Organization Environmental Footprint (OEF)
and Product Environmental Footprint (PEF)
of Sensitive® Fabrics
synthetic warp-knitted fabrics

2020

Summary

Contents

Reference data

Organisation:	EUROJERSEY SPA
Location:	Via S. Giovanni Bosco, 260 - 21042 Caronno Pertusella (Va) Italy
Economic activity code (NACE)	13.91
Contacts	+39 02 966541 www.sensitivefabrics.it
Technical support	ICA - Società di Ingegneria Chimica per l'Ambiente S.r.l. – Bergamo, Italy
Independent review	CERTIQUALITY S.r.l. – Istituto di Certificazione della Qualità – Milan, Italy. N. Attestato PEF010/21 N. Attestato OEF003/21

1 Goals of the study

The study aims to quantify the impact generated by Sensitive® Fabrics production throughout their lifecycle, from the extraction of raw materials and energy production to the manufacturer's gate. The study used the evaluation method described in EU Recommendation 2013/179.

The system examined in this study is the supply chain leading to the production of Sensitive® Fabrics, which takes place at the EUROJERSEY S.p.A. plant in Caronno Pertusella (VA).

This study was conducted according to a *B2B* (*Business to Business*) perspective, nevertheless it is not intended to be used for comparisons or comparative assertions.

2 Scope of the study

2.1 Organisation

Organisation EUROJERSEY SPA

Location: Via S. Giovanni Bosco, 260 - 21042 Caronno Pertusella (Va) Italy

With the contribution of the following companies for the primary data of the raw materials analysed:

- RadiciYarn S.p.A.

Organisation: RADICI YARN SPA

Location: Via Provinciale, 1125IT - 24020 – Villa d'Ogna (BG)

- Nurel

Organisation: Nurel S.A.

Location: Ctra. Barcelona km 329 (N-IIa) 50016 Zaragoza (Spain)

- INVISTA UK Limited

Organisation: A&AT GmbH

Location: Maydown Works - United Kingdom

2.2 Products included in the Product Environmental Footprint (PEF) analysis and Functional Unit

The Product Environmental Footprint (PEF) analysis encompassed the following products (whose acronyms are given in brackets):

- Light Dyed Fabric [*CH*]
- Dark Dyed Fabric [*SC*]
- White Fabric to be Printed [*BS*]
- Fabric Printed with a Traditional Method [*T*]
- Fabric Printed with Ecoprint Method [*E*]
- Fabric Printed with Ink-Jet Method [*J*]
- Bonded Fabric [B]
- Perforated Fabric [*F*]
- Reco® Fabric [*R*]

Sensitive® Fabrics articles may be produced to different values of grammage (weight per square meter); in particular, four fabric classes have been identified, each of which represents a grammage range, as listed in the table below. Each class is homogeneous in terms of its manufacturing process; the variation in environmental footprint within each class is proportional to its grammage.

Product class	Grammage (g/m^2)	Average weight for the class (g/m^2) 2020 DYED FABRICS	Average weight for the class (g/m^2) 2020 PRINTED FABRICS
1	< 100	80,86	80,00
2	100 - 150	127,65	119,15
3	150 - 200	167,21	162,81
4	> 200	221,53	217,44

Table 2–1 Fabric classes

A **'Functional unit'** is the quantified performance of a product system to be used as a reference unit. The unit of analysis adopted in this environmental footprint study is **1 m^2 of Sensitive®Fabrics warp-knitted fabric**. It must also be applicable irrespective of the quality features of the fabric analysed: the first aspects to be taken into account are the grammage of the fabric and the dyeing or printing process used to produce it. The results of PEF studies are then correlated with the various product classes, as listed in Table 2–1, and specific production modalities (dyed fabric or printed fabric).

The performance and construction characteristics of the articles examined in this study are given in the Annex, broken down by grammage class.

