XLANCE®

invisible

innovation

BRAND presentation

Ver. 3.0

Mission

In these days and age dominated by the throwaway economy, our mission is to provide our customers with a product expressively engineered for the creation of high quality and durable elastic garments designed to stay in their lives for long and to convey a lasting sense of well-being and comfort.

This is why XLANCE® fiber can be seen as a better and more sustainable alternative to spandex (TPU).

From workwear to beachwear: XLANCE® technology is so innovative and versatile it boasts countless possible applications.

BOOST

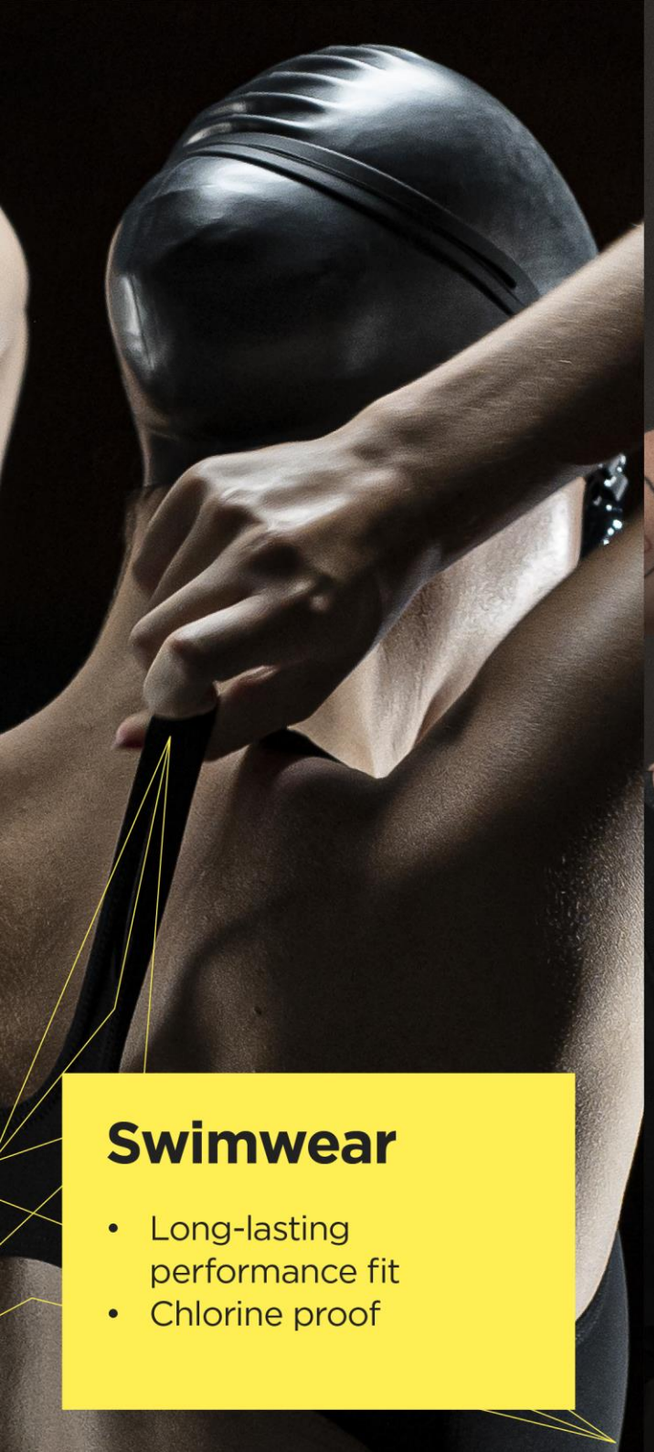
XLANCE® makes anything elastic from Polypropylene to extra white and non-iron clothing.

POWER

XLANCE® makes elasticity durable thanks to its unique chemical and thermal resistance.

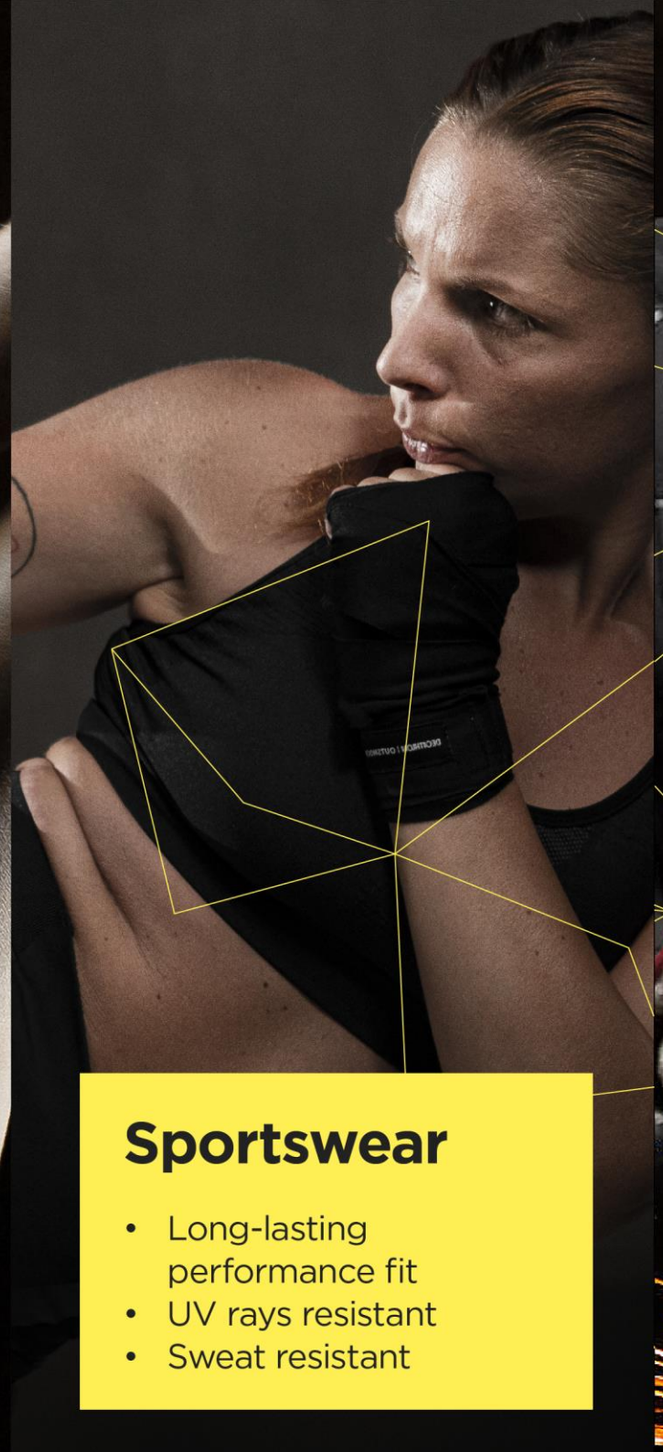
ECO

XLANCE® makes elasticity sustainable from an eco-friendly manufacturing process to extended garments life cycle.



