



C.L.A.S.S. (Creativity, Lifestyle and Sustainable Synergy)
A unique eco-platform for textiles, fashion, lifestyle, home, design and communication

THE ECO-DICTIONARY

ECO-DICTIONARY

NATURALS & ORGANICS Produced following eco or organic criteria, including:

- wool
- silk
- cashmere
- cotton
- linen
- hemp

Organic Cotton

Organic cotton is picked from land cultivated according to the system of biological farming, without any GM seeds, chemical pesticide, synthetic fertilizer and defoliant. These substances are normally used in conventional cotton growing, causing great pressure on both the environment and population. In growing cotton organically, the fertility of the soil is guaranteed long term and water sources are better preserved.

C.L.A.S.S. support cotton-based products that wholly or partly comply with the above requirements – i.e. our support is designed to encourage a pathway to eco perfect products and respects our partner's efforts in that journey.

Organic Wool

The raw material used is certified and guaranteed, for each batch in accordance with strict legislative standards of its country of origin. Furthermore the use of pesticides, chemical additives and substances that are harmful to individual and animal health is not permitted. Also invasive techniques for animals' care are avoided. "Mulesing-free" means that the wool fibre used to produce the yarns comes from farms located in uncontaminated areas using ethical farming techniques respecting both the animals and the environment.

The transformation of the raw material into finished yarn is performed by means of bio-process systems that are free of chlorine and its derivatives. The dyeing process respects the rules of the Oeko-Tex standards. Similarly, the finishing phase is executed in full respect of the environment.

CLASS support wool based products that wholly or partly comply with the above requirements – i.e. our support is designed to encourage a pathway to eco perfect products and respects our partner's efforts in that journey

Mother-Of-Pearl (Superlativa™)

Organic by nature, from certified sustainably farmed oysters. It is a new and innovative way of working the mother of pearl to minimize waste and help re-seed the oceans. The technique experiments with colors and design effects by cutting extremely thin films of material from the shell and then layering them. The process is entirely done by hand to produce seamless sheets of finished product for use in lifestyle interior and product laminations. Superlativa™ has an Ecocrest® certification which is given only to eco-compatible marine sourced materials whose production contributes towards the improvement of the sea environment, the protection of endangered species and eco-systems and the rebuilding of self sustaining local community enterprise.

ECO FRIENDLY

Eco friendly products connote a wide range of products associated with an ethical approach to production, even if they do not wholly use fibres from biological farming, organic wools or herb dyes, but refer to a process or sourcing activity or production methodology that does not cause harm to man or his environment.

REPURPOSED & RECYCLED

This category refers to textile products that have been given a second life, helping to reduce a production or manufacturing carbon footprint, or helping to reduce costs, alleviate pressured raw material resources and also address issues of disposal, waste and recovery. These materials can include:

- recycled polyester/bottles
- recycled polyamide/nylon
- recycled cashmere
- recycled cotton/cotton denim
- recycled paper
- recycled leather
- recycled wool

INNOVATIVE RENEWABLES

These materials are based on the principle sustainability and natural, easily renewable resources all now using new technology innovation specifically designed to produce useful and desirable consumer materials with attributes that include appropriate aesthetics, performance and environmental credentials, combining the benefits of products that are natural in origin but with the performance of engineered high-tech fibres. Products should have a small carbon footprint and not be dependent on oil for source material or production. Below are some new commercial examples that demonstrate this growing category:

Ingeo™ is a fibre produced by NatureWorks LLC that is derived from 100% annually renewable plant sugar-based resources rather than oil. From proprietary processes a new biopolymer is produced (PLA) that is marketed under the Ingeo™ brand name. Applications range from bioplastics for packaging, electronics, casings and films as well as spun or filament fibres for apparel, hometextiles and nonwovens. The brand trades off the humble truth that using less oil is better for the environment. For example, if you convert just 10,000 polyester performance sports shirts to ones made with **Ingeo™**, it would give the fossil energy savings equivalent to 750 gallons of gasoline and the greenhouse gas savings equivalent to driving an average car 17,000 miles.

Lenpur™ cultivated wood fibre. Lenpur fibre is made from a pure cellulose resource, grown as a crop every year. It is eco-friendly and kind to your skin. The raw material, wood pulp, is harvested only from certified tree farms and the fibre is regenerated from that source through a clean chemical process. Its physical characteristics offer consumers good thermo regulation, natural breathability and good odour control.

Milkofil® is an innovative organic and healthy fibre that is spun into fibre derived from the protein in milk. This is particularly suited for contact with the skin in clothing, underwear, and bedding. Fibre made from casein, demonstrates durability and negative ion emissions and is therefore also beneficial for air quality, helps stimulate circulation and is a natural sterile antibacterial material. Milkofil® is used to make light weaves with a soft silky aesthetics that allow the skin to breathe and humidity to be absorbed. Milkofil® is a registered trade mark of Filati Maclodio, who make a variety of yarns both pure and in blend with cotton and Lenpur®.