What	Warp-knitted fabric
How much	1 m^2 of warp-knitted fabric in synthetic fibre characterised by a specific grammage.
How well	Description of fabric types: - grey - dyed with light colours - dyed with dark colours - white for printing - printed traditionally - ecoprint printed - inkjet printed - bonded - perforated - Reco®
How Long	The warp-knitted fabric is an intermediate product which in its turn serves as a raw material for further manufacturing processes. Fabric durability depends on its end use, but in view of the fact that a fabric's use stage extends beyond the boundaries of the system considered in this study, this parameter cannot be defined.
Reference Year	2020

Table 2–2 Definition of the system's boundaries

2.3 System's boundaries

According to Recommendation 2013/179/UE, system boundaries include all processes linked to the product supply chain relative to the unit of analysis. The study is defined **cradle to gate** since has been considered a partial product supply chain, from the extraction of raw materials (cradle) up to the manufacturer's "gate". As can be seen from Figure 2-2, the system boundaries include up-stream processes (raw materials and energy acquisition) and producer's site processes (site level). The use stage and end-of-life stages have been omitted because the fabrics are intermediate products which serve as raw materials in further production cycles

The cradle-to-gate system starts when resources are extracted from nature and ends when the product leaves the factory gate, thus the extraction of raw materials and the production process of intermediates and auxiliary materials have been considered. Transports of raw materials to the factory gate has been included. The processes included in the system boundaries can be divided into *foreground processes* (i.e. core processes in the product life cycle for which direct access to information is available) and *background processes* (i.e. those processes in the product life cycle for which no direct access to information is possible).

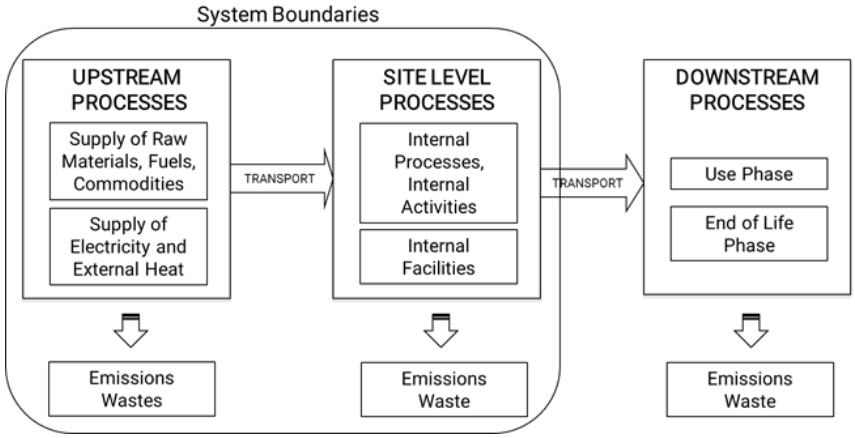

Figure 2-1: Schematic representation of system boundaries

Foreground processes	**Brief description**
Polyamide production	Polymer Production: - Extraction and transport of the main raw materials for the polymerisation process at the plant - Production and transport of additives/auxiliary materials for production/packaging at the plant - Energy consumption (electric and thermal power) - Water consumption - Emissions (to the air, water, ground) - End-of-life disposal of waste leaving the polymer production plants
Polyamide yarn production	Polyamide Yarn Production : - Polymer transport - Production and transport of additives/auxiliary materials for production/packaging at the plant - Energy consumption (electric and thermal power) for the spinning and possible the warping stage - Water consumption - Emissions (to the air, water, ground) - End-of-life disposal of waste leaving the yarn production plants
Elastane yarn production	Elastane yarn Production : - Extraction and transport of the main raw materials at the plant - Production and transport of additives/auxiliary materials for production/packaging at the plant - Energy consumption (electric and thermal power) - Water consumption - Emissions to the air, water, ground - End-of-life disposal of waste leaving the polymer production plants

Foreground processes	Brief description
Fabric production	Warp-knitted fabric Production: : - Energy consumption for scouring, thermofixing and weaving - Emissions in air, water, ground - End-of-life disposal of waste generated during the stages described above
Fabric dyeing	Dyed fabric Production: - Colorants and additives - Energy consumption - Emissions to the air, water, ground - End-of-life disposal of waste generated during the stages described above
Printing	Printed fabric Production : - Colorants and additives - Energy consumption - Emissions to the air, water, ground - End-of-life disposal of waste generated during the stages described above
Bonding	- Energy consumption - Adhesive - End-of-life disposal of waste generated during the stages described above
Perforing	- Energy consumption - End-of-life disposal of waste generated during the stages described above - Transports

