MADE IN MILAN Italy Since 1938

Candiani DENIM

# How much are they Worth?





## This Comparison Proves How much greener your jeans can be if the fabric used is: CONVENTIONAL DENIM FABRIC

The jeans below are made with two different fabrics with equal color intensity but dyed with two different dyeing technologies. The water used to grow the cotton was not taken in to account in the data below.



### TOTAL CONSUMPTION FOR THIS JEAN WATER L CHEMICALS kg



Both jeans have been washed in order to look the same. The wash processes to achieve this look are different.



Amount of water (liters) and chemicals (kg) needed to produce 1,5m of fabric for this jeans



### M WASH





### DENIM WITH KITOTEX<sup>®</sup> + INDIGO JUICE<sup>®</sup>-----

WATER l CHEMICALS kg



## Certifications

## » Patent

- » Biodegradability and compostability certification
- » GOTS certification
- » Biodegradability in marine environment certification
- » Hypoallergenic certification
- » Skin Irritation certification





# -COREVATM

### WHY

Did you know that approximately 25 billion unworn garments endup in landfills every year? The fashion industry has a serious waste problem, and because of Petrol-Based synthetic yarns, discarded jeans take hundreds of years to decompose, leaving a negative impact on the planet.

With this problem in mind, Candiani set out to find a solution, COREVA™, the world's first compostable stretch denim.





## WHAT ARE THE BENIFITS

### CIRCULARITY of the raw materials

Thanks to COREVA™. Candiani has created a truly circular and regenerative model in which natural materials are turned into fabric, then garment, and, instead of being thrown away, COREVA™ returns to the earth naturally, leaving a positive impact on the environment.

Conventional Stretch

## WHAT IS IT

COREVA™ is an innovative technology developed and patented by Candiani Denim that uses a **GOTS** approved plant-based yarn obtained from 100% natural rubber. When combined with organic cotton this results in a **yarn that is** completely natural and plastic-free.

COREVA™ replaces conventional synthetic and petrol-based elastane often used in stretch denim with Candiani's new, custom-engineered, biobased component. With this technology Candiani has achieved an innovative compostable stretch denim fabric without compromising the elasticity, physical qualities, and durability of jeans.



As this technology is made with natural rubber, it is the first renewable, plant-based **alternative** to synthetic, non-renewable petrol-based elastane. COREVA™ has been tested to prove its compostability, in mature compost in **less than six months**, without releasing the toxic chemicals and microplastics of conventional elastane, in compliance with the EU Standard EN13432 - offering an eco-compatible, end-of-life **solution** for stretch denim.

COREVA™ Stretch



## Positive

## COMPOSTABILITY TEST

COREVA™ has undergone tests to assess biodegradability, disintegration, and eco-toxicity. These tests, when put together, determine compostability. The tests were conducted at **Innovhub**\* following the requirements of the **EU Standard EN 13432**.

As there is not yet a dedicated compostability test for fabric such as COREVA™, Innovhub selected the closest material category possible, packaging, to test COREVA™'s biodegradability and compostability status. The following are the EU Standard EN 13432 requirements to pass the compostability test:

\*Innovhub -**Experiment Station** 

for Industry is an accredited laboratory certified by ACCREDIA (National Accreditation Body), which guarantees the impartiality of all parties within the laboratory, the technical competence and professionalism of the staff, the adequate use of equipment, and the compliance of the organization with the management and technical requirements prescribed by the UNI CEI EN ISO / IEC 17025 standard.

- » After 12 weeks, no more than 10% of material pieces can be larger than 2mm.
- » Within 6 months, the test sample must produce at least 90% of the CO, that is generated by the control fabric (in this case, the control material used was a cellulose microcrystalline, Avicel).
- » There must be no evidence of negative environmental effects on the composting process.
- » There must be low levels of heavy metals (such as copper, nickel, lead, chromium etc.).
- » There must be no effect on bulk density, pH, salinity, volatile solids, total nitrogen, total phosphorus, total magnesium, total potassium, and ammonium nitrogen characteristics of the compost.

The requirements for the EN 13432 standard were established using the test method, ISO 14855:2012. This method examines aerobic biodegradability of plastics made of organic compounds, in controlled composting conditions with a constant 58±2 °C and 50% ±5% humidity.

## Impact

### Disintegration test

At the end of 12 weeks, the sample disintegrated at 98.1% of it's original value therefore, it falls within the limits specified.



Evaluation of the compost created by COREVA™ Once confirming the compostability of COREVA™, it was necessary to test the soil where the fabric composted to determine its ecotoxicity. The pythotoxic effect test\* was conducted with two different types of seeds: mung bean (Vigna radiata) and barley (Hordeum vulgare). The sowing was conducted in pots filled with a mixture containing the compost created by COREVA™ and compost created by control material. The results determined there was significantly more growth from the COREVA™ compost than the sample material.



\*Pythotoxic effect: test for assessing the effects of chemicals on plants. \*Germination: the growth of a seed into a young plant or a seedling





mung bean

## 7283 RR

### Future Heritage

### 96% Organic Cotton 4% Natural Rubber

This fabric has a 3x1 Right Hand Twill with an open weave constuction. It is composed of organic cotton and features a core-spun natural rubber weft. As this fabric has a marked salt and pepper effect, it has the most authentic denim look in our COREVA™ collection.



### RR 7283 SIOUX LOUNGE

The Sioux color is extremely versatile and boasts a medium-dark Indigo shade with a red cast. The Lounge finishing confers a natural hand feel.

Technical Specs:

Special Features:

% Stretch: 24.00 Organic Cotton

**Unwashed Weight:** 12 Oz/yd²



Washed Weight: 13 1/4 Oz/yd<sup>2</sup>





**V-Sizing** 

### RR 7283 PLATINO LOUNGE

Technical Special Specs: Features: % Stretch: Organic 24.00 Cotton **Unwashed Weight:** 12 Oz/yd² COREVA™ Washed Weight: 13 1/4 Oz/yd<sup>2</sup> **EarthColors**® **V-Sizing** 

**RR 7283** universe lounge



The Platino color is an extremely versatile super dark blue/black shade. The Lounge finishing confers a natural hand feel.

