



**ENVIRONMENTAL PRODUCT  
DECLARATION - DIAP**  
of warp-knitted synthetic fabrics  
Ink-jet printed fabrics



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Certificate of Conformity MGI0001d issued by Certiquality Srl

# ENVIRONMENTAL PRODUCT DECLARATION – DIAP of warp-knitted synthetic fabrics

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# Introduction

The Product Environmental Footprint (PEF) is a Life Cycle Assessment (LCA) methodology defined by the European Union. The objective is to provide a common Europe-wide measure of the environmental impacts of a product throughout its life cycle.

The national voluntary environmental footprint calculation scheme called 'Made Green in Italy' has adopted the PEF methodology.

The system under study is the production chain for the packaging of **Sensitive® Fabrics** articles, which takes place at the EUROJERSEY S.p.A. plant in Caronno Pertusella (VA).

# Organisation

EUROJERSEY SPA is the only European producer of **Sensitive® Fabrics**, a family of synthetic warp-knitted fabrics sold worldwide. The production cycle used to manufacture them is verticalised, in fact all the production phases are carried out at the production site in Caronno Pertusella (VA).

EUROJERSEY SPA has among its objectives the achievement of results of excellence in terms of product quality. These are obtained by using production processes designed with attention to the saving of natural resources and the prevention and mitigation of emissions to the external environment. **SensitivEcosystem®** is the ambitious "green" programme of EUROJERSEY SPA through which the Company undertakes in every phase and moment of its activity to guarantee the maximum respect for the environment through the implementation of processes that reduce the impact on the territory of the production of its range of **Sensitive® Fabrics**.

This project is made possible thanks to the commitment made every day within the Company by its 200 employees, which has become a shared ethical behaviour that guides every daily action, not only within company roles, but also and above all on a personal and human level. EUROJERSEY SPA has developed and certified its environmental management system according to UNI EN ISO 14001.

Since 2017, EUROJERSEY has been experimenting with the PEF methodology to measure and monitor the environmental impact of its products, validating its application through independent third-party certification.



# Description of products

Sensitive® Fabrics, consisting of elastane and polyamide, are used by EUROJERSEY S.p.A. customers for sportswear, underwear and swimwear. The fabrics can be grouped into the following families:

- Light colour dyed fabrics
- Dark colour dyed fabrics
- Ecoprinted fabrics
- Ink-jet printed fabrics
- Traditional printed fabrics
- Bonded fabrics
- Perforated fabrics
- RECO fabrics

# About the declaration

This Environmental Footprint Declaration refers to the "Environmental Footprint Assessment Study, synthetic warp-knitted fabrics (Revision no. 01 of 30/11/2023)".

Both documents have been independently verified by Certiquality Srl.

Environmental declarations relating to different schemes are not comparable.

The study was carried out using the European Union's Product Environmental Footprint (PEF) calculation method.

The software used is Simapro 9.5 and the calculation method is Environmental Footprint 3.1.

The PEF study is conducted in accordance with the following international documents and standards:

- ISO 14040:2021 Environmental management – Life cycle assessment - Principles and Framework
- ISO 14044:2021 Environmental management - Life cycle assessment - Requirements and Guidelines
- Recommendation 2021/2279/EU on the use of environmental footprint methods to measure and communicate the life cycle environmental performance of products and organisations
- Product Category Rules (PCR) - National Voluntary Scheme "Made Green in Italy", NACE 13.20.31.50, VERSION 1.0 valid until 28-07-2027
- DECREE No. 56 of 21 March 2018 Regulations for the implementation of the voluntary national scheme for the assessment and communication of the environmental footprint of products, called "Made Green in Italy", referred to in Article 21, paragraph 1, of Law No. 221 of 28 December 2015.

**This Environmental Footprint Declaration is available at: [www.sensitivefabrics.it](http://www.sensitivefabrics.it)**

# Description of products – printed fabrics

Printed Sensitive® Fabrics articles can be produced by three different processes :

- **Ecoprint [E]** is the printing technology developed by EUROJERSEY that offers significant aesthetic and, above all, environmental advantages. Coloured pigments create the design directly on **Sensitive® Fabrics**;
- **Ink-jet [J]** printing is undoubtedly EUROJERSEY's most innovative technique and allows for high-resolution designs with a three-dimensional effect and the highest degree of detail definition;
- The **cylinder printing** method, or **traditional [T] printing**, allows excellent penetration of the colour on the fabric. The design matched to a specific colour is engraved on the cylinder, which is printed with a very high level of detail.