Table 2–3 Foreground processes for which primary data is available

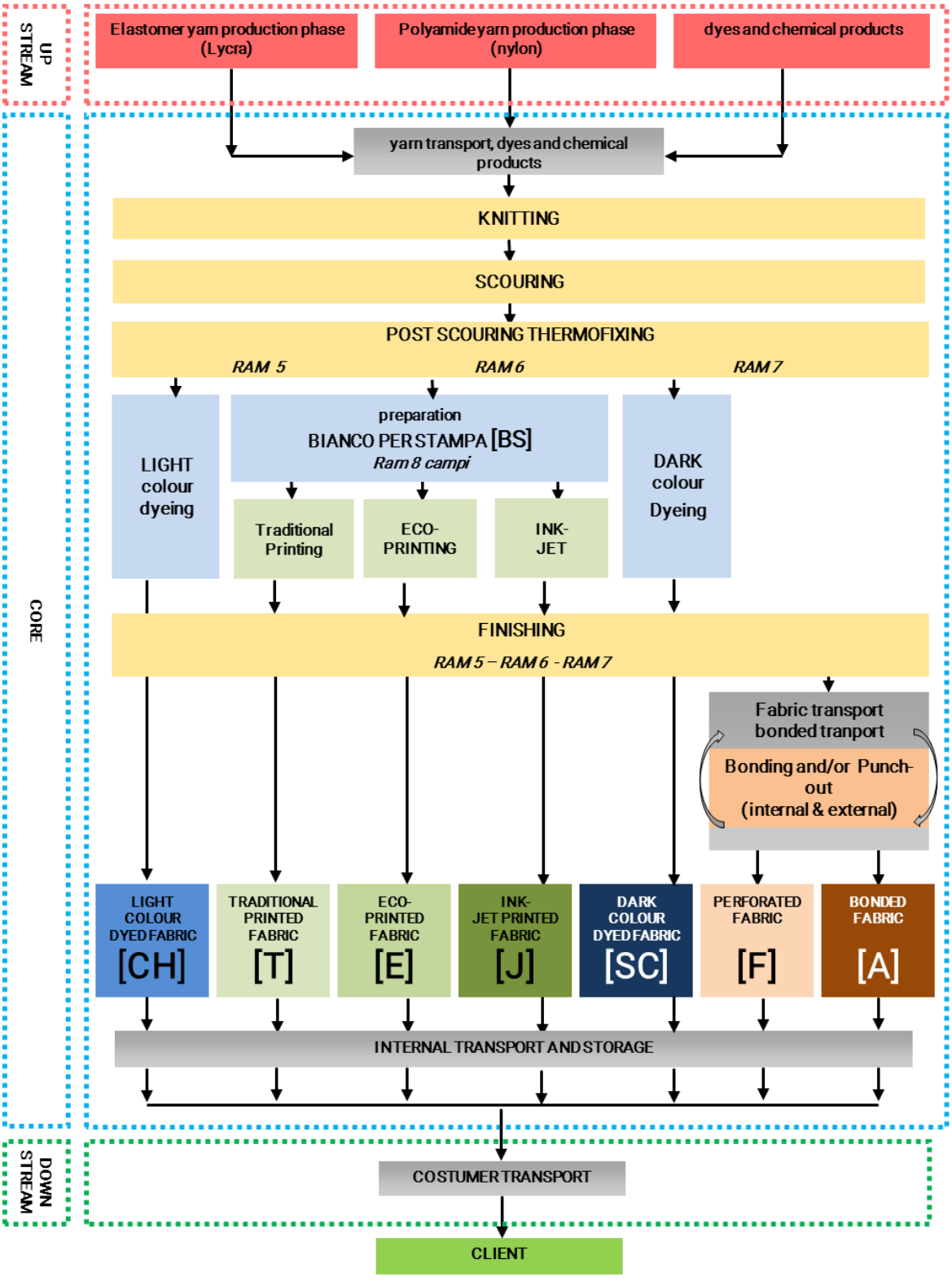

Figure 2-2 Schematic view of system boundaries considered in the PEF study

2.4 Impact category selection

The environmental footprint of the products was evaluated by applying all the impact categories and the relative methods provided for in Recommendation 2013/179/EU as amended according to document "Supporting information to the characterization factors of recommended EF Life Cycle Impact Assessment methods" (Fazio, S. Castellani, V. Sala, S., Schau, EM. Secchi, M. Zampori, L., EUR 28888 EN, European Commission, Ispra, 2018).