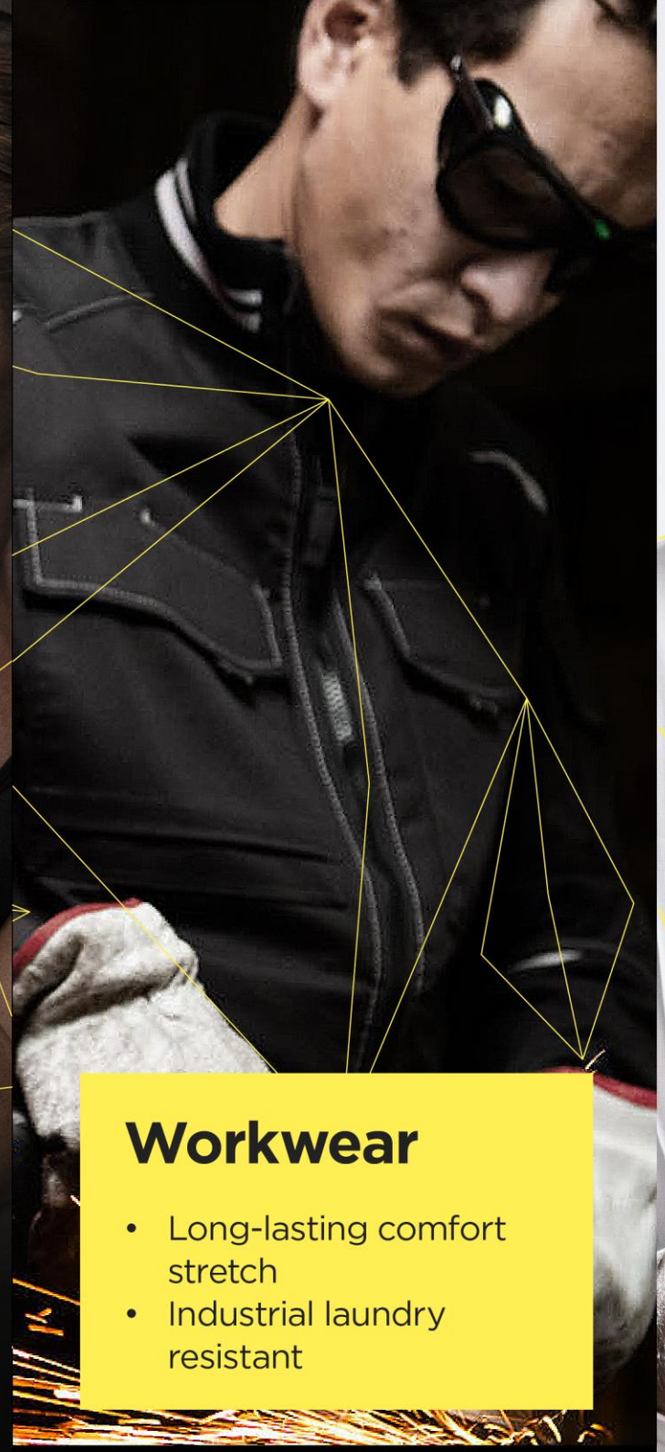
Swimwear

- Long-lasting performance fit
- Chlorine proof



Sportswear

- Long-lasting performance fit
- UV rays resistant
- Sweat resistant



Workwear

- Long-lasting comfort stretch
- Industrial laundry resistant

Shirting

- Long-lasting comfort stretch
- Extra white
- Non-iron

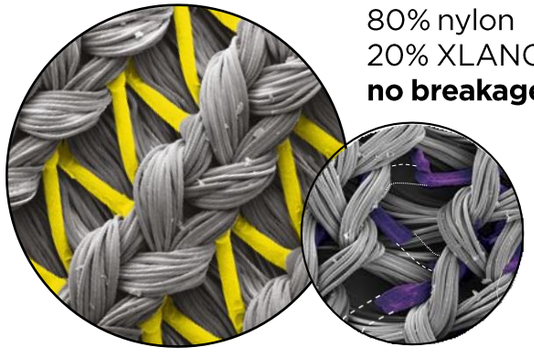
You don’t need to be a fish to perform in water: just choose the right swimwear.

Swimwear

- Long-lasting performance fit
- Chlorine proof
- Low microplastics release

Chlorine proof

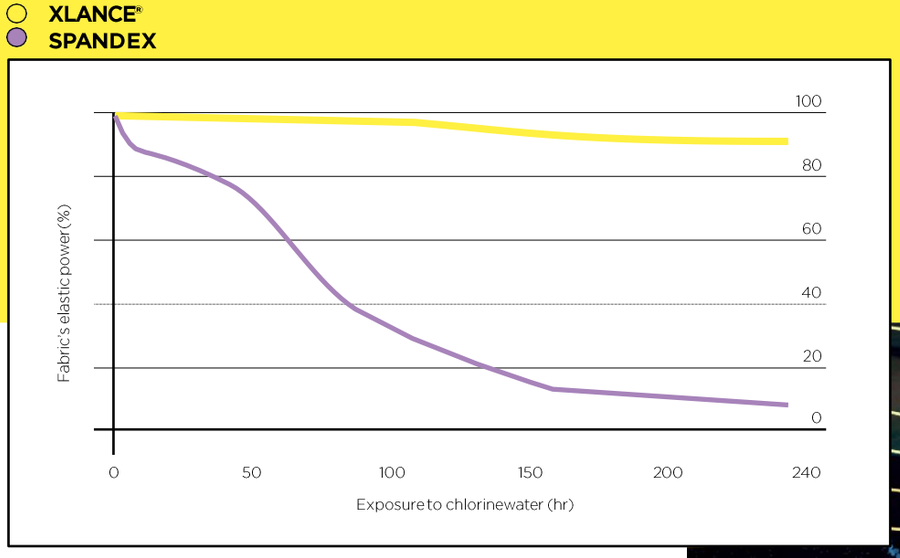
XLANCE® is extraordinarily resistant to chlorine thanks to its capacity to resist oxidative degradation. Upon exposure to swimming pool conditions, it retains its physical properties for hundreds of hours.