# Description of products – printed fabrics

**Sensitive® Fabrics** articles can be produced in different grammages (weight per square metre). In particular, 4 fabric classes have been identified, each representing a range of grammages. Each class is homogeneous from the point of view of the production process and the variation of environmental loads within the class is proportional to the grammage.

Class	Grammage (g/m <sup>2</sup> )	Representative class average weight (g/m <sup>2</sup> ) PRINTED FABRICS 2022 <sup>[1]</sup>	Printing technique
Class 1	< 100	80.00	E, J, T
Class 2	100 ÷ 150	126.06	E, J, T
Class 3	150 ÷ 200	167.89	E, J, T
Class 4	> 200	227.85	E, J, T

*[1] Weighted average of the grammages (weights per square metre) of the articles produced, value used as reference in modelling*

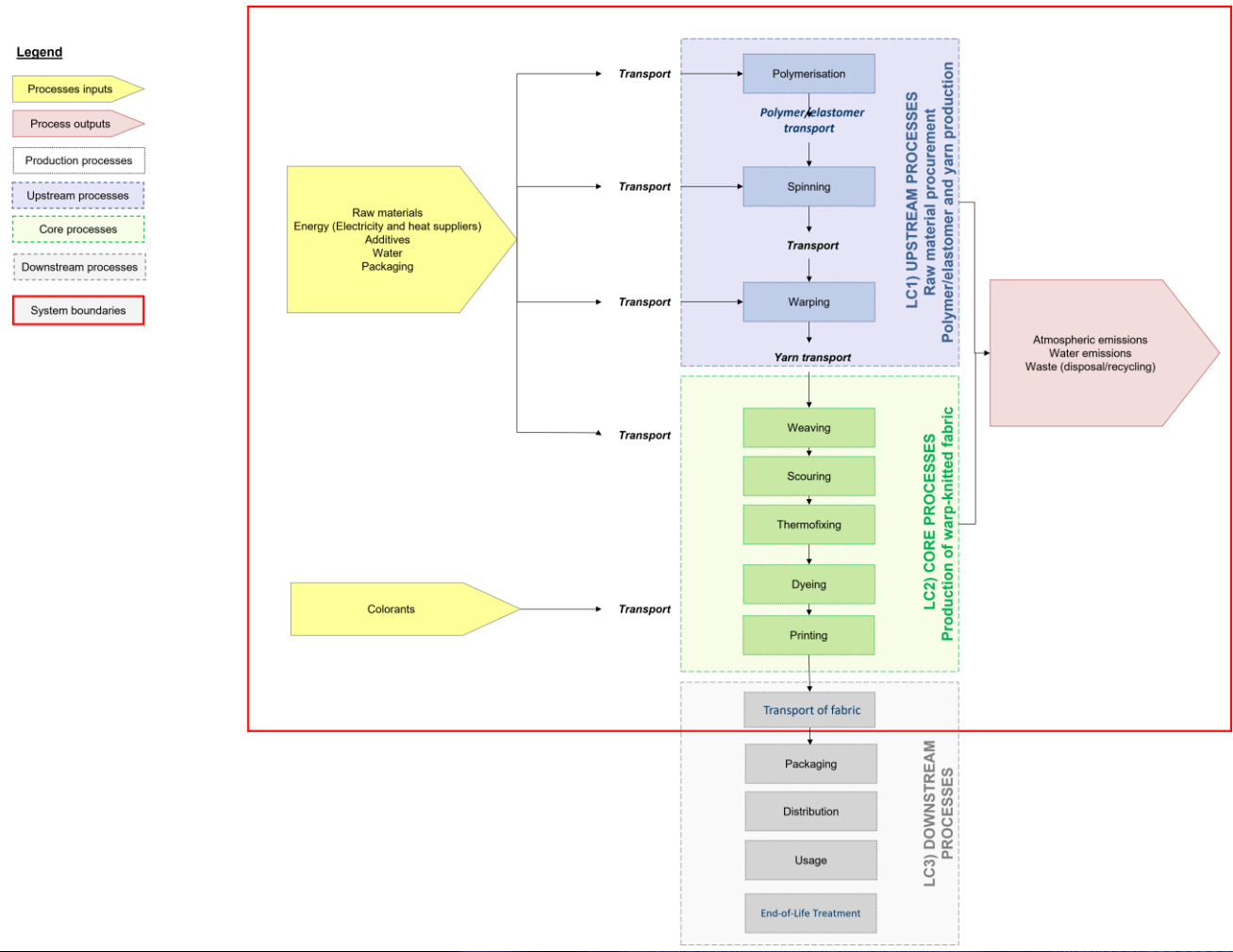


# Functional unit

The functional unit provides the reference to which input and output data are referred to the system considered. The functional unit (FU) has been defined in accordance with the PCR as follows:

<b>What</b>	<b>Ink-jet [J]</b>
<b>How much</b>	1 m <sup>2</sup> of warp-knitted synthetic fibre fabric characterised by its specific grammage.
<b>How well</b>	Suitable for making garments and other textile products.
<b>How Long</b>	Not applicable. The warp-knitted fabric is an intermediate product that in turn constitutes raw material for further production processes. The durability of the fabric depends on the end use, but considering that the use phase goes beyond the boundaries of the system in this study, it is not possible to define this parameter.
<b>Reference year</b>	From 01-01-2022 to 31-12-2022
