



## Organic and Eco-Friendly Fabrics

### What is Organic?

Organic textiles are grown in controlled settings with no pesticides, herbicides, or other chemicals. Only natural fertilizers are used and the soil and water are monitored. If a fiber is “certified organic” its growing conditions have been monitored and certified by an agency from one of the several organic trade associations worldwide. A fabric can be called organic as long as 95% of the fabric contains the organic fabric.

At TÉLIO, we have Organic Cotton, and eco-friendly Bamboo, Hemp, Ramie and Tencel.

### Organic Cotton

- Organic cotton is cotton that has been grown on earth that has been without the use of chemical pesticides and defoliants for at least three years.
- Fertilizers that are used include compost, manure, naturally derived mineral and plant fertilizers and crop rotation. Insect controls involve the use of beneficial insects and natural pesticides certified for organic crops.
- Organic cotton feels softer, smells cleaner, and is less likely to trigger allergies. The sustainable farming practices used to grow organic cotton do not pollute groundwater, surface water, soil, or air. In fact, soil quality is actually improved by the production of organic cotton.
- In Canada there are no certifications for organic fibers/fabric but there are other global / national standards that govern what is considered to be organic that are involved in our production process.
- Certifications that our mills have, cover the entire process from when the cotton is grown and made into yarn (knit and woven)
- The Cotton Mills are certified under OCIA International Organic Certification. (OCIA = Organic Crop Improvement Association International)
- See end of booklet for our organic qualifications.

Our Organic Cotton:



\*\*\*see fabric headers for our range of available colours\*\*\*

## What is Eco-Friendly?

Eco-friendly fabrics are made from fibers that do not require the use of any pesticides or chemicals to grow. They are naturally resistant to mould and mildew and are disease free. Hemp, linen, bamboo and ramie are eco-friendly fibers.

## Bamboo

- Bamboo is one of nature's most sustainable resources; it's 100% biodegradable and is naturally regenerative. Bamboo grows extremely fast, up to one foot a day!
- Taken from the plant, bamboo is spun into yarns with no chemical modification by crushing the bamboo plant and then using natural enzymes to break the bamboo walls into a pulp so that the natural fibers can be mechanically combed out and spun into yarn. Bamboo fabric made from this process is sometimes called Bamboo Linen.
- Bamboo fabric is naturally anti-microbial, hypoallergenic and thermal regulating. It is also resistant to mould. Bamboo breathes and wicks moisture away due to its porous nature. Bamboo also has an excellent drape and a silky-cashmere feel.
- Our bamboo is naturally eco-friendly, not organic.

## \*\*\*Bamboo Viscose

- The other way to manufacture Bamboo is chemically, by regenerating the cellulose fiber, which make Bamboo Viscose.
- All fabrics manufactured with cellulose, whether its bamboo, plants or trees are rayon (viscose).
- Bamboo Viscose is considered eco-friendly, as the primarily source is naturally regenerative.

## Our Bamboo:



## Hemp

- Having the most eco-friendly potential, these plants grow quickly and densely which makes it difficult for weeds to hold on- no pesticides or herbicides needed. Hemp does not exhaust the soil and enables sustainability by leaving the soil in excellent condition for any succeeding crops.
- Hemp has long fibers perfect for spinning with minimum processing and because it comes in a variety of weights and textures it can be used to produce many different articles of clothing/ accessories.
- Hemp is an extremely durable fabric. It is also very insulating, absorbent and improves over time with washing and wearing. It reveals a new surface becoming softer with every wash. It is also UV resistant, highly breathable, fast drying, hypoallergenic and non-irritating to skin.

## Our Hemp:



## Ramie

- Ramie is a highly sustainable eco-friendly fiber. It is very strong and durable; 8 times stronger than cotton and even stronger when wet.
- Ramie is a flowering plant, and once the flowers begin to bloom, that is when the fibers are extracted from the plant for spinning, it can be harvested up to 6 times in a successful year!
- Ramie is naturally resistant to bacteria, mould and mildew as well as light damage, rot or insect attack. It does not require pesticides or herbicides to grow healthily.

### Our Ramie:



\*\*\*see fabric headers for our range of available colours\*\*\*

## Tencel

- Tencel (Lenzing Fibers' brand name for lyocell) is a new all natural fiber.
- It is made with wood pulp cellulose from the eucalyptus tree, it uses a non-toxic solvent during its production process and close to 100% of the solvent is recovered, and what is not, is broken down in water treatment plants.
- Tencel uses much less water than the production of non-organic cotton, which uses 100 times more water to produce.
- Tencel is extremely absorbent, irritation free (very smooth on skin), naturally prevents the growth of bacteria, and is 100% biodegradable, coming from forests that practice sustainability.

### Our Tencel:



\*\*\* Other tencel options include # 27160 & # 27971\*\*\*

## Eco-Friendly Dyeing Process:

### Mud Silk

- Mud silk is a fabric we carry that is finished in a very eco-friendly way. Although the fabric itself is a silk/rayon blend, the process in which it is dyed is very unique and organic.
- Once the silk fabric is ready to be finished, it is dyed with natural resources such as roots, grass and vegetable/berry juices (in our case, a root was used to achieve the brown dye). It is then washed several times with iron-bearing mud, a process that takes four weeks.
- The fabric is then laid out on the ground for a week where light rays from the sun and moon set the double-sided dyeing process.