2.5 Assumptions and restrictions

All the data collected during the reference period of one year (2020) were taken into account in the analysis. The exclusion of particular consumption items for which was impossible to obtain reliable data from databases did not exceed 1% by mass of the total input. Infrastructures, capital goods and maintenance works were excluded for a cut-off of 1% the total mass of model inputs.

Conservative assessments were developed to model the transports between the different supply chain stages, while kilometres covered are specific and relative to the reference year.

In order to model in a representative way the processes relating to the additives and colorants used in the dyeing and printing stages, specific inventories were elaborated on the basis of specific material safety data sheets. The chemical composition was then modelled using the databases available. The items excluded from the modelling as a percentage of the total mass of model inputs are listed in the following Table. The Table also lists the proxy data used, always expressed as percentages of the total mass of model inputs.

	Dyeing CH	Dyeing SC	Dyeing BS	Printing T	Printing E	Printing J
Cut off	0,170%	0,188%	--	--	0,342%	--
Proxy data	0,213%	0,207%	0,073%	0,53%	0,038%	0,377%

Table 2–4 Items excluded from the modelling and proxy data (% of the total mass of material inputs)

2.6 Resource and emission utilization profile: inventory analysis

An inventory (profile) of all material/energy resource inputs/outputs and emissions into air, water and soil have been compiled as a basis for modelling the PEF. The model of the product supply chain have been constructed using facility and product-specific data, collecting facility-specific inventory during the reference period (2020).

Whenever possible, system specific inventory data were used. The study used specific data supplied by EUROJERSEY S.p.A. for all production stages directly controlled by the company.

Specific data collected by the main suppliers were also used to model the profiles of the polyamide 6 yarn (72%) and elastane yarn (28%). For background processes where the company does not have direct access to specific data, the information used were sourced from a third-party life-cycle-inventory database that complies with the data quality requirements of the PEF method. In particular all the background data used in the study were retrieved from the Ecoinvent v. 3.7 databank.

.

The allocation by mass of the environmental impacts for the different grammage values was developed on the basis of production volumes in the reference year.

3 Evaluation of data quality

All the data related to the processes under the direct control of EUROJERSEY S.p.A., as well as the data relating to the most significant raw materials, are primary data. The overall quality level of the data used is "*Very Good",* according with the requirements set out in the Recommendation 2013/179/EU.

4 Environmental footprint assessment stage (Life Cycle Impact Assessment (LCIA) stage)

The software used in modelling the environmental impact result was **SimaPro 9.2**.

The method used for the calculation phase was:

- *EF Method 3.0 v.1.01*

4.1 PEF results

The overall results of the PEF study relating to warp-knitted Sensitive® Fabrics by Eurojersey have been calculated for all the impact categories required by Recommendation 2013/179/EU.

The results were analysed to disclose the contribution associated to the different stages of the supply chain. In order to identify the most significant impact categories, the environmental impact results were normalised with respect to the reference data provided for in the latest reference guidelines for the implementation of PEF studies[1] and were subsequently weighted. The Table below reports the most significant impacts.

It was also possible to subdivide the value of each impact indicator between the various contributions, highlighting which may be correlated with production processes taking place during fabric manufacturing and which should be ascribed instead to other life cycle stages. In particular, the study details the impacts associated with the following stages:

- Spinning
- Knitting
- Scouring
- Thermofixing
- Dyeing/printing

Then, the dyeing and printing stages were analyzed in greater detail, so as to determine which *core processes* were correlated with the most significant impacts, with special regard to:

- Electric energy (EE) consumption
- Natural gas (ET) consumption
- Direct plant emissions (Direct emissions to the atmosphere and to water)
- Additives and colorants.