<b>Composition</b>	Average composition 78% PA6 / 22% Elastane
<b>Weaving</b>	Warp-knitted
<b>Height of fabric</b>	Average height 140 cm

# Life cycle phases



The system boundaries determine the life cycle phases included in the study.

The study is defined as 'cradle-to-gate'.

The fabric is an intermediate product that constitutes raw material for further production processes mainly aimed at the manufacture of garments.

Durability, utilisation and end-of-life are therefore excluded from the system boundaries of this study.

The distribution phase of the finished product was also quantified as additional information.

Primary data were collected for all phases directly controlled by the Company (LC2: weaving, scouring, thermofixing, dyeing, printing, bonding). Primary supplier data were also collected for the production of incoming yarns (LC1).

# Traceability

As part of its commitment to careful and transparent value chain management, EUROJERSEY guarantees the **traceability** of its **Sensitive® Fabrics** manufacturing process. All the information necessary to ensure the traceability of the end product is recorded, starting with the identification of the yarn, the creation of a weaving order and the subsequent identification of the unbleached fabric, then moving on to the creation of an internal processing order on the fabric that takes into account the batch number of the chemical products used, through to the identification of the finished product. The traceability of each stage of the production process and of the raw materials used is guaranteed by the use of a dedicated management tool implemented by the Company in 2020.

