

ACL

I M P E X L D A

THE ECOBOOK



INDEX

Introduction	p. 03
REPREVE®	p. 06
SeaCell™	p. 08
PLA	p. 10
Hemp	p. 12
Bemberg™	p. 14
Kapok	p. 16
Bamboo	p. 18
TENCEL™	p. 20
EcoVero™	p. 22
ProModal™	p. 24
REFIBRA™	p. 26
Wool	p. 28



Tradition in bed linen innovation

Four generations of a Portuguese family have been putting together all their knowledge with cutting-edge innovation, creating new designs and constructions to meet the demand of the global market. Over the years, ACL Impex has met all the challenges of the international market place, presenting unmatched resources and quality of the highest standard.

ACL Impex is passionate for our planet and is committed to preserving it. Certified by Oeko-Tex®, assuring all its products are safe from harmful substances, it has been striving for the lightest carbon footprint throughout the entire process. Natural fibres are the preferential raw materials for its products, sourced from sustainable processes, ensuring the long-term health of all its natural resources.

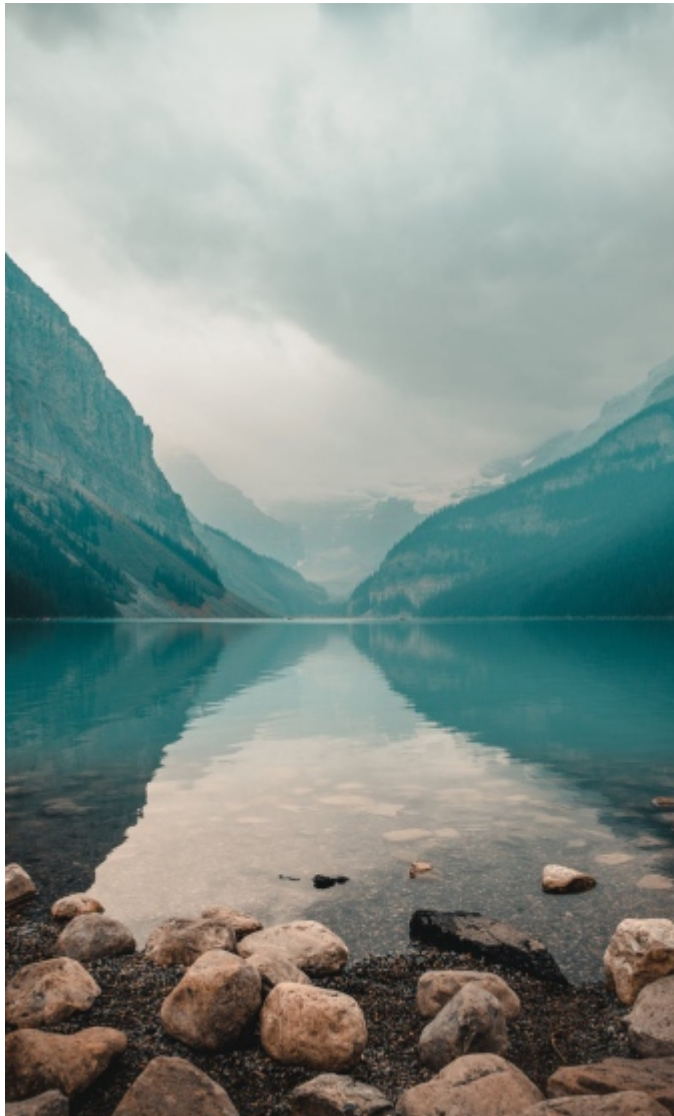


Fostering an eco-friendly industry

As conscious consumers, we are becoming aware that our planet is fragile and that the intensive use of natural fibres is dwindling resources.

To enhance natural fibres production, harmful chemicals are commonly used and there is an enormous waste of water and energy, which is disruptive for the environment, producers and consumers. Also, synthetic fibres need harmful substances, so they are not an option.

Companies are now challenged to look for sustainable alternatives and to prove that the production of textiles does not have to pollute the environment.