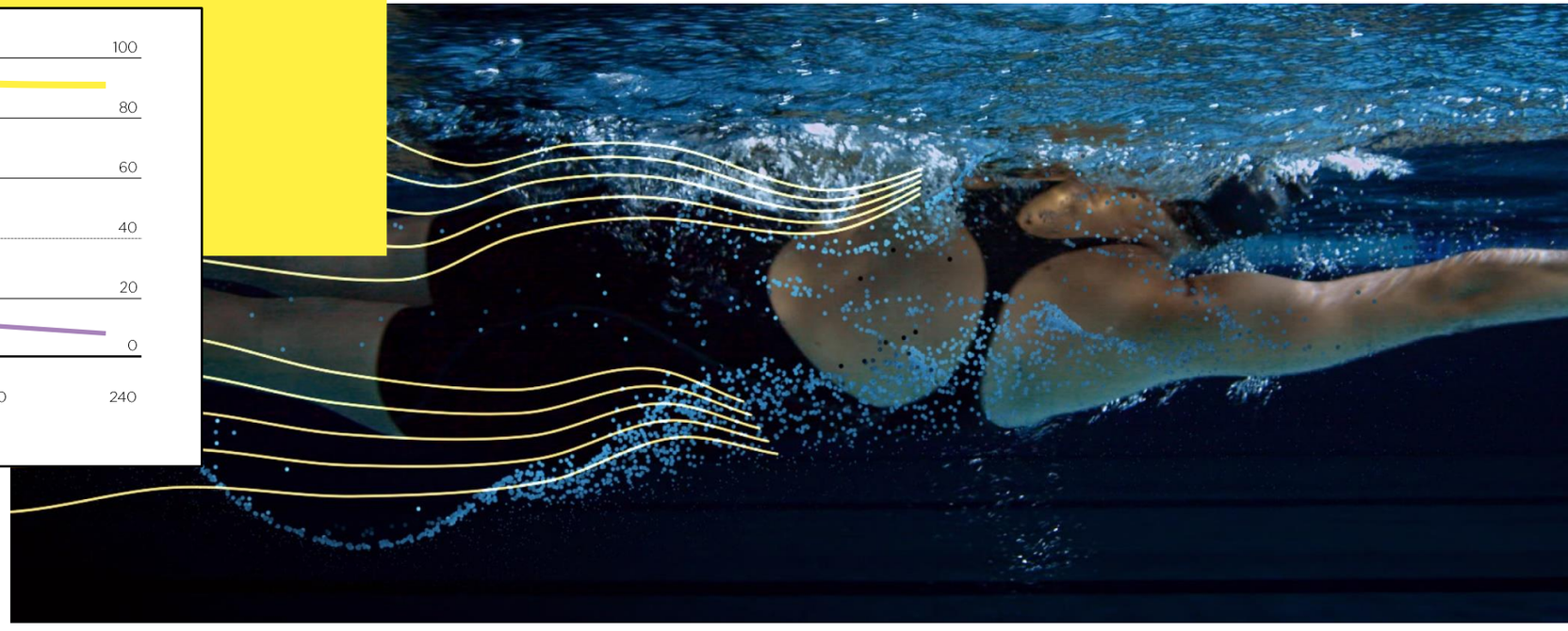
80% nylon
20% XLANCE®
no breakages

80% nylon
20% spandex
breakages

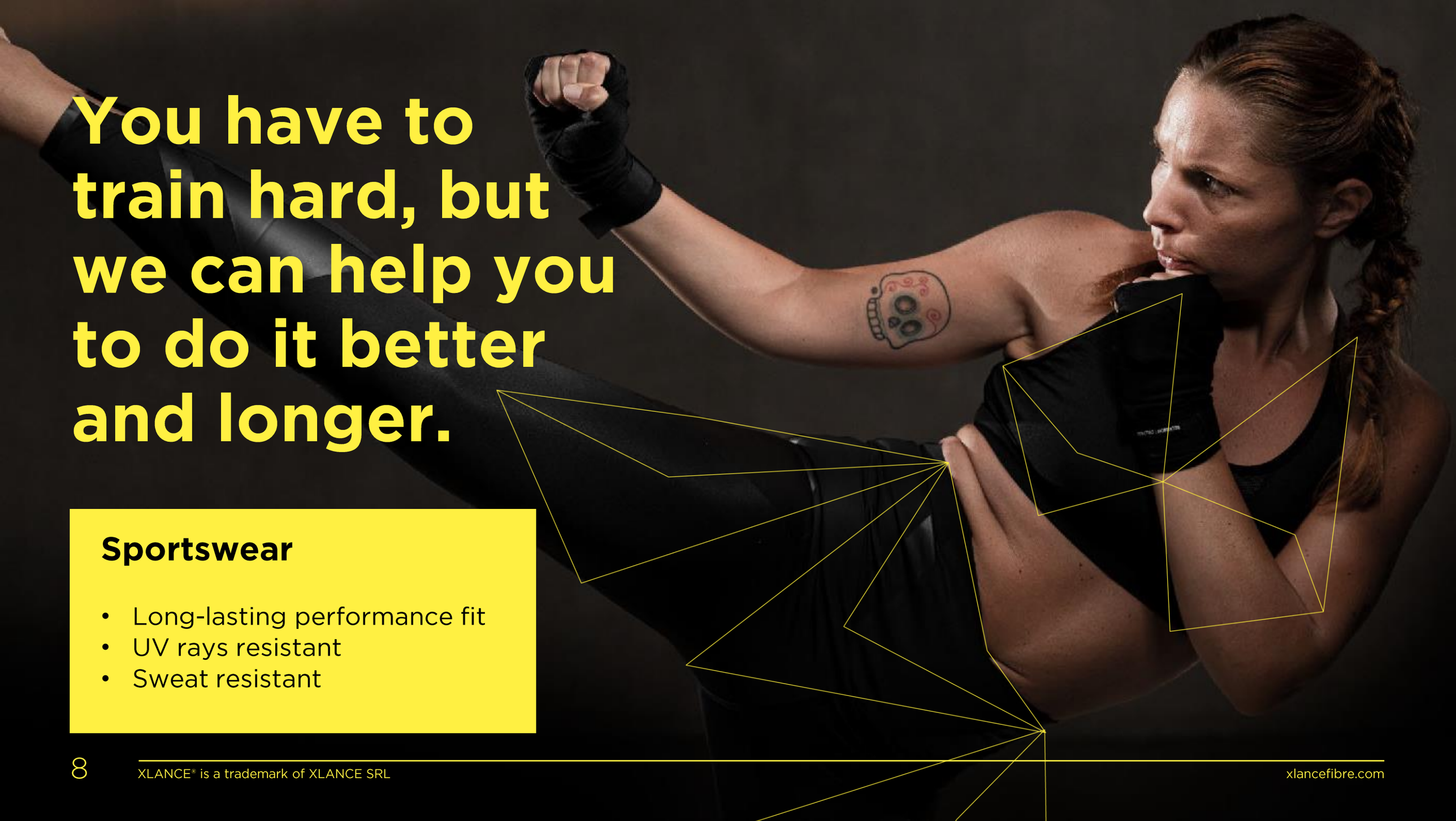
Images of competition garments containing either XLANCE® or spandex after 5 months of swimwear test: XLANCE® remains fully intact while spandex fiber is broken and fragmented by oxidative degradation.



PA6-based warp-knitted fabrics containing either 20% XLANCE® or 20% spandex dipped in a 4-ppm-chlorine solution while under continuous dynamic stretch for over 200h.



You have to train hard, but we can help you to do it better and longer.



Sportswear

- Long-lasting performance fit
- UV rays resistant
- Sweat resistant

Long-lasting performance fit

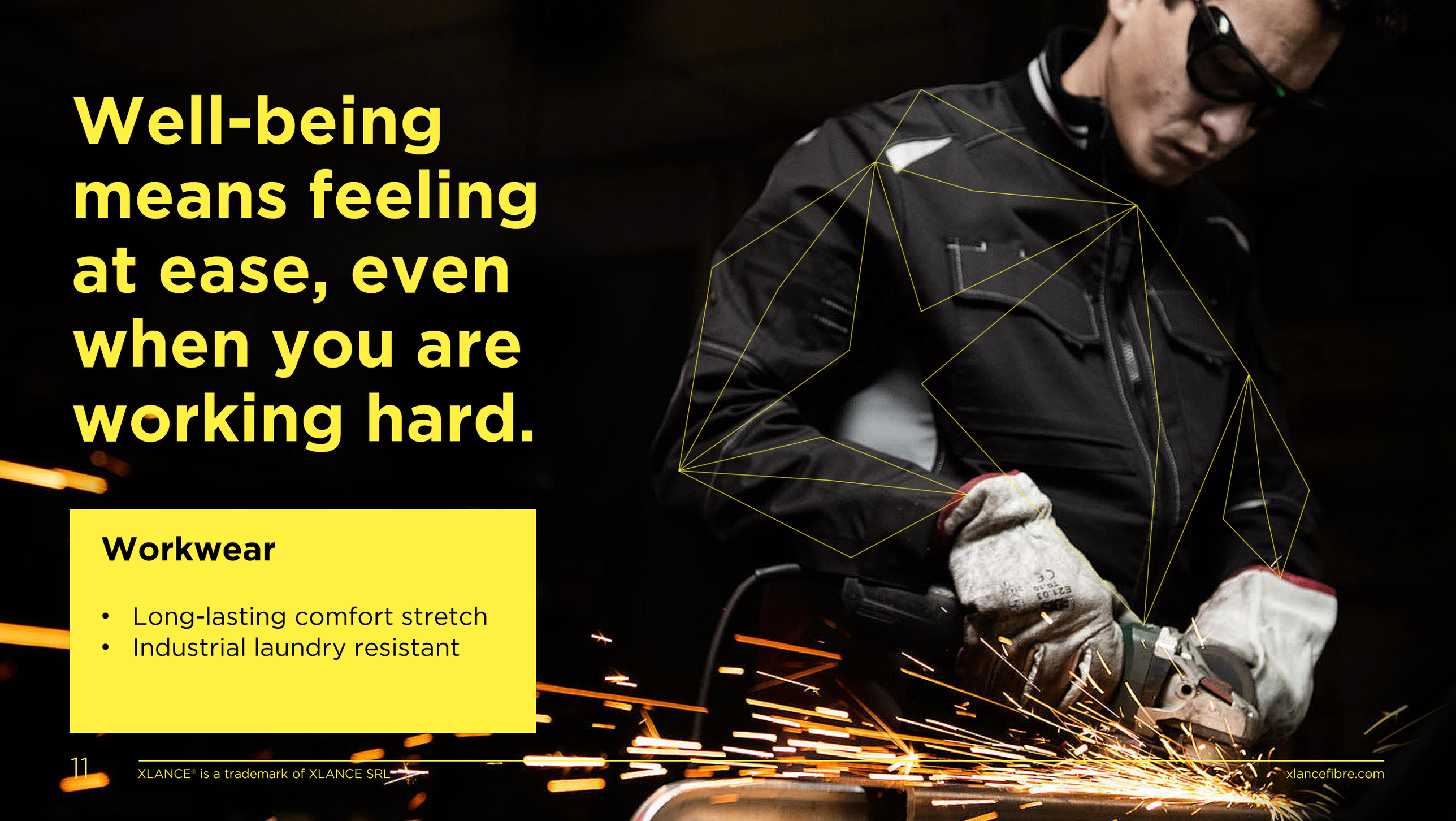
XLANCE® features a unique high performance fit thanks to its dosed elasticity which helps supporting the body and enhancing its movements. And this unique elasticity is everlasting thanks to its inherent resistance.

Polypropylene

- Everlasting high performance fit
- Superior moisture management capability
- Improved thermal regulation

The unique elastic fiber which can be processed with Polypropylene.

Well-being means feeling at ease, even when you are working hard.