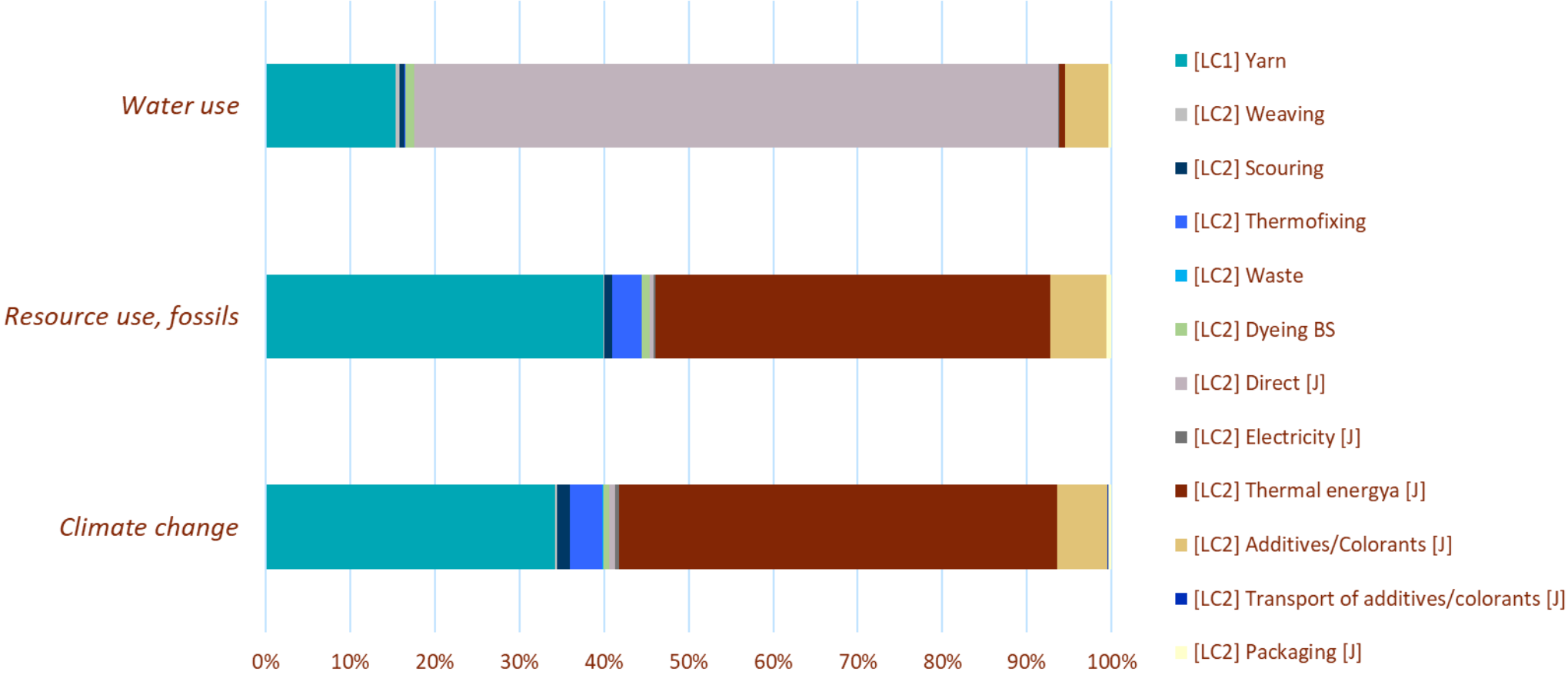
# Comparison with benchmark – Printed fabrics

Comparison of the results with benchmarks shows that all EUROJERSEY's printed **Sensitive® Fabrics** are in **Class A**.

Product		Class A threshold	EUROJERSEY score 2022	Product class
		mPt/m <sup>2</sup>	mPt/m <sup>2</sup>	
Ink-jet printed fabrics	Class 1	0.127	0.104	Class A
	Class 2	0.200	0.170	Class A
	Class 3	0.267	0.227	Class A
	Class 4	0.362	0.310	Class A



# Breakdown of impacts - Ink-jet printed fabrics



# Appendix 1 - Environmental Footprint results (LC1 & LC2)

Impact category	Unit	Ink-jet printed fabrics			
		Class 1	Class 2	Class 3	Class 4
Acidification	mol H <sup>+</sup> <sub>eq</sub>	4.03E-03	6.60E-03	8.77E-03	1.26E-02
Climate change	kg CO <sub>2</sub> <sub>eq</sub>	1.77	2.90	3.87	5.31
Ecotoxicity, freshwater	CTUe	16.94	27.50	36.57	53.70
Particulate matter	Dis. inc.	4.06E-08	6.63E-08	8.80E-08	1.29E-07
Eutrophication, marine	kg N <sub>eq</sub>	1.06E-03	1.73E-03	2.30E-03	3.26E-03
Eutrophication, freshwater	kg P <sub>eq</sub>	1.89E-04	3.08E-04	4.09E-04	5.94E-04
Eutrophication, terrestrial	mol N <sub>eq</sub>	1.05E-02	1.71E-02	2.28E-02	3.21E-02
Human tox., cancer	CTUh	1.05E-09	1.72E-09	2.29E-09	3.38E-09
Human tox. non-cancer	CTUh	8.38E-09	1.37E-08	1.82E-08	2.54E-08
Ionising radiation	kBqU235 <sub>eq</sub>	0.10	0.15	0.21	0,29
Land use	Pt	4.27	6.99	9.31	13.04
Ozone depletion	kg CFC1 <sub>eq</sub>	2.36E-07	3.89E-07	5.19E-07	7.06E-07
Photochem. Ozone form.	kgNMVOC <sub>eq</sub>	4.77E-03	7.82E-03	1.04E-02	1.45E-02
Resource use, fossils	MJ	28.48	46.58	62.18	85.26
Resource use, min.&metals	kg Sb eq	2.73E-06	4.48E-06	5.96E-06	8.25E-06
Water use	m <sup>3</sup> depriv.	2.40	3.95	5.27	7.16