[1] *The normalisation factors were determined using statistical data relating to emissions to the air and the ground, and the consumption of extracted resources. Normalization factors for the Environmental Footprint Reference Package 3.0.*

Upstream+ Core Processes												
Impact category	**Unit**	**White for printing**				**Light colour dyed fabric**				**Dark colour dyed fabric**			
		Class 1	**Class 2**	**Class 3**	**Class 4**	**Class 1**	**Class 2**	**Class 3**	**Class 4**	**Class 1**	**Class 2**	**Class 3**	**Class 4**
Climate change – Total	kg CO_2 eq	0,799	1,230	1,704	2,241	0,928	1,434	1,971	2,595	1,023	1,581	2,16	2,850
Particulate matter	disease inc.	2,52E-08	3,93E-08	5,53E-08	7,74E-08	2,73E-08	4,27E-08	5,99E-08	8,34E-08	3,24E-08	5,06E-08	7,02E-08	9,70E-08
Ecotoxicity, freshwater	CTUe	11,270	17,817	25,268	36,724	13,731	21,693	30,348	43,451	20,613	32,479	44,475	62,166
Water use	m^3 depriv.	1,205	1,840	2,532	3,222	1,720	2,654	3,599	4,635	2,064	3,190	4,30	5,565
Resource use, fossils	MJ	12,909	19,790	27,412	35,654	15,656	24,136	33,106	43,196	17,161	26,475	36,17	47,254
Resource use, minerals and metals	kg Sb eq	9,24E-07	1,44E-06	2,03E-06	2,84E-06	1,22E-06	1,91E-06	2,65E-06	3,65E-06	3,04E-06	4,77E-06	6,39E-06	8,61E-06

Table 4–1: PEF study results – Dyed and white for printing fabrics – Upstream+Core Processes

Upstream+ Core Processes												
Impact category	**Unit**	**ECOPRINT PRINTING**			**INK-JET PRINTING**				**TRADITIONAL PRINTING**			
		Class 2	**Class 3**	**Class 4**	**Class 1**	**Class 2**	**Class 3**	**Class 4**	**Class 1**	**Class 2**	**Class 3**	**Class 4**
Climate change – Total	kg CO_2 eq	1,654	2,28	3,015	1,848	2,786	3,83	5,081	1,770	2,675	3,68	4,879
Particulate matter	disease inc.	5,75E-08	8,03E-08	1,11E-07	4,14E-08	6,33E-08	8,82E-08	1,21E-07	3,56E-08	5,49E-08	7,67E-08	1,06E-07
Ecotoxicity, freshwater	CTUe	36,134	50,292	70,153	21,834	33,487	46,685	65,325	32,034	48,715	67,482	93,117
Water use	m^3 depriv.	3,148	4,32	5,610	4,302	6,433	8,81	11,606	4,699	7,040	9,64	12,713
Resource use, fossils	MJ	26,619	36,74	48,118	30,943	46,541	63,97	84,480	28,862	43,528	59,84	78,980
Resource use, minerals and metals	kg Sb eq	3,00E-06	4,16E-06	5,67E-06	4,30E-06	6,44E-06	8,87E-06	1,20E-05	2,29E-06	3,48E-06	4,81E-06	6,55E-06

Table 4–2: PEF study results –Fabrics printed with traditional, ecoprint and ink-jet methods

Downstream Processes									
Impact category	**Unit**	**Dyeing**				**Printing**			
		Class 1	**Class 2**	**Class 3**	**Class-4**	**Class 1**	**Class 2**	**Class 3**	**Class 4**
Climate change – Total	kg CO_2 eq	0,020	0,030	0,039	0,050	0,020	0,028	0,038	0,050
Particulate matter	disease inc.	1,24E-09	1,88E-09	2,42E-09	3,16E-09	1,23E-09	1,76E-09	2,36E-09	3,11E-09
Ecotoxicity, freshwater	CTUe	0,214	0,325	0,420	0,547	0,212	0,305	0,409	0,538
Water use	m^3 depriv.	0,001	0,001	0,002	0,002	0,001	0,001	0,002	0,002
Resource use, fossils	MJ	0,290	0,440	0,567	0,740	0,287	0,413	0,553	0,728
Resource use, minerals and metals	kg Sb eq	5,816E-08	8,819E-08	1,138E-07	1,484E-07	5,761E-08	8,281E-08	1,108E-07	1,46E-07

Table 4–3: PEF study results –Transport of printed and dyed fabrics

4.1.1 Bonded Fabric

Bonded fabrics may be produced by combining two types of Sensitive® Fabrics.