Taking care of our planet

Sustainable textile innovations must change the fashion industry. ACL Impex is taking action, by developing products that are beneficial for the environment and bring comfort in the daily life of consumers.

Ecofriendly fabrics are the future, made from fibres that do not require the use of any pesticides or chemicals to grow. They are naturally resistant to mold and mildew and are disease-free. ACL Impex promotes these fibres for believing in the positive impact on nature. The value and benefits of environmentally friendly materials are tremendous, among many other reasons why we should be making the shift.

It's easy to find consciously crafted clothing that feels as good as it looks (inside and out)!



FROM PLASTIC TO GOODNESS

Billions of plastic bottles go into landfills every year. But now you can do something about it. REPREVE® is the leading, most trusted, branded performance fibre made from recycled materials (including plastic bottles). Buy products made with REPREVE® to make a difference.



A NEW LIFE

REPREVE® transforms recycled bottles into an amazing fibre, used by the world's leading brands to make athletic and fashion apparel and more. The process embeds properties like wicking, adaptive warming and cooling, water repellency, and more at the fibre level, for reliable and durable quality.



CONSERVING RESOURCES

REPREVE® is not just finding a new life for recycled materials. Compared to making what is called virgin fibre, making REPREEVE® offsets using new petroleum, emitting fewer greenhouse gases and conserving water and energy in the process. That makes a big difference for our future.

REPREVE®



FROM THE SEA

SeaCell™ is a rich cellulose-based fibre, achieved using the so-called Lyocell technology, that carries the benefits of seaweed properties. Among others, SeaCell™ protects the skin and has anti-inflammatory characteristics. It is seaweed which forms the basis of the SeaCell™ fibre.



THE MANY BENEFITS

The structure of SeaCell™ facilitates the active exchange of substances between the fibre and the skin – nutrients such as calcium, magnesium and vitamin E are released by the natural body moisture when the fibre is worn, thereby creating a complete sense of well-being. Its textile properties also offer advantages such as breathability, softness and great moisture management.



THE STRUCTURE

The great thing about the SeaCell™ comes in two versions, as a Lyocell and as a Viscose fibre, which is manufactured using an advanced modal process. The smartcel™ sensitive is its fibre using the same and patented process but incorporates recycled pharmaceutical grade zinc, for extra antimicrobial properties and even greater benefits.



SUSTAINABLE MAN-MADE FIBRES

Innovative man-made fibres and biopolymers can offer sustainable solutions that cannot be attained with natural fibres alone. Alongside optimising existing products, it replaces fossil resources – which are of limited availability – with renewable primary materials. Polylactid acid (PLA) is an example.



THE RAW MATERIAL

Among the biopolymers made from plant materials, PLA is accorded by far the greatest technological opportunity, since it combines the desired functions with outstanding properties in terms of degradation.

For the most part, PLA is made from grain (corn) and represents a sustainable alternative to petroleum-based fibres, constituting the basis for intelligent materials with added functions that are equally economic and efficient.



ECOLOGICAL LIFECYCLE

During the polycondensation of PLA, a primary material is produced from which it is possible to make fibres and filaments for all conceivable applications. This is particularly true for the use of PLA materials in combinations with other biologically degradable materials, which means that the whole product can be disposed of ecologically at the end of the lifecycle.



Hemp



SUSTAINABILITY

Hemp is in the world's top 5 plantations with less impact and that contribute more to the biodiversity. It is an extremely resistant plant that does not need pesticides to grow, it decomposes spontaneously and its need for water is inversely proportional to the nutrient characteristics of the soil.



MOLECULAR STRUCTURE

Hemp has a cold thermal sensation and has strong ultraviolet protection properties. It has a very stable molecular structure which reduces the production of static electricity and subsequently, allergies and skin erosions, as well as good moisture absorption, air permeability and dirt-resistive properties. Hemp also has molecular properties that inhibit bacteria like E-Coli and Candida.