### Our Mud Silks:



Other Style Numbers:  
27405, 28526

## Linen

- Linen fibers are taken from the Flax plant.
- Linen is eco-friendly because it is a natural fiber, meaning it takes little or no chemical fertilizer to grow. Also once it is harvested all parts of the plant can be used, making multiple by-products and nothing gets wasted.
- Linen is cool and very absorbent, great for summer wear. It is also extremely durable and strong, the strongest of all natural fibers.
- At TÉLIO we promote our natural linen as eco-friendly but not organic.
- As for our linen blends, we will be promoting it as an eco-friendly fabric. While these fabrics are not 100% environmentally friendly, they continue to provide fashionable fit and fall, and they are a step in the right direction.

### Our Linen:



We have a large selection of different linens and linen blends available.  
\*\*\*see fabric headers for our range of available colors\*\*\*

## Modal

What is Modal?

- Modal is a processed bio-based textile made from reconstituted cellulose from beech trees.
- Modal is considered a type of rayon. While rayon may be made of the wood pulp of a number of different trees, modal uses only beech wood.
- Like other types of rayon, originally marketed as "artificial silk," Modal is soft, smooth and breathes well. Its texture is similar to that of cotton or silk. It is cool to the touch and very absorbent. Like cotton, modal dyes easily and becomes color-fast after submersion in warm water. Modal drapes well and keeps its shape, even when wet.
- One of the advantages of Modal over cotton is its resistance to shrinkage, a notorious problem with cotton. Modal is also less likely to fade or to form pills as a result of friction. Its smoothness also makes hard water deposits less likely to adhere to the surface, so the fabric stays soft through repeated washings.
- Why is Lenzing Modal eco-friendly?
- The eco-friendly concept of Lenzing dwells on the raw materials used. This Lenzing Modal is extracted from beech wood. The beech tree is know as the "Mother of the Forest" and it veritable soil enhancer. Beech trees grow in Northern and Central Europe where they characterize the landscape of these regions. Beech groves are an important habitat and home to a wide variety of different animals. What makes the beech tree special is that it breeds naturally and can survive without the need of artificial irrigation.
- The unique think about the production of the Lenzing Modal is the absolute integration. The pulp is made by Lenzing itself and is responsible for the high quality of the fiber. In addition valuable by-products are extracted from the process such as acetic acid, sweetener and sodium sulfate for the production of glass.
- Last, Lenzing fibers come from nature and return to Nature since they are bio-degradable.

### Our Modal:



### Why Go Organic or Eco-Friendly?

- Social responsibility: Chemicals and pesticides invade drinking water and groundwater, polluting its fish and even reaching human consumption. Organic and eco fibers grow without any pesticides or chemical fertilizers.
- Biodegradable: Eco and organic fabric biodegrade naturally over time. Synthetic fibers eventually become waste and let off harmful toxins when they degrade.
- Health: Many people are allergic or dislike wearing synthetic textiles. Eco fabrics have all the properties of the new synthetic breathable fibers with added softness and drape. They feel better against the skin.
- Absorption: Not only do its chemicals reach into our groundwater, conventional clothing is worn next to our most porous organ- our skin. Organic and eco-fibers are natural and do not contain irritating chemicals. Many of them are also considered hypoallergenic and naturally anti-bacterial.
- Popularity: Organic foods have been around for awhile and it is a natural evolution that organic and eco friendly fabrics will also gain popularity. Eco and Organic fabrics once considered an alternative are now entering into the mainstream.

## Our Organic Qualifications (for cotton)

### OCIA Regulations

- OCIA International (Organic Crop Improvement Association) is a non profit, member owned organization which always provides its members with the highest quality of certification as well as providing access to global organic markets.
- There are different regulations depending on where the fabric is being produced and where it is being sold and OCIA takes each different area and it's regulations into account before certifying. All of our organic cotton is produced in China and India, and to sell in Canada there are no regulations or further certifications that a product has to fall under.
- To sell an "organic" product in the United States, the product must be certified under the NOP (National Organic Program). This is covered under the OCIA certification therefore we are certified under this program as well.

### EKO Quality Symbol

Another symbol that you will see on some of our Organic fabrics is the EKO Quality Symbol.



The square EKO quality symbol is an international quality symbol for Control Union Certifications sustainable textile products. It is used when raw materials originate from organic cultivation and are processed using the sustainable textile production methods.

When the EKO quality symbol is attached to our fabric, it means:

1. The fabric's fibres come from inspected, organic farming, from organic production methods or from NOP certified cotton.
2. The fabric complies with the Control Union Certifications Standards.

### Control Union Certifications Standards:

- The natural fibers have to be organic. The standards reject any textiles which contain heavy metals, which are toxic or non-degradable. The input of additives, which harm the environment, is prohibited during the total production process, and the finished products may not contain residues or harmful means.
- CU Certifications encompass all stages of textiles production which include raw materials origin, pre-treatment (washing, bleaching, etc.), dyeing and printing, after treatment, storage, labeling of the final product and packaging.

## Our Dyeing Process:

- The dyeing process also plays a role in the qualifications of organic and eco-friendly fabrics, as the entire production process is taken into account when given certification.
- Our dyeing process is certified with the Oeko Tex Standard 100, product class II, for products with direct contact to skin.
- Our fabrics whether knitted, blends, piece-dyed or yarn-dyed (in a range of 9 reactive dyestuffs and 3 disperse dyestuffs) and how they were finished were tested.
- The results of this inspection state that these fabrics meet the human-ecological requirements of the standards currently established and are therefore not harmful to skin or health whatsoever.
- Along with the fact that eco-friendly and organic textiles are usually non-allergenic and cause little or no irritation this standard allows customers to know that our textiles are safe and skin-friendly.