Impact category	Unit	Bonded fabric BFT5		Bonded fabric SDM5 and GGT5	
		Upstream + Core Processes	Downstream Processes	Upstream + Core Processes	Downstream Processes
Climate change – Total	kg CO_2 eq	4,21	0,075	3,082	0,058
Particulate matter	disease inc.	1,28E-07	4,70E-09	9,19E-08	3,63E-09
Ecotoxicity, freshwater	CTUe	65,073	0,815	46,954	0,628
Water use	m^3 depriv.	7,63	0,003	5,650	0,002
Resource use, fossils	MJ	71,11	1,102	52,326	0,849
Resource use, minerals and metals	kg Sb eq	6,14E-06	2,21E-07	4,60E-06	1,70E-07

Table 4–4: PEF study results –Bonded fabric: upstream+core processes + downstream processes

Bonded fabric results were determined with reference to bonded fabrics produced with two class 2 dark dyed fabrics (SDM5 and GGT5) and two class 3 dark dyed fabrics (BFT5), which were deemed representative of the bonded fabric produced in 2020. It should be noted, however, that bonded fabric may also be made with light dyed fabrics and fabrics belonging to different grammage classes; in this connection, the impact relating to the bonding process alone was quantified separately. The Table below lists the results for the bonding stage expressed per m^2 of fabric.

Impact category	Unit	Results
Climate change – Total	kg CO_2 eq	0,080
Particulate matter	disease inc.	2,49E-09
Ecotoxicity, freshwater	CTUe	1,540
Water use	m^3 depriv.	0,094
Resource use, fossils	MJ	1,798
Resource use, minerals and metals	kg Sb eq	5,92E-07

Table 4–5: Results – bonding of 1 m^2 of fabric

4.1.2 Perforated Fabric

Bonded fabric results were determined with reference to perforated fabrics produced from class 2 dark dyed fabrics (GGR1), which is representative of the perforated fabric produced in 2020.

Impact category	Unit	Perforated Fabric GGR1	
		Up-stream + Core Processes	Downstream
Climate change – Totale	kg CO_2 eq	1,61	3,00E-02
Particulate matter	disease inc.	4,75E-08	1,88E-09
Ecotoxicity, freshwater	CTUe	23,968	3,25E-01
Water use	m^3 depriv.	2,88	1,25E-03
Resource use, fossils	MJ	26,94	4,40E-01
Resource use, minerals and metals	kg Sb eq	2,16E-06	8,82E-08

Table 4–6:Results – Perforated Fabric GGR1: up-stream+core processes + downstream processes

It should be noted, however, that perforated fabric may also be produced from light dyed fabrics and fabrics belonging to different grammage classes; for this reason, the impact related to the process was quantified separately. The Table below lists the results for the process expressed per m^2 of fabric.

Impact category	Unit	Results
Climate change – Totale	kg CO_2 eq	0,062
Particulate matter	disease inc.	1,38E-09
Ecotoxicity, freshwater	CTUe	0,540
Water use	m^3 depriv.	0,014
Resource use, fossils	MJ	0,870
Resource use, minerals and metals	kg Sb eq	9,39E-08

Table 4–7:Results – impacts of the process to realize 1 m^2 of perforated fabric

4.1.3 Sensitive Reco

Sensitive Reco results were determined with reference to 2 representative facrics during 2020, which were *Sensitive® Life Reco* e *Sensitive® Classic Reco* (class 3 dark dyed fabrics). Should be noted, however, that Reco® fabric may also be made with light dyed fabrics and fabrics belonging to different grammage classes.