QUALITY

When compared with flax, cotton and ramie, Hemp is the most tenacious fibre, meaning it is the thinner yarn of the three, allowing a greater number of fibres per section of the resulting yarn. It also has a low coefficient of friction, which ensures a good cohesion between the fibres, giving strength to the yarn and a more regular fabric texture. It is a long fibre, which makes it suitable for spinning on low weight yarns.



PURE NATURE

Bemberg™ Cupro yarns are produced from the purest cellulose found in nature: through a specific process, the cotton linter is dissolved and extruded, obtaining a very fine thread. Its multifilament and capillary structure allows us to produce a material with unique characteristics of comfort, ventilation and resistance but which is also extremely delicate and atoxic.



ALLERGY FREE

Fabrics manufactured with this material are hypoallergenic and therefore ideal for contact with the more delicate zones of the body. With this extraordinary material, we have created a collection of bright and colourful fabrics whose extraordinary quality also helps to improve sleep quality.



A FINE FIBRE

Bemberg™ Cupro fibre is popular for high-quality fabrics. It is soft and shiny and it matches the environmentally friendly clothing trends, so being often used for advanced textile raw material that can be pure spun Bemberg™ Cupro yarn or blended with Wool, Cashmere or synthetic fibres to make high-grade knitted clothes.



Bemberg™

Kapok



NATURALLY SMOOTH

Kapok is a natural fibre obtained from a tropical plant that grows in South-East Asia and Africa, which has a similar structure to Cotton but has a hollow fibre. Combined with other natural fibres, it can give life to original yarns with exceptional properties without using chemical treatments.



THE FIBRE

The Kapok fibre has a very particular way of spinning, and needs to be handled very carefully. This delicate fibre is naturally hypoallergenic and resistant to moisture, meaning it is antimicrobial and resistant to mites. These fibres are light, elastic, lustrous and very strong, and they can survive in the long term.



BETTER SLEEP

Good quality sleep is essential for general health and ultimately provides well-being. Fabrics woven from Kapok or with Kapok blends repel moisture and are breathable, ideal for close contact with the skin, helping to improve your health and quality of sleep.



Bamboo Viscose, made of 100% pure Bamboo, can be decomposed in the clay, thus, clearing of this natural material has little impact on the environment. The whole distilling process has already passed ISO 9000 certification and will soon pass ISO 14000.



NATURALLY ANTI-BACTERIAL

Validated by the International Inspection Association and Microorganism Research Institute even after times of washing, bamboo fibre still possesses the anti-bacteria character for the Staphylococcus aureus, Klebsiella pneumoniae and MRSA, among others.



BREATHABLE, COOL & FUNCTIONAL

The cross-section of the Bamboo fibre is filled with gaps and micro-holes, thus Bamboo Viscose can absorb and evaporate human sweat easily. It is considered as a naturally cool and light fabric, although more suitable for spring and summer wear. The effect of antibacterial, bacterial-cubing, anti-static, and deodorization of this fibre keeps the products clean and pleasant.

Bamboo



NATURALLY SMOOTH

TENCEL™ Lyocell is made from cellulosic fibres of botanic origin and define a new standard of sustainability and natural comfort. These fibres have an exceptional natural softness and smooth feel. Fabrics create a pleasant, almost soothing cool feeling on the skin, thanks to the special attributes of TENCEL™ Lyocell fibres.



BREATHE FREELY

One of the most outstanding qualities of TENCEL™ Lyocell fibres is the ability to enhance breathability. The smooth fibre surface absorbs and releases moisture efficiently. This supports the body's natural thermal regulating mechanism, keeping your skin feeling pleasantly cool and dry throughout the day and night.



SHOW YOUR TRUE COLOURS

TENCEL™ Lyocell fibres are able to preserve vibrant colours that don't fade over time. Its smooth surface allows colour dyes to penetrate deeply into the fibre structure, resulting in impressive colour brilliance. The possibility to dye TENCEL™ Lyocell. During the fibre production process means garments made by these fibres are less prone to fade, even after repeated washing.