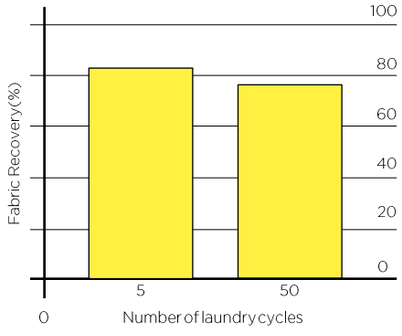


Workwear

- Long-lasting comfort stretch
- Industrial laundry resistant

Industrial laundry resistant

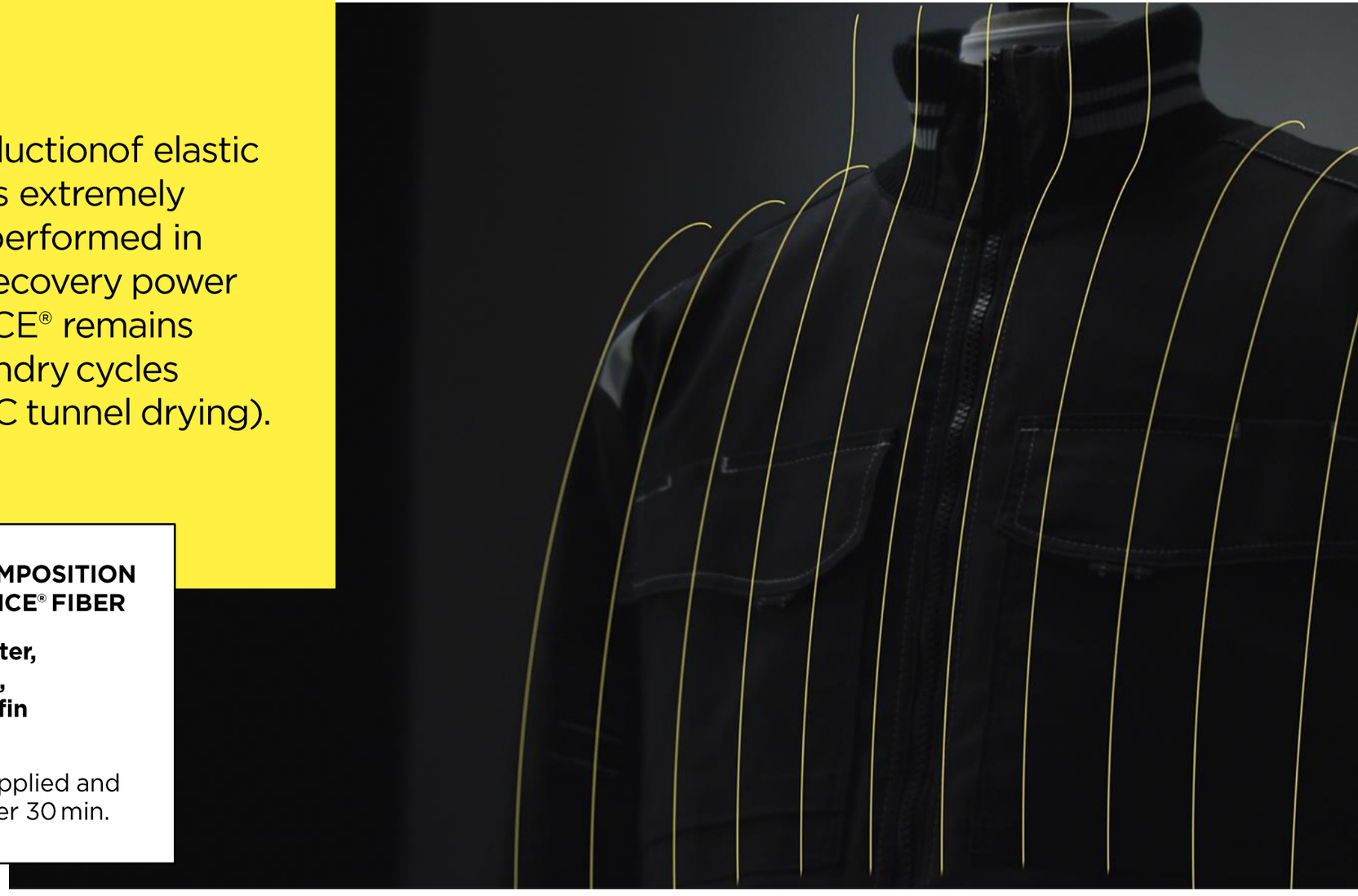
XLANCE® is suitable for the productionof elastic workwear garments because it is extremely resistant to washing processes performed in industrial laundries. Indeed the recovery power of workwear fabrics with XLANCE® remains consistent after 50 industrial laundry cycles (ISO 15797 - 75°C wash and 155°C tunnel drying).



FABRIC COMPOSITION WITH XLANCE® FIBER

63% polyester,
34% cotton,
3% elastolefin

ASTM 3107
1,8 kg load applied and recovery after 30 min.



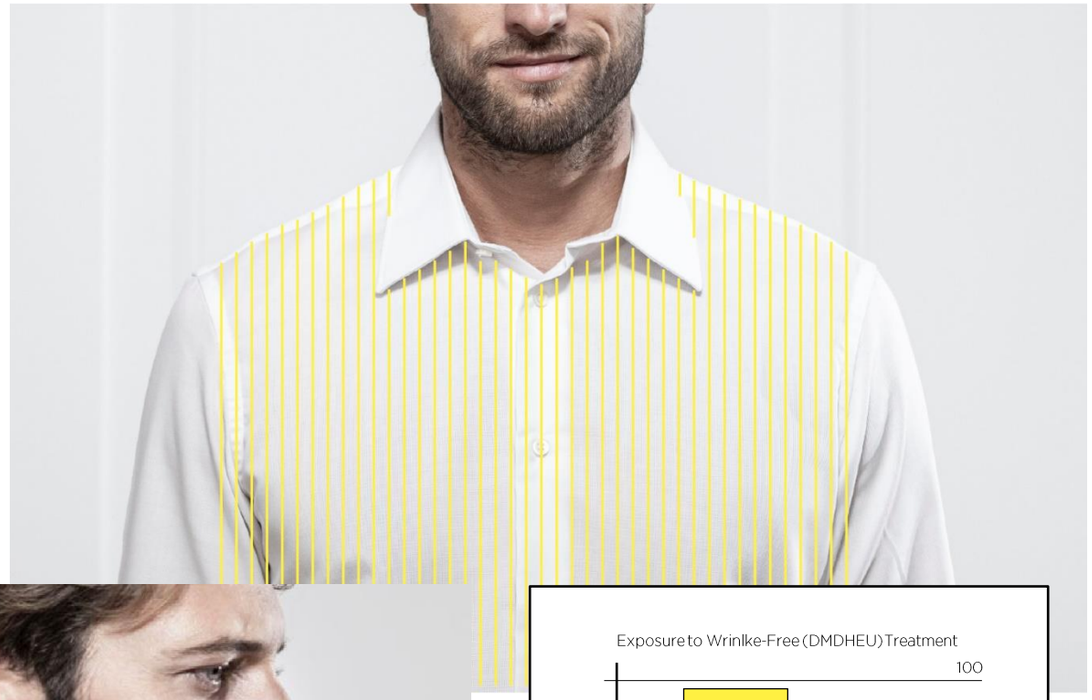
It’s not just about feeling good, it’s about feeling confident.

Shirting

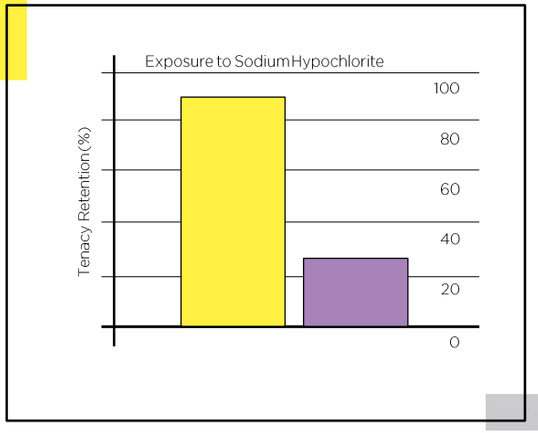
- Long-lasting comfort stretch
- Extra white
- Non-iron

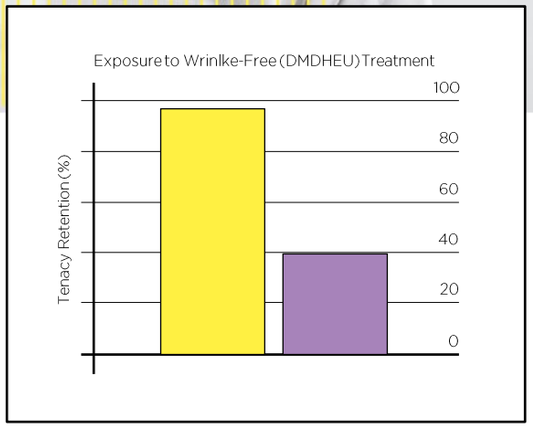
Elastic, extra white and non-iron

XLANCE® is inherently resistant to wrinkle-free treatment and the exposure to Sodium Hypochlorite, thanks to its specific structure.



