

Owner: Kvadrat High Performance Textiles B.V.
No.: MD-25155-EN
Issued: 19-12-2025
Valid to: 19-12-2030

3rd PARTY VERIFIED

EPD

VERIFIED ENVIRONMENTAL PRODUCT DECLARATION | ISO 14025 & EN 15804



Owner of declaration

Kvadrat High Performance Textiles B.V.
Kieftse 18
7151 HZ Eibergen, Netherlands
VAT no. NL007738250B01
www.kvadrat.dk/en/kvadrat-shade



Issued:

19-12-2025

Valid to:

19-12-2030

Basis of calculation

This EPD is developed and verified in accordance with the European standard EN 15804+A2.

Comparability

EPDs of construction products may not be comparable if they do not comply with the requirements in EN 15804. EPD data may not be comparable if the datasets used are not developed in accordance with EN 15804 and if the background systems are not based on the same database.

Validity

This EPD has been verified in accordance with ISO 14025 and is valid for 5 years from the date of issue.

Use

The intended use of an EPD is to communicate scientifically based environmental information for construction products, for the purpose of assessing the environmental performance of buildings.

EPD type

- ☒ Cradle-to-gate with modules C1-C4 and D
☐ Cradle-to-gate with options, modules C1-C4 and D
☐ Cradle-to-grave and module D
☐ Cradle-to-gate
☐ Cradle-to-gate with options

Programme

EPD Danmark
www.epddanmark.dk



- ☐ Industry EPD
☒ Product EPD

- ☐ Product specific
☒ Average
☐ Worst Case

Declared product(s)

Roller blind textiles by the brand Kvadrat Shade

Number of declared datasets/product variations: 9

Production site

7151 HZ Eibergen, Netherlands

Use of Guarantees of Origin

- ☐ No certificates used
☒ Electricity covered by GoO
☐ Biogas covered by GoO

Declared unit

1 m² of roller blind textile

Year of production site data (A3)

2024

EPD version

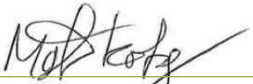
1st version

CEN standard EN 15804 serves as the core PCR

Independent verification of the declaration and data, according to EN ISO 14025

- ☐ internal ☒ external

Third party verifier:


Morten Sørensen
epddanmark


Martha Katrine Sørensen
EPD Danmark

Life cycle stages and modules (MND = module not declared)

Product			Construction process		Use							End of life				Beyond the system boundary
Raw material supply	Transport	Manufacturing	Transport	Installation process	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-construction demolition	Transport	Waste processing	Disposal	Re-use, recovery and recycling potential
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
X	X	X	ND	ND	ND	ND	ND	MD	ND	ND	ND	X	X	X	X	X

Product information

Product description

This EPD covers nine types of roller blind textiles sold under the brand Kvadrat Shade. The main product components are shown in the table below.

	Polyester	Blockout-coating	Metallization	Finishing chemical
Weight-% of declared product				
Retta/Silvretta	95,8 – 96%	-	0 – 0,2%	4,0%
Retta blackout	50%	50%	-	-
Athos	70%	30%	-	-
Enviro-screen	95,8%	-	0,2%	4,2%
Apo	95,8%	-	0,2%	4,0%
Clearview	95,8%	-	0,2%	4,0%
Ferrite	95,8%	-	0,2%	4,0%
Graphite	95,8%	-	0,2%	4,0%
Unlit blackout	49,8%	49,8%	0,2%	0,2%

Product packaging:

The composition of the sales- and transport packaging of the product is shown in the table below, given in kg/m² and as weight-%.

	Cardboard	Plastic	Wooden pallet
Weight of product packaging [kg]			
Retta/Silvretta	0,057	0,0025	0,017
Retta blackout	0,116	0,0050	0,035
Athos	0,049	0,0021	0,015
Enviro-screen	0,049	0,0021	0,015
Apo	0,047	0,0021	0,014
Clearview	0,045	0,0020	0,014
Ferrite	0,057	0,0025	0,017
Graphite	0,047	0,0021	0,014
Unlit blackout	0,075	0,0033	0,023
Weight-% of product packaging			
All products	74,4%	3,2%	22,4%

Representativity

This declaration, including data collection and the modeled foreground system including results,

represents the production of 1 m² of roller blind textiles on the production site of Kvadrat High Performance Textiles B.V. located in Eibergen, Netherlands. Product specific data are based on average values collected in the year 2024. Background data are based on the Sphera version 10.9 and the Ecoinvent 3.10 database and are less than 10 years old. Generally, the background datasets used are of high quality, following the data validation requirements specified in EN 15804+A2, Annex E. The majority of the datasets are relatively recent, being only a few years old.