Impact category	Unit	Sensitive® Life Reco and Sensitive® Classic Reco	
		Up-stream + Core Processes	Downstream
Climate change – Totale	kg CO_2 eq	1,49	3,87E-02
Particulate matter	disease inc.	9,31E-08	2,42E-09
Ecotoxicity, freshwater	CTUe	44,299	4,20E-01
Water use	m^3 depriv.	2,86	1,62E-03
Resource use, fossils	MJ	21,77	5,67E-01
Resource use, minerals and metals	kg Sb eq	1,39E-05	1,14E-07

Table 4–8: Results – Sensitive® Life Reco e Sensitive® Classic Reco: up-stream+core processes + downstream processes

4.2 Analysis of uncertainty in the results

Table 4-9 shows the results of the uncertainty analysis performed for each of the impact indicators determined with the EF Method (adapted) for class 4 fabrics (i.e., the fabric associated with the most significant impacts). The uncertainty associated with the results was evaluated by making use of the Montecarlo analysis with a 95% confidence interval. Analysing the results given in Table 4-9 we find that the impact indicator with the lowest standard deviation is GWP_{100}. The impact indicator associated with the highest uncertainty is the "*Water Footprint*" indicator.

Class	dyed fabric light Color	dyed fabric dark Color	Printed Fabric Ecoprint	Printed Fabric Inkjet	Printed Fabric Traditional
Water use					
Resource use, fossils					
Particulate matter					
Ecotoxicity, freshwater					
Climate change					

>50%	*Very high uncertainty. Unreliable result.*
10%<x<50%	*High uncertainty. Fairly reliable result.*
5%<x<10%	*Acceptable uncertainty. Reliability of the result.*
≤5%	*Low uncertainty. Reliability of the result.*

Table 4-9: Uncertainty analysis - 95% confidence interval – Class 4 traditionally printed fabric

5 OEF results

The following Table shows the most significant results of the OEF study.

Impact category	Unit	Upstream+Core Processes results
Climate change – Total	kg CO_2 eq	31.129.882
Particulate matter	disease inc.	0,92
Ecotoxicity, freshwater	CTUe	511.998.100
Water use	m^3 depriv.	61.067.319
Resource use, fossils	MJ	520.251.881
Resource use, minerals and metals	kg Sb eq	57

Table 5–1: OEF study results – Upstream + Site-level Processes

6 Annex: Performance characteristics of the fabrics

Sensitive® Fabrics **Characteristics**	**Reference standard**	**Unit of measure**	**CLASS**			
			1	**2**	**3**	**4**
COMPOSITION	EU Reg. no. 1007/2011	%	EA 28 PA 72	EA 27 PA 73	EA 28 PA 72	EA 20 PA 80
WEAVE/ STRUCTURE	Knitted fabrics ISO 8388:1998 ISO 4921:2005	=	Tricot			
WIDTH	UNI EN 1773:1998	cm	140±2%	140±2%	140±2%	160±2%
PILLING TEST WITH MARTINDALE	UNI EN ISO 12945:2002 Part 2	degree	4/5			
AQUEOUS EXTRACT pH	UNI EN ISO 3071:2006	-	4,0/7,5			
STRETCH PROPERTY	UNI EN 14704:2005 Part 1	% at 15 N	W= 145 L= 110	W= 130 L= 125	W= 120 L= 95	W= 100 L= 55