XLANCE®
SPANDEX





XLANCE®
SPANDEX

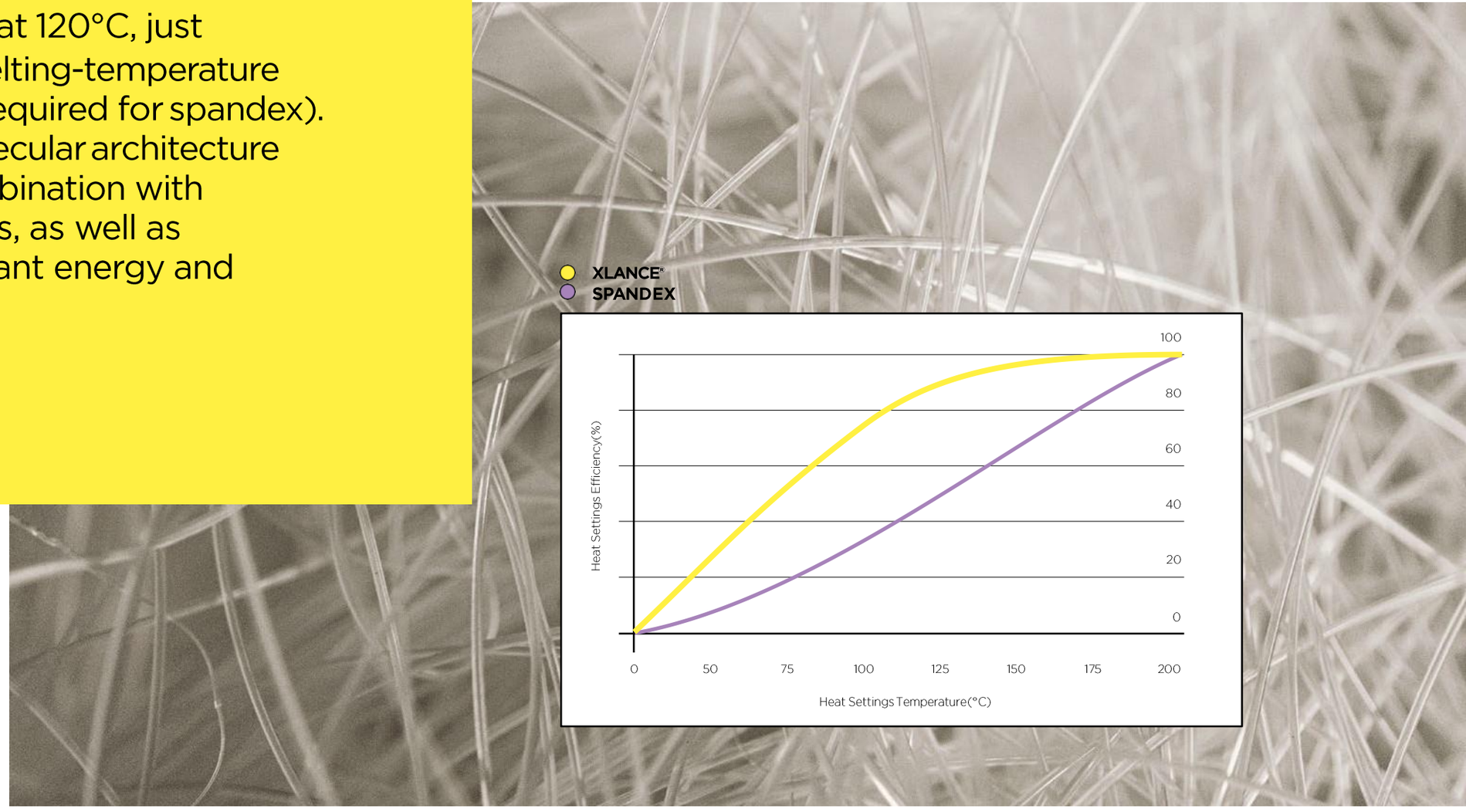
BOOST

XLANCE® makes anything elastic

from Polypropylene to extra white
and non-iron clothing

Easy set

XLANCE® is heat set at 120°C, just above the crystal melting-temperature (against 185-190°C required for spandex). This is due to its molecular architecture and enables the combination with thermosensitive fibers, as well as guaranteeing significant energy and pollution savings.



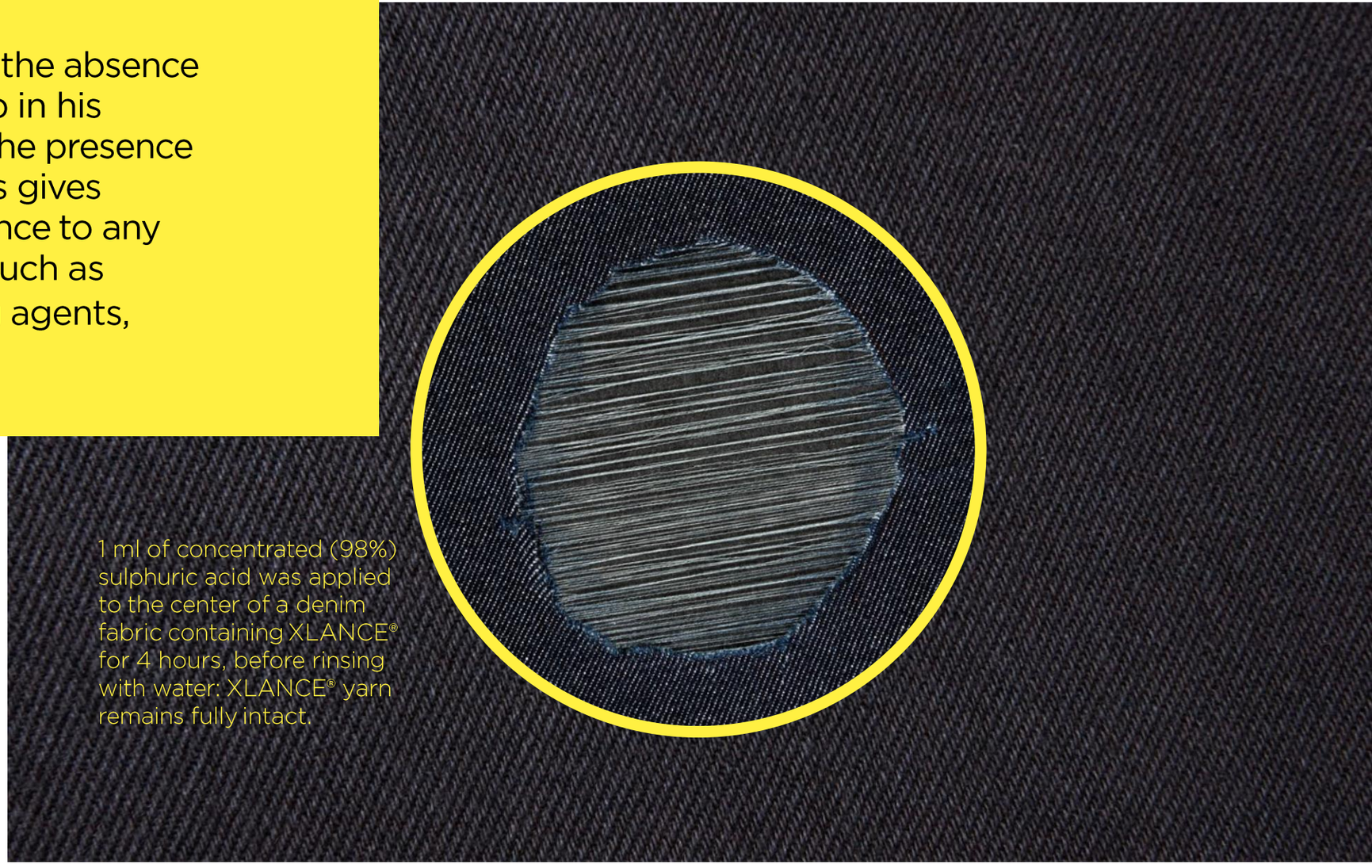
POWER

XLANCE® makes elasticity durable

thanks to its unique chemical
and thermal resistence

Acid test

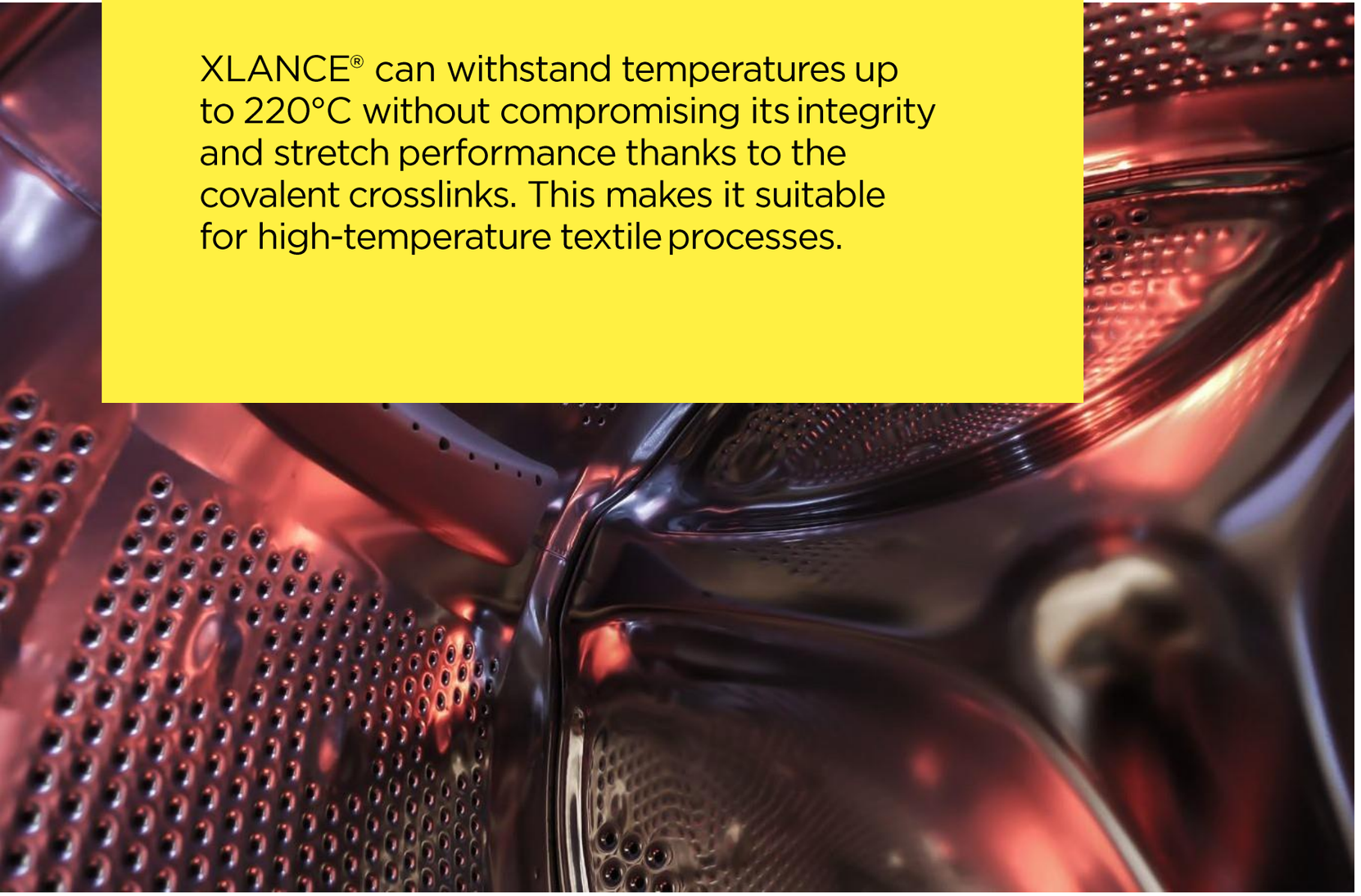
XLANCE® is characterized by the absence of any easily-attackable group in his polyolefin backbone and by the presence of the covalent crosslinks. This gives XLANCE® an excellent resistance to any aggressive chemical agents, such as strong acids, alkalis, oxidizing agents, enzyme wash conditions.

