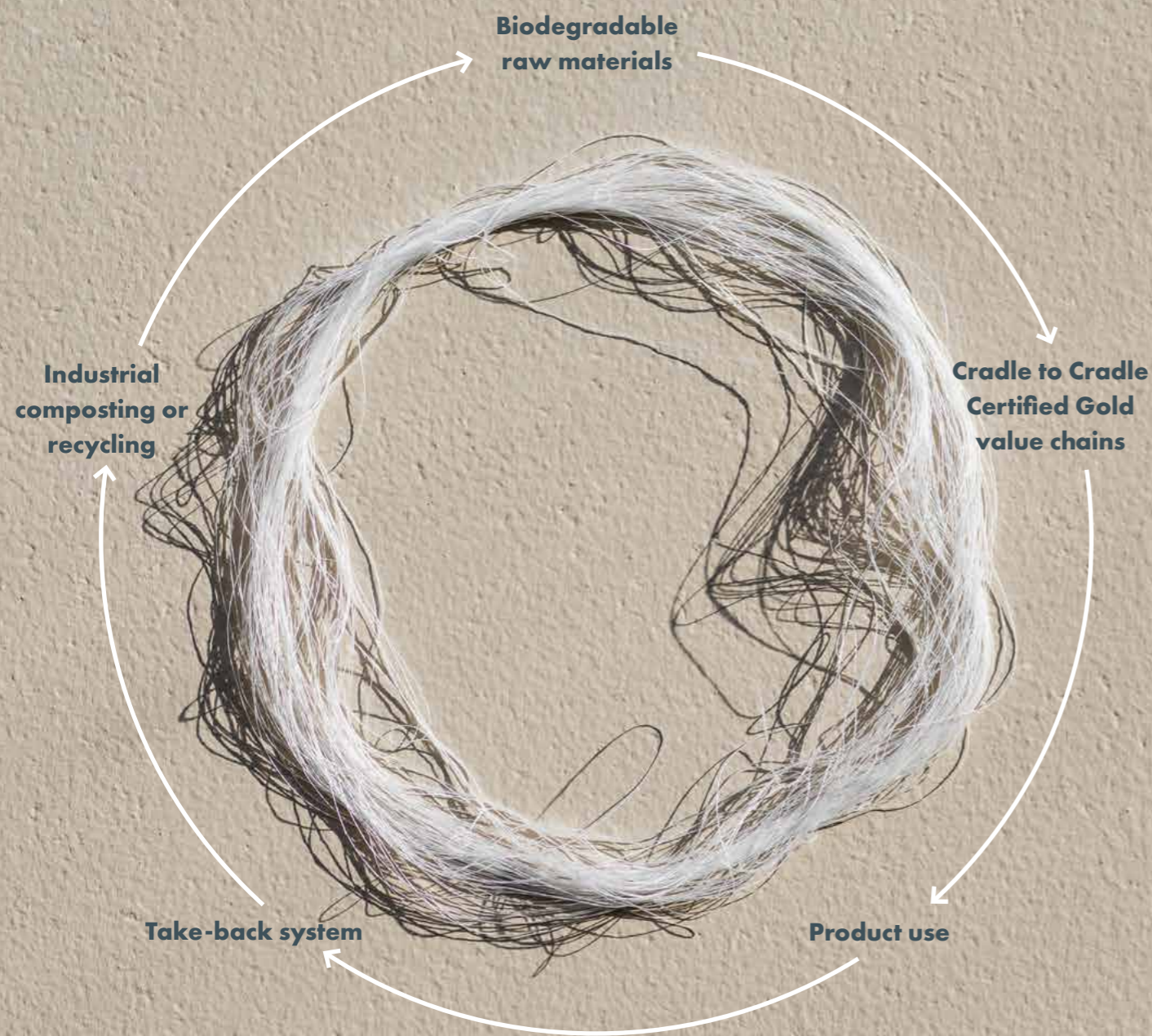
humanity urgently need to migrate to more sustainable solutions which do not compromise performance..

WE HAVE DEVELOPED

a suite of fully circular hanging textiles which can naturally biodegrade and can be returned to the ecological system whilst offering added benefits for our oceans and our well-being when being used..