SUSTAINABLE WOOD

EcoVero™ Viscose fibres are produced using pulp, which is derived from the renewable resourced wood as raw material. Lenzing purchases wood and pulp derived from responsibly managed forests. Since materials come from sustainable sources, they are certified FSC®(C041246) and PEFC™.



THE ECO-RESPONSIBLE VISCOSE

The production process of Lenzing EcoVero™ Viscose fibres generates up to 50% fewer emissions and water impact compared to generic Viscose. The CO₂ emissions and fossil resource usage are approximately half of the industry's average use. Environmentally conscious consumers can be assured that retailers and brands are incorporating genuine eco-responsible Viscose in their products.



EU ECOLABEL

Manufactured from conscientious methods and materials, Lenzing EcoVero™ Viscose fibres are certified with the internationally recognized EU Ecolabel. This label of environmental excellence is only awarded to products and services which have a significantly lower environmental impact throughout their lifecycle: from raw material extraction to production, distribution and disposal.

EcoVero™





ECO-INNOVATION

ProModal™ is a blend of two extraordinary natural fibres, Modal™ Tencel and TENCEL™ Lyocell. Both Lenzing Modal™ Tencel and TENCEL™ Lyocell originate from the wood pulp of managed tree farms, making ProModal™ a completely sustainable fibre. ProModal™ is fully biodegradable and manufactured according to Lenzing's high environmental standards.



UNIQUE BLEND

The combination of these two fibres is unique to Lenzing. ProModal™ offers softness, good moisture absorption and performance in one product. The special blending ratio, as well as a TENCEL™ Lyocell fibre developed especially for this application, makes textiles of ProModal™ distinctive. Lenzing is the exclusive supplier of this patent-pending fibre combination.



FIELDS OF APPLICATION

Individually, both fibres are well established in the textile market and are now united together. ProModal™ is the innovative fibre uniting softness and function for activewear, casualwear, intimate apparel and home textiles.



THE PRICE OF FASHION

The colour and fun of fashion come at a cost. Worldwide 48 million tons of textiles end up as waste every year, of which 73% end up in landfills or are incinerated. The pioneering REFIBRA™ technology involves upcycling a substantial proportion of cotton scraps, in addition to wood pulp, where the raw material is transformed to produce new virgin TENCEL™ Lyocell fibres.



KEEP IT CIRCULAR

In the emerging circular economy of the future, nothing is treated as waste. What is leftover from one process becomes input to another, so keeping it circulating. REFIBRA™ technology gives a second life to pre- and post-consumer sources - applying a loop production process that uses 95% less water than conventional cotton, with high resource efficiency and low environmental impact.



FEELS RIGHT

With their unique physical properties, TENCEL™ Lyocell fibres with REFIBRA™ technology deliver quality, performance and versatility in consumer applications. These fibres are the optimal choice as they bring the added benefit of circularity - diverting tons of cotton scraps from the waste stream.

REFIBRA™



Wool



NATURAL & BIO

Wool is 100% natural and renewable, grown year-round by sheep that are fed with water and grass. When a wool fibre is disposed of, it will naturally decompose in soil in a matter of years, slowly releasing valuable nutrients back into the earth.



EXCEPTIONAL PROPERTIES

Wool is incredibly soft, elastic, hygroscopic and thermally insulated. Indeed, Wool allows the production of exceptional fabrics that will make your sheets warm and comfortable, but also fresh when necessary, creating a thermal barrier that will keep the temperature constant throughout the night.



NATURALLY BREATHABLE

Wool fibre comprises amino acids that incorporate water molecules in the structure of the fibre; so, in the case of moisture or excessive sweating, they activate a breathing process in which the moisture is absorbed, releasing it back into the environment.

Small acts, when multiplied by
millions of people, can transform
the world.





THE ECOBOOK

2022

Rua Monte de Cima, 314, Gondar
4835-606 Guimarães, Portugal
www.aclimpex.com

www.aclimpex.com