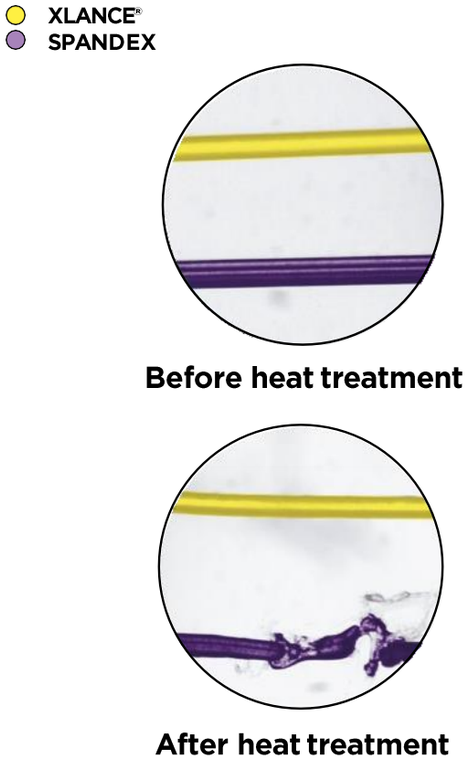


1 ml of concentrated (98%) sulphuric acid was applied to the center of a denim fabric containing XLANCE® for 4 hours, before rinsing with water: XLANCE® yarn remains fully intact.

Heat test

XLANCE® can withstand temperatures up to 220°C without compromising its integrity and stretch performance thanks to the covalent crosslinks. This makes it suitable for high-temperature textile processes.

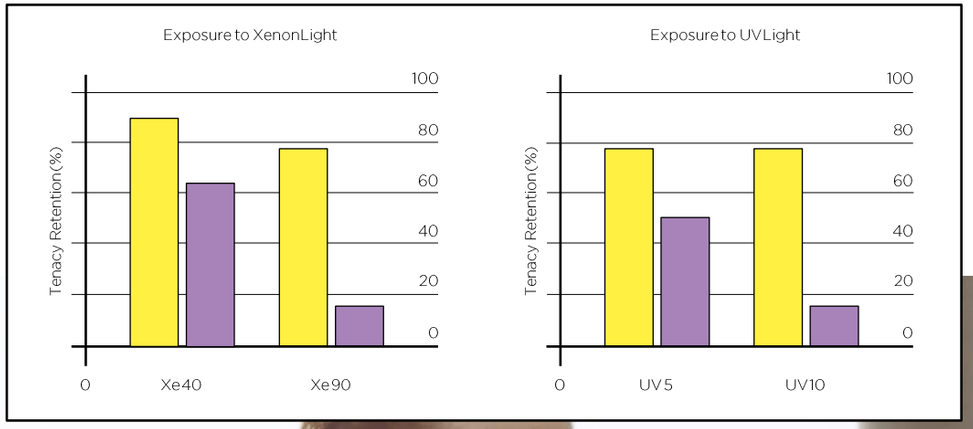


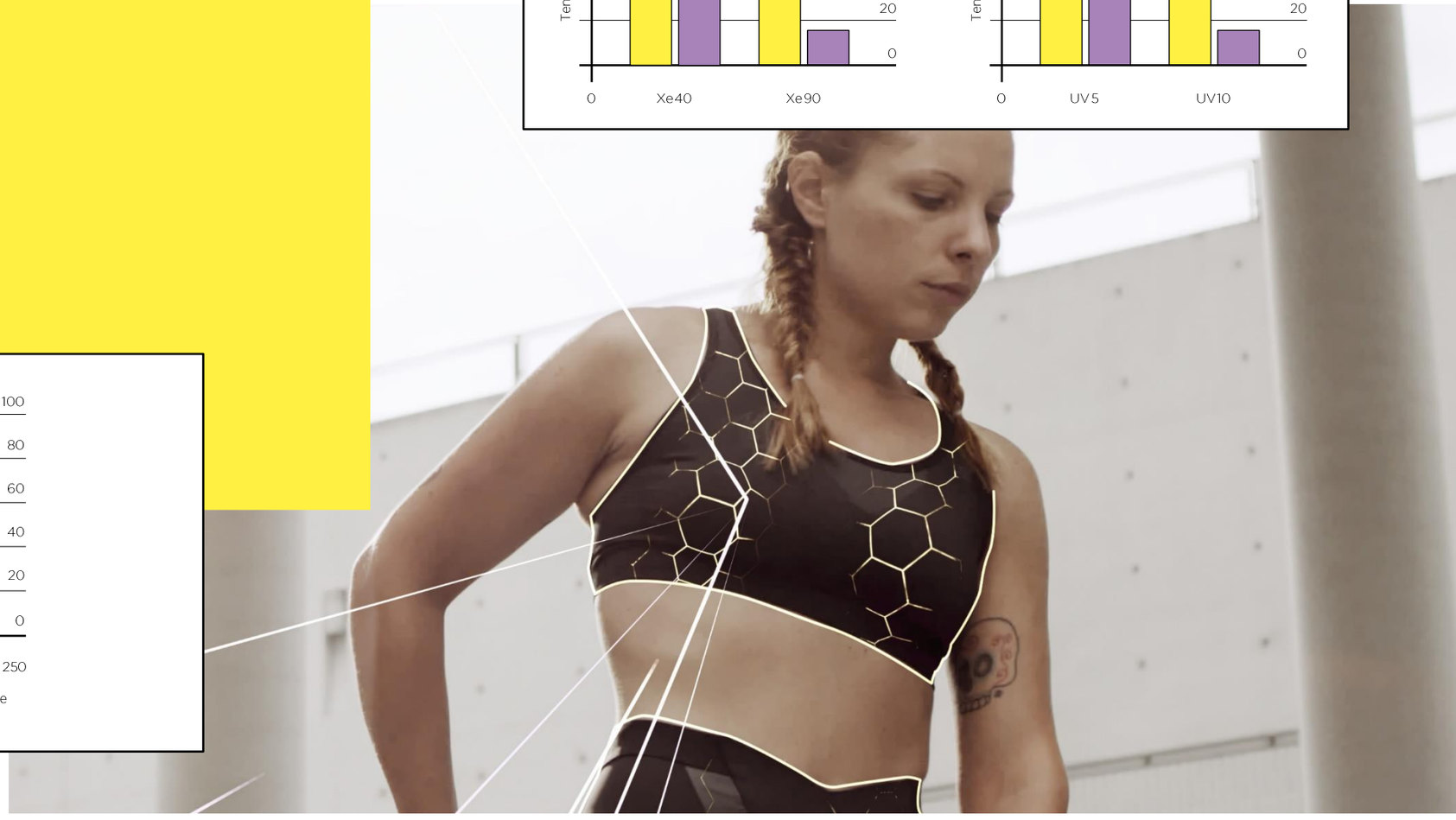


Micrographs comparing XLANCE® and spandex fibers before and after 3 minutes treatment at 220 ± 3 °C. Fibers were placed on a slide side by side, covered with slipcover and placed on a hot stage. After cooling, the slipcover was gently removed, leading to the disintegration of spandex but not of XLANCE®.

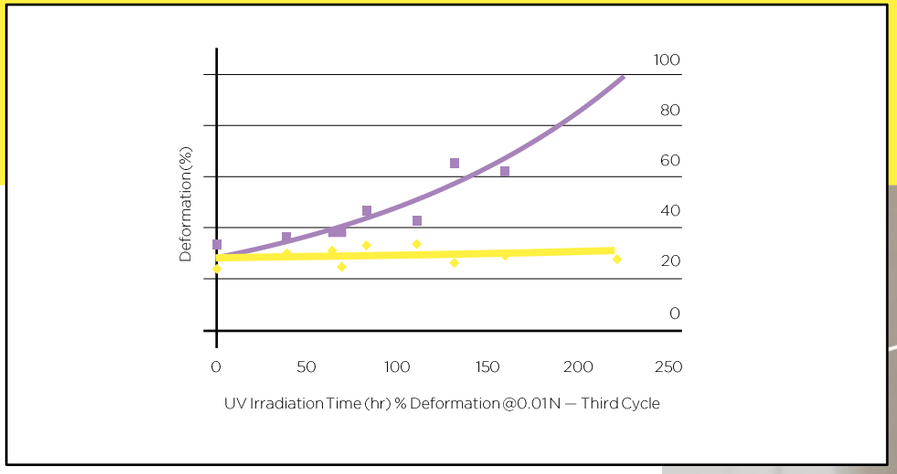
UV test

XLANCE® yarn is inherently resistant to UVA and UVB radiations.