ENABLING OUR CUSTOMERS

for the first time to choose truly circular solutions in hanging textiles for the professional market.



Once **Circle textiles** reach the end of their functional life, we welcome the textiles into our **take-back system**.

The take-back system is currently open only to **Circle textiles** based on **OceanSafe technology**.

Used **Circle textiles** are processed in an industrial composting facility.

The industrial composting process produces either raw material for new **OceanSafe fibres**, or base materials such as humus, minerals, water and biogas.

Material loops are closed.

Our journey across more than 20 years to continually build and develop a unique sustainability footprint.



The 1990s and prior
Understanding that the production process mainly determines environmental impact, Almedahls invested early and heavy in sustainable processes

2018
Launch of the Almedahls Five Zero Green certificate involving a zero tolerance vision in five key areas of environmental impact

2022
Launch of first fully circular platform for textiles for the contract/public space market: CIRCLE – Circular hanging textiles from Almedahls with OceanSafe technology



The 2010s
Among the pioneers in launching a GREEN COLLECTION including recycled polyester fibres and fibres from a sweetcorn base

2021
Updated and comprehensive sustainable development framework aligned with UN's Agenda 2030 and Sustainable Development Goals (SDGs)



The natural closed-loops in our environment have inspired us to set the direction for the development of our textile design. With Circle, we offer you the opportunity to join the radical evolution of fully circular textiles. No waste, no toxins, and no compromise on quality.

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WHY **The Benefits**

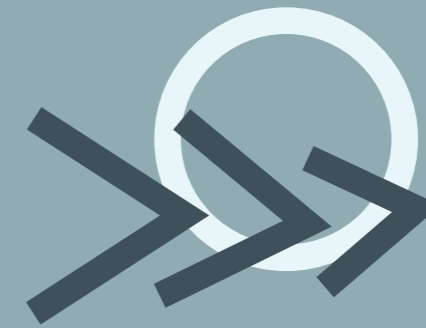


For our oceans

Microplastics are tiny pieces of plastic that pollute our oceans. These toxic microplastics slowly degrade, across approximately 600 years, ending up in aquatic life and through consumption, in the human body.

Circle textiles are toxin-free and release much less fibres into the water when washed. These are biodegradable within only a few days and are non-harmful to aquatic life or the human body.

Because of this, Circle textiles carry the coveted Cradle to Cradle Certified Gold.



For our health

UV radiation slowly breaks down the fibres of curtains, emitting small particles into the airflow. Circle textiles are toxin-free, from raw material to finished product, meaning that the risk of indoor air pollution is radically reduced for the benefit of our health.

The production of the fibres for Circle textiles require considerably fewer process steps than conventional polyester. This results in a considerable reduction of process energy, CO₂ emissions and a positive impact on climate changes through reduced greenhouse-gases.



For our future

At end of life, Circle textiles may be composted and recycled into new fibres through an established take-back system. The textiles are processed at a composting facility where it takes 90 days to degrade the fibres to monomers*, which are used to make new fibres.

Other byproducts of the composting are humus, minerals, water, and biogas to be used in local agriculture and industrial applications.
In other words; no waste.

* monomer = a molecule that can react with molecules of the same kind to form a larger molecule. Monomers form the base of polymers.



For our environment

There are no harmful chemicals or toxins in the entire Circle textiles process. This includes all dyes, coatings, and other ingredients. In short; raw materials creating the best textile choice for our health and environment.

The few fibres that flow into the water are non-harmful and biodegradable within a few days on land and in the ocean. Because of this, Circle textiles carry the coveted Cradle to Cradle Certified Gold.



For our climate

The production of OceanSafe fibres, the basis for Circle textiles, require 63% less CO₂ equivalents than conventional polyester.*

In the manufacturing process, the energy used is either from renewable sources or CO₂ emissions are offset.