# Appendix 2 - Additional information (LC3)

As additional information, the impact of the distribution of finished products was calculated

Impact category	Unit	Distribution of printed fabrics			
		Class 1	Class 2	Class 3	Class 4
Acidification	mol H <sup>+</sup> <sub>eq</sub>	6.99E-04	1.04E-03	1.36E-03	1.81E-03
Climate change	kg CO <sub>2</sub> <sub>eq</sub>	1.60E-01	2.40E-01	3.12E-01	4.15E-01
Ecotoxicity, freshwater	CTUe	1.05	1.56	2.04	2.71
Particulate matter	Dis. inc.	2.53E-09	3.78E-09	4.92E-09	6.55E-09
Eutroph., marine	kg N <sub>eq</sub>	2.76E-04	4.13E-04	5.37E-04	7.15E-04
Eutroph., freshwater	kg P <sub>eq</sub>	2.88E-06	4.31E-06	5.60E-06	7.46E-06
Eutroph., terrestrial	mol N <sub>eq</sub>	2.96E-03	4.42E-03	5.76E-03	7.66E-03
Human tox., cancer	CTUh	2.22E-11	3.31E-11	4.31E-11	5.74E-11
Human tox. non-cancer	CTUh	1.69E-09	2.53E-09	3.30E-09	4.39E-09
Ionising radiation	kBqU235 <sub>eq</sub>	8.26E-04	1.24E-03	1.61E-03	2.14E-03
Land use	Pt	2.40E-01	3.60E-01	4.68E-01	6.23E-01
Ozone depletion	kg CFC1 <sub>eq</sub>	2.60E-09	3.88E-09	5.05E-09	6.73E-09
Photoc. Ozone form.	kgNMVOC <sub>eq</sub>	9.41E-04	1.41E-03	1.83E-03	2.44E-03
Resource use, fossils	MJ	2.14E	3.20	4.16	5.54
Res. use, min.&metals	kg Sb eq	7.39E-08	1.11E-07	1.44E-07	1.91E-07
Water use	m <sup>3</sup> depriv.	4.08E-03	6.10E-03	7.93E-03	1.06E-02

# Appendix 2 - Additional information

The organisation is also certified according to **ISO 14001:2015**. The ISO 14001 compliance certification is renewed annually and attests that EUROJERSEY meets the environmental management requirements defined in the standards, maintaining the principles of sustainable development for the **Sensitive® Fabrics** range.

In addition, the products follow the sustainability programmes cited below:

- **OEKO-TEX®**: Certifies that Sensitive® Fabrics do not contain or release substances harmful to human health and represents a standard in the textile and clothing industry for consumer protection. Scrupulous laboratory analyses are used to check semi-finished and finished products for the presence or release of harmful substances such as pesticides, heavy metals, formaldehyde, aromatic amines and allergenic dyes. Requirements and limits are constantly updated on the basis of the latest medical-scientific knowledge.
- **COMPLIANCE WITH COMMUNITY REACH REGULATION**: REACH (Registration, Evaluation, Authorisation and Restriction of Chemicals) is a registration, evaluation and authorisation system that regulates the use and import of harmful chemicals. EUROJERSEY is actively engaged in compliance and verifies that suppliers meet safety standards for delivered raw materials, which is also attested by the OEKO-TEX certification.
- **CM 4SUSTAINABILITY**: The Chemical Management certificate declares the Company's adoption of the ZDHC protocol for the elimination of toxic and harmful substances in production processes. An approach that has led EUROJERSEY to reach the "excellence" level of the pathway and that is reflected in the decision to support as a contributor the ZDHC "roadmap to zero".
- **GLOBAL RECYCLED STANDARD (GRS)**: Certifies for all RECO products that they are made from recycled materials in compliance with environmental and social criteria extended to all stages of the production chain.



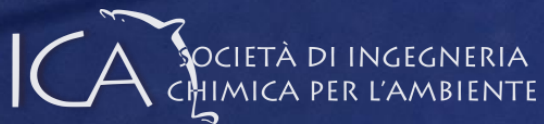


Proposer

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Technical support for the preparation of the PEF study

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