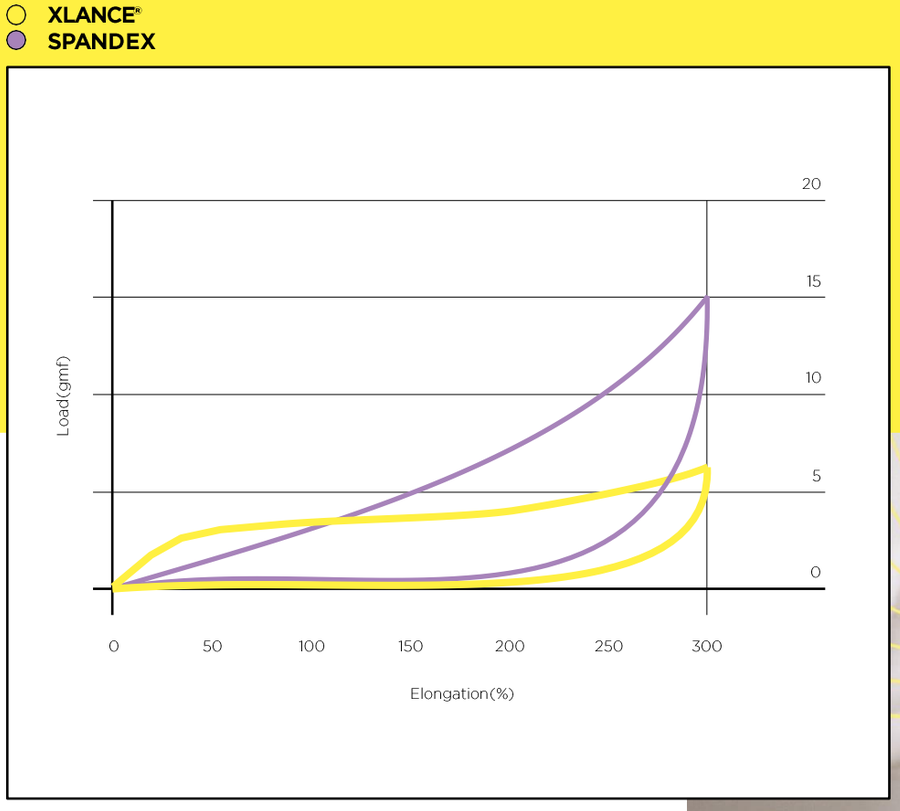


XLANCE®
SPANDEX



Stretch test

XLANCE® features an innovative gentle stretch power, completely different from the typical high stretch power of spandex. The force required to stretch XLANCE® is much lower than the one to be applied to spandex. This accounts for the unique comfort stretch feeling of XLANCE® shaping fabrics.



XLANCE® makes elasticity sustainable

clean process, durable
and recyclable fabric

Solvent free

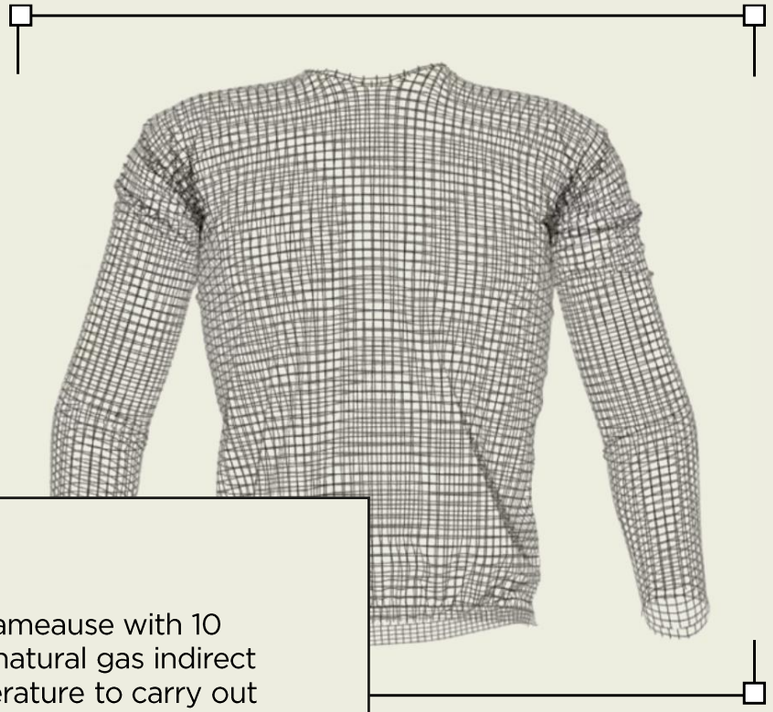
XLANCE® is produced through a clean melting process different from the dry chemical one of spandex that involves the use of dangerous solvents like DMAC or DMF.

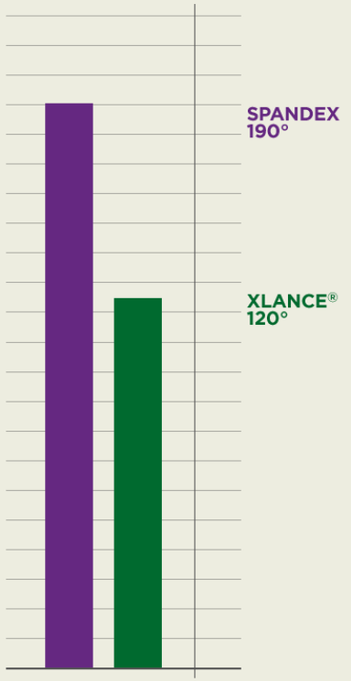
RENEWABLE ENERGY

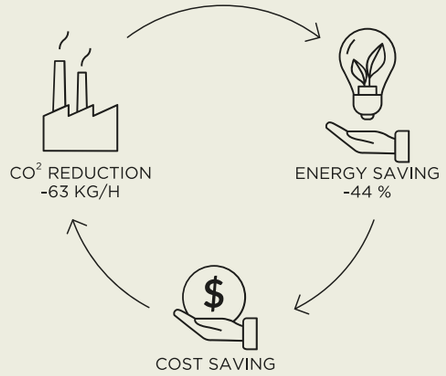
XLANCE® is sourcing 100% of its electric power needs from renewable energy.

Low CO_2 emissions

XLANCE® can be heat set at just 120°C ensuring the manufacturers substantial energy and costs savings and a relevant reduction in CO_2 emissions.

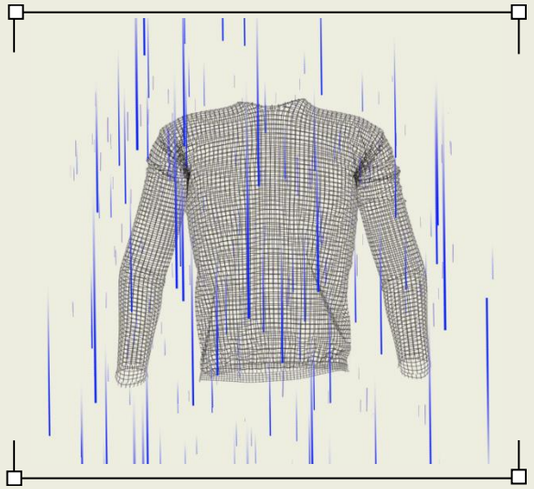




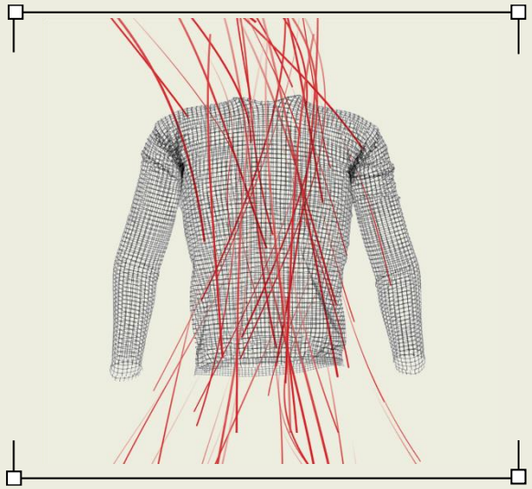


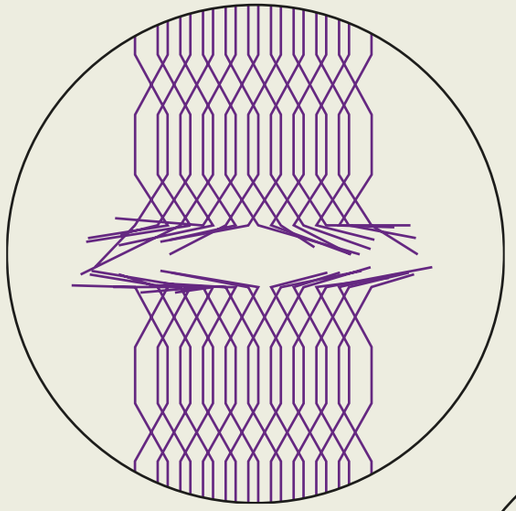
The test was performed on rameause with 10 vertical chain fields fed with natural gas indirect (CH_4).The reduction in temperature to carry out the fabric thermofixing operation allows to reduce the consumption of natural gas (CH_4) by 32 mc/h and consequently to reduce CO_2 emissions by 44% (reduction of CO_2 emissions by 63.1 Kg/h of CO_2).