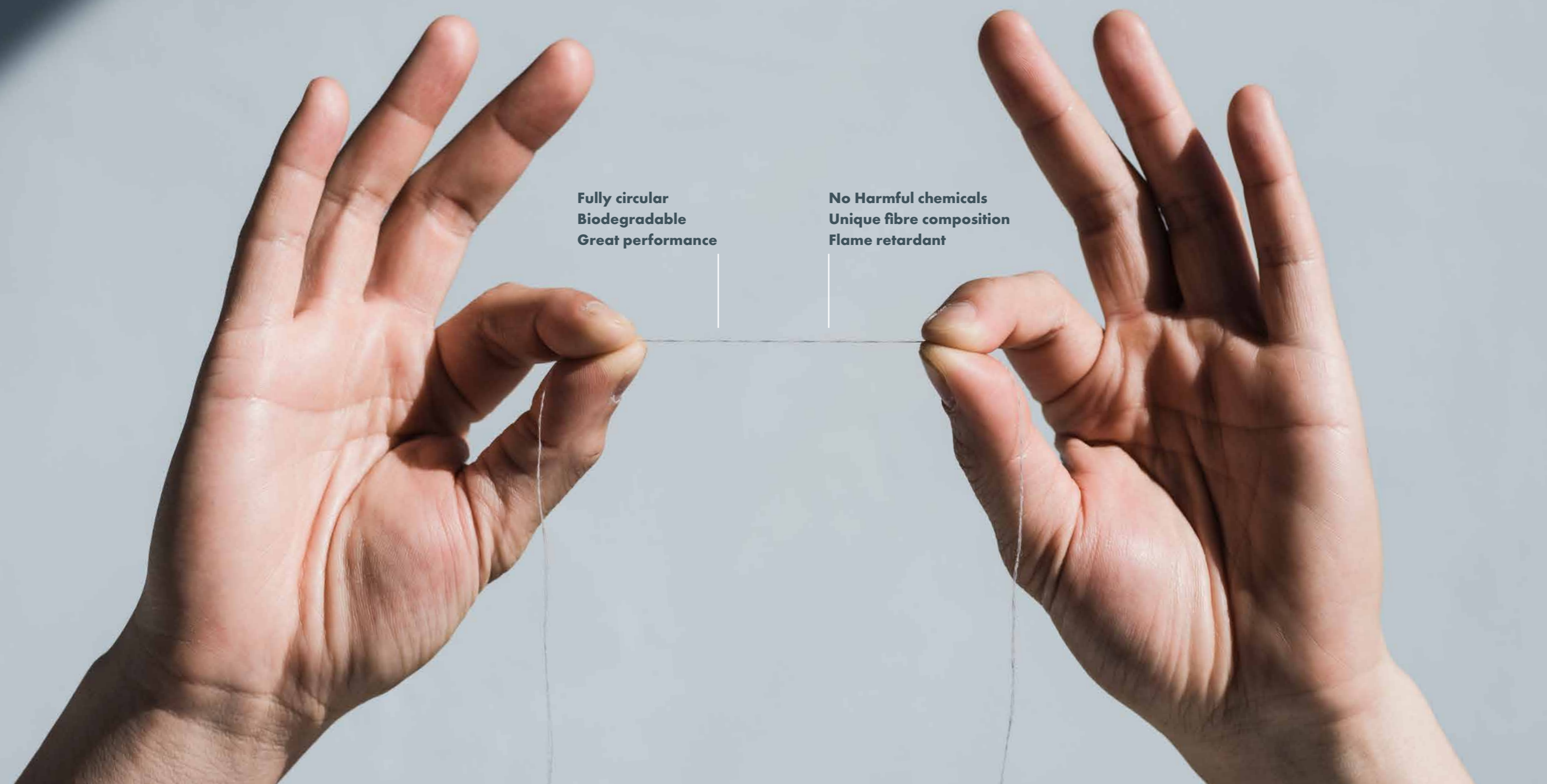
*OceanSafe LCA data, based on Idemat database

Circular Hanging Textiles from Almedahls

with OceanSafe technology

Fully circular
Biodegradable
Great performance

No Harmful chemicals
Unique fibre composition
Flame retardant





TEXTILES

Our Offer

**No compromise on quality,
durability, and comfort.
Circle Hanging Textiles are flame
retardant and biodegradable.
Initially we offer two qualities:
CircleEase and CircleRest.**



CircleEase



You breathe in the fresh salty air and exhale slowly. It immediately lifts the spirit and fills you with energy. You feel at Ease.