SeaCell® is a cellulose fiber containing seaweed material (ascophyllum nodosum). The theory is that the skin can absorb some of the mineral rich nutrients found in the seaweed content. A cellulose-based fiber is manufactured using the closed loop Lyocell process which then serves as the functional substrate and seaweed is added as the active substance. This marine plant is rich in trace elements, believed to protect the skin and have anti-inflammatory properties, and, the structure of SeaCell® facilitates the active exchange of substances between the fiber and the skin-nutrients such as calcium, magnesium and vitamin E which when released activated by body temperature, creates a sense of active wellbeing.

Tencel®/Lyocell (a trademark brand name for Lyocell) is manufactured by Lenzing Fibres and is a new age natural cellulosic fiber, creating a fabric with excellent moisture absorption. In addition, Lyocell has an exceptionally soft hand and is found to be particularly agreeable to those with skin sensitivities. Lyocell was introduced to consumers in 1991 and is produced from wood pulp and shares many properties with other cellulosic fibres such as cotton, linen, ramie and rayon. Some key characteristics of Lyocell are that it is soft, absorbent, has unique drape, is very strong, wet or dry, and has the advantage of easy care. The key environmental benefits with Tencel are that it is harvested from sustainable raw materials and is produced in a clean closed loop system where the only effluent is pure drinkable water.

Crabyon® is totally new fiber based on the technology of making Chitin/Chitosan into fiber. The idea behind its development is the fact that chemical structure of Chitin/Chitosan is quite similar to that of cellulose. This idea led to development of technology to make Chitin/Chitosan viscose and it is manufactured by uniformly blending Chitin/Chitosan and cellulose viscose and extruding the blended viscose into spin-bath. Some key characteristics of Crabyon are excellent long-lasting antibacterial function. It has high moisture retention, better than any other cellulosic fiber. It's perfect for sensitive skin with its velvet touch and it does not irritate the skin. Physical properties of CRABYON are almost the same as those of rayon fiber. It dyes well maintaining excellent touch and hue. Chitin/Chitosan, with activation of lyozime, is a natural organic resource essential to conservation of biosystem of the earth. It has been developed with the idea of making the most use of this natural resource. It uses the crabshell waste from crab meat processing factories and as a raw material of Chitin/Chitosan, it is totally biodegradable.

Bamboo fiber today represents a new breed of viscose based regenerated fiber products that claim natural touch, moisture transport, comfort and cool aesthetics. Its key feature as an environmentally appropriate raw material is that it is sourced from bamboo which is a prolific natural crop and as such is annually renewable, not depleting forestry resources.

Modal is a (cellulose fiber) made from reconstituted beechwoodcellulose. It is about 50% more absorbent than cotton. It is designed specifically to create finer yarn counts and so finer softer fabrics with Micromodal being even finer and mainly produced by Lenzing AG in Austria. Dyeing like cotton it produces good depth and fastness and when manufactured responsibly is an excellent renewable innovation raw material for the CLASS library.

PROCESSES

Designed with the environment in mind, CLASS acknowledges and promotes any intermediate process that has been engineered to have less impact on man and the environment such as:

- chemical dyeing without using heavy metals or dangerous substances such as aromatic amines
- minimized finishing effluents
- water preservation systems
- natural tanned leathers(chrome free)

Natural dyeing - where natural dyes assure comfort, are non-toxic to the skin and give a unique chromatic sweetness to the most precious fibres. There are mainly two dyeing techniques:

1 - By infusion, according to an old dyeing technique using only flowers leaves bark and roots infusions. No addition of chemical additives is required.

2 - Using coloured pigments extracted through ecological processes by flowers, leaves, berries, roots barks and insect's secretions.

Dye uniformity and fastness are changeable and sometimes do not give the same end result as chemical dyestuffs, but because of this characteristic the textile adjusts over time tuning with the person.

Digital printing system - a process where less water and less ink is used creating fewer problems in effluent control. CLASS has lent its support to the **Inkmax** system as one such innovation dye product because it uses a unique range of eco-friendly nano particle, water based pigment dyes for Inkjet and screen printing, as well as piece dyed goods for everything from cotton, wool, nylon, viscose and polyesters.

These are just few examples of better raw materials that C.L.A.S.S. offers also in many, varied finished product forms. We will update our definitions each season as more innovations for the environment are brought to market.

What is C.L.A.S.S.?

CLASS is a unique forum for textiles, fashion, lifestyle, home and design, creating business opportunities through more innovative and responsible eco-sensible products designed for a better way of living.

CLASS is a global network of three showrooms based in Milan, London and New York, each supporting and promoting environmentally better products for fashion, home and design through a wide range of eco-textiles, yarns, processes, finished products and services. There is a comprehensive materials library in each showroom, available for businesses, designers and buyers.

CLASS helps connecting materials producers with designers and retailers, encouraging them to make more environmentally friendly choices.

For information, we invite you to contact one of our showrooms:

ITALY

CLASS Milan showroom
Corso Venezia 35
20121 Milano
Italia
Tel.+39 02 76018402
Contact: Giusy Bettoni
info@c-l-a-s-s.org

UK

CLASS London showroom
Contact: Sandy MacLennan,
sandy@c-l-a-s-s.org
Tel. +44 7973 429 782
Emma Tweedie
emma@c-l-a-s-s.org
Tel. +44 7711 515904

USA

CLASS New York showroom
Contact: Bahar Shahpar
bahar@showroomfourhundred.com
Tel. + 1 212 206 8319

* Document printed on recycled paper