WEATHERING



UV





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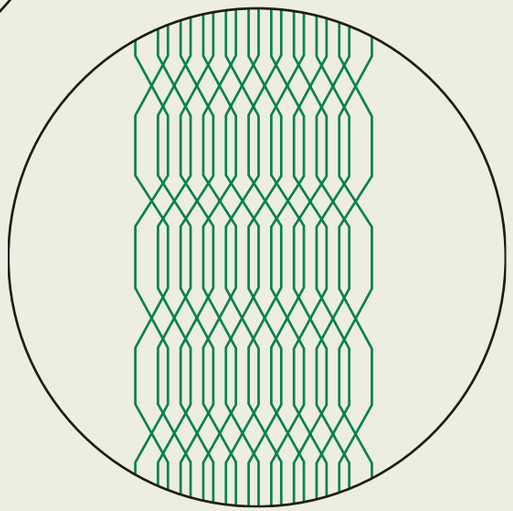


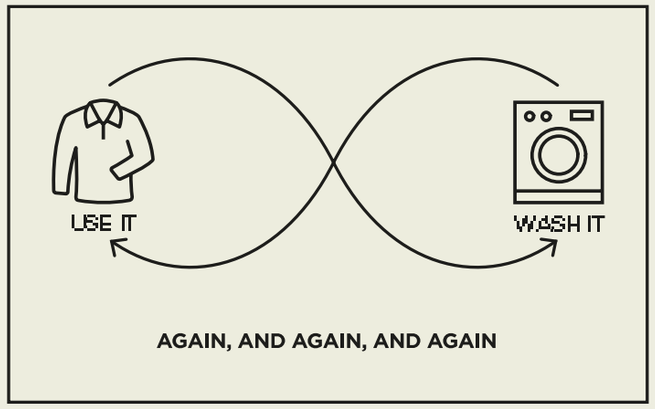
XLANCE®

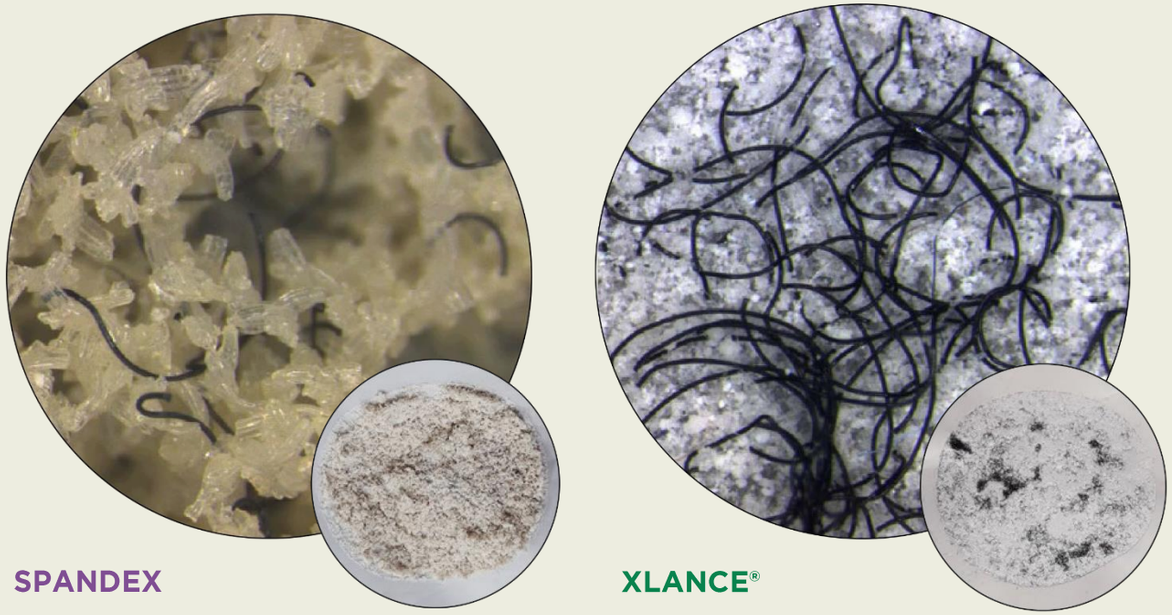
Extended life cycle

XLANCE® features a long-lasting stretch which guarantees an extended life cycle to all garments made of it. The fiber has therefore a low environmental footprint: less production waste and consequent reduction in landfill content.

Low microplastics release

Thanks to its extreme chemical/physical resistance, XLANCE® has no tendency to fragmentation and microfiber shedding, not even after exposure to harsh agents, weathering or ageing.





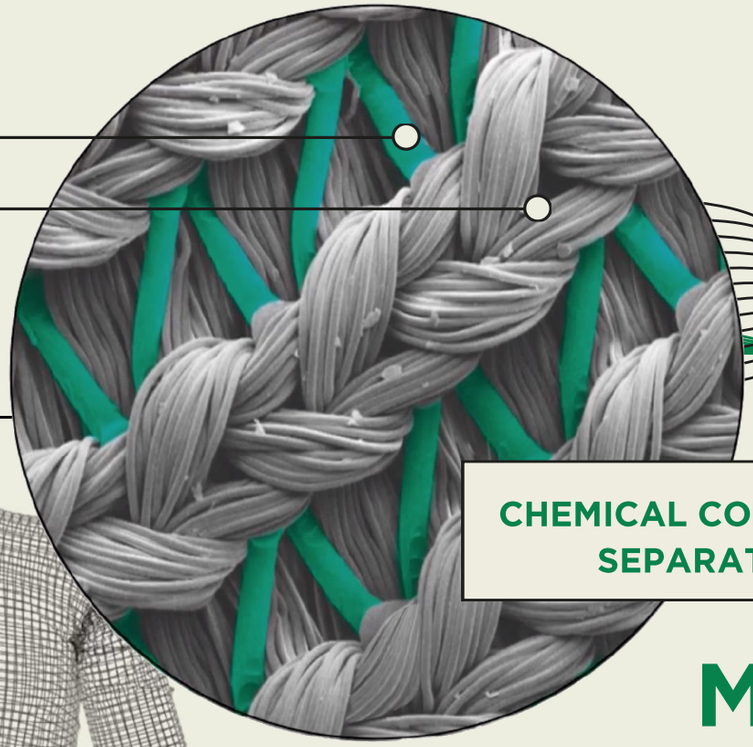
SPANDEX

XLANCE®

PA6-based warp-knitted fabrics containing either 20% XLANCE® or 20% spandex were exposed to a combination of sunscreens and sunlight (Xenotest – ISO 105-B02, for 200 hours), to simulate a typical beachwear/outdoor cloth usage; washing was performed at 40 °C according to ISO 105-C06, procedure A1S (with 25 steel balls and ECE detergent). Collection of microfibers was performed by filtering wastewaters from the washing machine on 25-micron-mesh filters; microfibers (dimensions < 5 mm) were quantified and identified by gravimetric analysis and microscopic observation. XLANCE® microfiber release is negligible, whereas spandex yarn releases an average of 20 g of microfibers per kg of fabric.

1 - XLANCE®

2 – NYLON OR PET YARN



CHEMICAL COMPONENT SEPARATION

MATERIAL REGENERATION

THE STRETCH FABRIC RECYCLING

Make it circular

XLANCE® is always looking for new solutions that make sustainable not only the product, but also the entire production process, having a more systemic and holistic vision of the entire textile chain. The chemical component separation and material regeneration is one of the solutions that XLANCE® is trying to put in place, in the perspective of a sustainable development.

Who we are

Our story

2003 – 2010
Dow Chemical Company invents a new polyolefin fiber and launches it on the textile market naming it XLA.

2011
Our history begins: XLANCE® is established and takes over Dow Chemical division devoted to the production of XLA and the related licensed technology and patents.

2017
XLANCE® is taken over by the current owners. New relevant investments are made into R&D so as to develop new marketing strategies.

2020
Several new, last generation spinning lines are set up. XLANCE® opens a branch office in Shanghai.

Where we are

Our certifications

XLANCE® promotes a systemic vision, seeking to continuously optimize its production process and keeping under control the quality and quantity of materials and energy resources used. For this reason, we have obtained numerous certifications over the years.

- **OEKO – TEX STANDARD 100**
- **REACH COMPLIANT**
- **ISO 9001**
- **ISO 14001**

Work in progress

- **ISO 14064**

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