Table 6–1 Characteristics of Sensitive® Fabrics produced by Eurojersey

Performance features			**COLOURS**	
Sensitive® Fabrics	**Reference standard**	**Unit of measure**	**LIGHT (ivory)**	**DARK (black)**
			For all classes	
COLORANTS DYEING CLASSES	=	=	PRE-METALLISED ACIDS	PRE-METALLISED ACIDS
DIMENSIONAL VARIATIONS FROM WASHING	UNI EN ISO 6330:2012 UNI EN ISO 3759:2011 UNI EN ISO 5077:2008	%	W ±3% L -5%	W ±3% L -5%
COLOUR FASTNESS TO LIGHT*	UNI EN ISO 105 B02:2013	Colour degree	Degr 4	Degr 5
COLOUR FASTNESS TO WASHING WITH A MILD DETERGENT AT 40°C*	ISO 105 C10:2008	discharge	CO 4/5 PA 4/5 Degr 4/5	CO 4 PA 3/4 Degr 4/5
COLOUR FASTNESS TO WATER *	UNI EN ISO 105 E01:2013	discharge	CO 4/5 PA 4/5 Degr 4/5	CO 4 PA 3/4 Degr 4/5
COLOUR FASTNESS TO SEA WATER *	UNI EN ISO 105 E02:2013	discharge	CO 4/5 PA 4/5 Degr 4/5	CO 4 PA 3/4 Degr 4/5
COLOUR FASTNESS TO CHLORINE*	UNI EN ISO 105 E03:2010	Colour degree	Degr 3/4	Degr 4/5
COLOUR FASTNESS TO ACID SWEAT *	UNI EN ISO 105 E04:2013	discharge	CO 4/5 PA 4/5 Degr 4/5	CO 4 PA 3/4 Degr 4/5
COLOUR FASTNESS TO ALKALI SWEAT *	UNI EN ISO 105 E04:2013	discharge	CO 4/5 PA 4/5 Degr 4/5	CO 4 PA 3/4 Degr 4/5
COLOUR FASTNESS TO DRY RUBBING *	UNI EN ISO 105 X12:2003	discharge	CO 4/5	CO 4/5
COLOUR FASTNESS TO MOIST RUBBING *	UNI EN ISO 105 X12:2003	discharge	CO 4/5	CO 4

Table 6–2 Performance features of dyed Sensitive® Fabrics produced by Eurojersey

Performance features			**PRINTING**		
Sensitive® Fabrics	**Reference standard**	**Unit of measure**	**TRADITIONAL**	**ECO-PRINT**	**INK-JET**
			For all classes		
COLORANTS DYEING CLASSES	=	=	PRE-METALLISED ACIDS	PIGMENTS	NON PRE-METALLISED ACIDS
DIMENSIONAL VARIATIONS FROM WASHING	UNI EN ISO 6330:2012 UNI EN ISO 3759:2011 UNI EN ISO 5077:2008	%	W ±3% L -6%	W ±3% L -6%	W ±3% L – 6%
COLOUR FASTNESS TO LIGHT*	UNI EN ISO 105 B02:2013	Colour degree	Degr 3/4	Degr 3/4	Degr 3/4
COLOUR FASTNESS TO WASHING WITH A MILD DETERGENT AT 40°C*	ISO 105 C10:2008	discharge	CO 4 PA 3/4 Degr 4/5	CO 4 PA 3/4 Degr 4	CO 4 PA 3/4 Degr 4/5
COLOUR FASTNESS TO WATER *	UNI EN ISO 105 E01:2013	discharge	CO 4 PA 4 Degr 4/5	CO 4 PA 4 Degr 4/5	CO 4 PA 4 Degr 4/5
COLOUR FASTNESS TO SEA WATER *	UNI EN ISO 105 E02:2013	discharge	CO 4 PA 4 Degr 4/5	CO 4 PA 4 Degr 4/5	CO 4 PA 4 Degr 4/5
COLOUR FASTNESS TO CHLORINE*	UNI EN ISO 105 E03:2010	discharge	Degr 3/4	Degr 3/4	Degr 3/4
COLOUR FASTNESS TO ACID SWEAT *	UNI EN ISO 105 E04:2013	discharge	CO 4 PA 4 Degr 4/5	CO 4 PA 4 Degr 4/5	CO 4 PA 4 Degr 4/5
COLOUR FASTNESS TO ALKALI SWEAT *	UNI EN ISO 105 E04:2013	discharge	CO 4 PA 4 Degr 4/5	CO 4 PA 4 Degr 4/5	CO 4 PA 4 Degr 4/5
COLOUR FASTNESS TO DRY RUBBING *	UNI EN ISO 105 X12:2003	discharge	CO 4/5	CO 4/5	CO 4/5
COLOUR FASTNESS TO MOIST RUBBING *	UNI EN ISO 105 X12:2003	discharge	CO 4	CO 4	CO 4

Table 6–3 Performance features of printed Sensitive® Fabrics produced by Eurojersey