This airy sheer with a breezy movement, is inspired and named from that notion. A plain with a matte, milky surface reminding of misty mornings when the world feels silent and soft. The gentle, light filtering creates a relaxed atmosphere. The fabric is piece dyed making it uniform in colour and bringing an unpretentious, minimalistic expression. It is flexible and easy to adapt to most environments both in front of a window and as a light room divider. The pared down colour palette has taken inspiration from the elements; the sky, water, sand and rock.

Expression	Plain design	Cradle to Cradle Certified Gold	Yes
Material	100% PES FR Biodegradable	REACH compliant	Yes
Width	300 cm	Designer	Studio Almedahls
Weight	70 g/m ²	Turnable	Yes
Flame retardant	Yes	Additional info	Washable at 70°C
Five-Zero-Green	Yes		



CircleEase 101880



CircleRest



Tactile materials have a restorative and comforting effect. Therefore, we have named this hanging textile CircleRest.

It is lightweight, textural and it has a semi-transparent drapery. The refined weave construction gives a distinct materiality, tenderly energizing our senses. The texture creates an illusion of depth to the piece dyed fabric. The light character of CircleRest balances perfectly between a sheer and a drapery creating privacy while still letting light through. The colour scheme draws inspiration from the shoreline on a slightly overcast day. Versatile and cool, these contemporary neutrals reflect the essence of nature working in harmony with the most common architectural materials.

Expression	Textured design	Cradle to Cradle Certified Gold	Yes
Material	100% PES FR Biodegradable	REACH compliant	Yes
Width	300 cm	Designer	Studio Almedahls
Weight	163 g/m ²	Turnable	Yes
Flame retardant	Yes	Additional info	Washable at 30°C
Five-Zero-Green	Yes		



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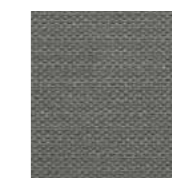
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FAQ

Frequently Asked Questions

Why a mix of petroleum-based and biobased and not recycled?

The current OceanSafe fibre is 30% biobased and 70% petroleum-based. Surprisingly for many, natural fibres (e.g. cotton) in most cases require much more water and chemicals than polyester which has origins in decomposed organic material. Also, the physical properties of both conventional polyester and OceanSafe polyester are superior to other natural fibres for professional applications.

Circle textiles based on OceanSafe technology represent a new generation of textiles which consume much fewer resources in production and may be returned to the ecological system in a circular flow. Therefore, Circle textiles are eligible for the coveted Cradle to Cradle certified Gold.

By contrast, for instance recycled polyester fibres are part of a cradle to grave lifecycle. Also, recycled polyester is associated with releasing more microfibres than virgin polyester.

How is the fibre made?

The fibres are made on conventional machinery for synthetic fibres/yarns, such as extruders or melt-spinning equipment. No new processes or investments in machinery are required.

Conventional polyester fibres are a result of 20-25 processes, whilst OceanSafe polyester fibres require substantially less process steps. This results in a polymer which is both strong and degradable into its origins. Moreover, the production process requires less energy and water. OceanSafe fibres release about about 63% less carbondioxide equivalents compared to conventional polyester.

Is the OceanSafe fibre as good as conventional polyester?

Before awarding the OceanSafe seal, the fibre is checked for performance and durability. Test results (e.g., light fastness, colour fastness, shrinkage) confirm that Circle Textiles perform the same as conventional polyester. Dyes, coatings and other ingredients must be biodegradable. For fabrics based on OceanSafe fibre, no toxic particles are released to the environment as part of a laundry process or daily use and exposure to UV radiation.

Why and how is this a fully circular product with no toxic output and footprint in nature?

When Circle fabrics are no longer used by customers, we welcome fabrics to be returned to Almedahls for feeding into our take-back system. The take-back system breaks down fabrics to monomers or fibre-to-fibre recycling. After 90 days in the industrial composting system, the OceanSafe fibre is degraded to monomers which may be recycled into new material or to end products: humus, minerals, water and biogas. Typically, humus will be used in local agriculture, and biogas for industrial applications.

How long does it take for microplastics from OceanSafe fibre to break down?

Microplastics from conventional polyester require hundreds of years to break down once entered in water or on land. Textiles with OceanSafe technology will emit fibres when washed. However, since they are toxin-free, they do not create harm to the biosphere and are proven to fully biodegrade within a few days in both land and water habitats.





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