Hazardous substances

The products declared within this EPD do not contain substances listed on the "Candidate List of Substances of Very High Concern for authorisation".

(<http://echa.europa.eu/candidate-list-table>)

Product(s) use

Roller blind textile for interior applications.

Essential characteristics

Product properties and certifications of the declared products are stated under *List of products*.

Additional information about the roller blind textiles can be obtained by contacting the manufacturer or on the manufacturer's website:

www.kvadrat.dk/en/kvadrat-shade

Reference Service Life (RSL)

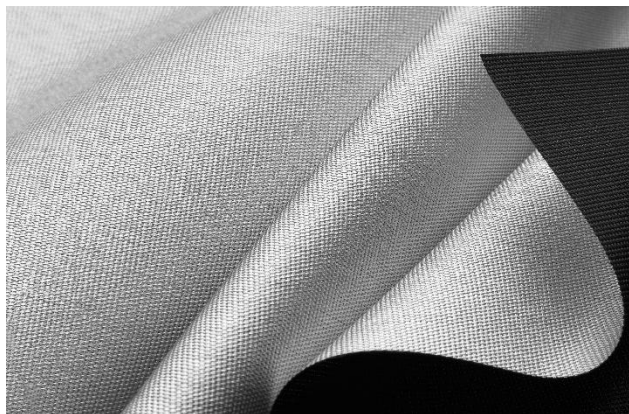
No RSL is declared. This EPD is type cradle to gate with modules C1 - C4 and D and does not include the use stage.

List of product(s)

This EPD covers nine roller blind textiles, as presented in the table below. For specific details about the products, please consult the company's website at www.kvadrat.dk/en/kvadrat-shade, or contact KHPT directly via phone at +31 545 463333 or by email at contact@kvadratshade.com.

Product properties & certifications of the declared products by KHPT					
ID	Product description	Product weight	OEKO-TEX® 100 IV	Greenguard Gold	C2C Bronze v3.1
P1	Retta/Silvretta¹ Retta is a woven, yarn-dyed textile made from 100% polyester yarns. Silvretta is the metallized version of Retta.	260 g/m ²	✓	✓	-
P2	Retta Blockout Retta Blockout is a woven, yarn-dyed textile made from 100% polyester yarns with single side blockout coating.	525 g/m ²	✓	✓	-
P3	Athos Athos is a woven, yarn-dyed textile made from 100% polyester yarn with double sided blockout coating.	220 g/m ²	✓	✓	-
P4	Enviroscreen Enviroscreen is a woven textile made from 100% FR recycled polyester yarns (textile-to-textile). It features a metallized surface.	220 g/m ²	✓	✓	✓
P5	Apo Apo is a woven textile made from 100% Trevira FR polyester yarns. It features a metallized surface.	215 g/m ²	✓	✓	✓
P6	Clearview Clearview is a woven textile made from polyester yarns. It features a metallized surface.	205 g/m ²	✓	✓	✓
P7	Ferrite Ferrite is a woven textile made from 100% recycled polyester yarns (ocean bound). It features a metallized surface.	260 g/m ²	✓	✓	-
P8	Graphite Graphite is a woven textile made from 100% recycled polyester yarns (textile-to-textile). It features a metallized surface.	215 g/m ²	✓	✓	-
P9	Unlit Blockout Unlit Blockout is a woven textile made from 100% polyester yarns with blockout coating. It features a metallized surface.	340 g/m ²	✓	✓	-
¹ Note: The roller blind textile is available in two versions: with and without aluminium backing (metallization). The EPD is valid for both variations of the textile, with the environmental impact based on an average result of the two product variants.					

Picture of product(s)



LCA background

Declared unit

The LCI and LCIA results in this EPD relate to 1 m² of roller blind textile.

	Declared unit	Weight of textile	Conversion factor to 1 kg
	m ²	kg/m ²	-
Retta/Silvretta	1	0,26	3,85
Retta blackout	1	0,525	1,90
Athos	1	0,22	4,55
Enviro-screen	1	0,22	4,55
Apo	1	0,215	4,65
Clearview	1	0,205	4,88
Ferrite	1	0,26	3,85
Graphite	1	0,215	4,65
Unlit blackout	1	0,34	2,94

Functional unit

Not defined.

PCR

This EPD is developed according to the core rules for the product category of construction products in EN 15804:2012+A2:2019.

Energy modelling principles

Foreground system:

Guarantee of Origin (GoO) certificates are used in this EPD, covering the consumption of electricity at the production facility in Eibergen. The certificate guarantees 100% green electricity from renewable sources, being a mix of wind, solar and biomass from Europe. The electricity mix is modeled as being evenly sourced from wind, solar, and biomass.

Information about the energy mix in the foreground system:

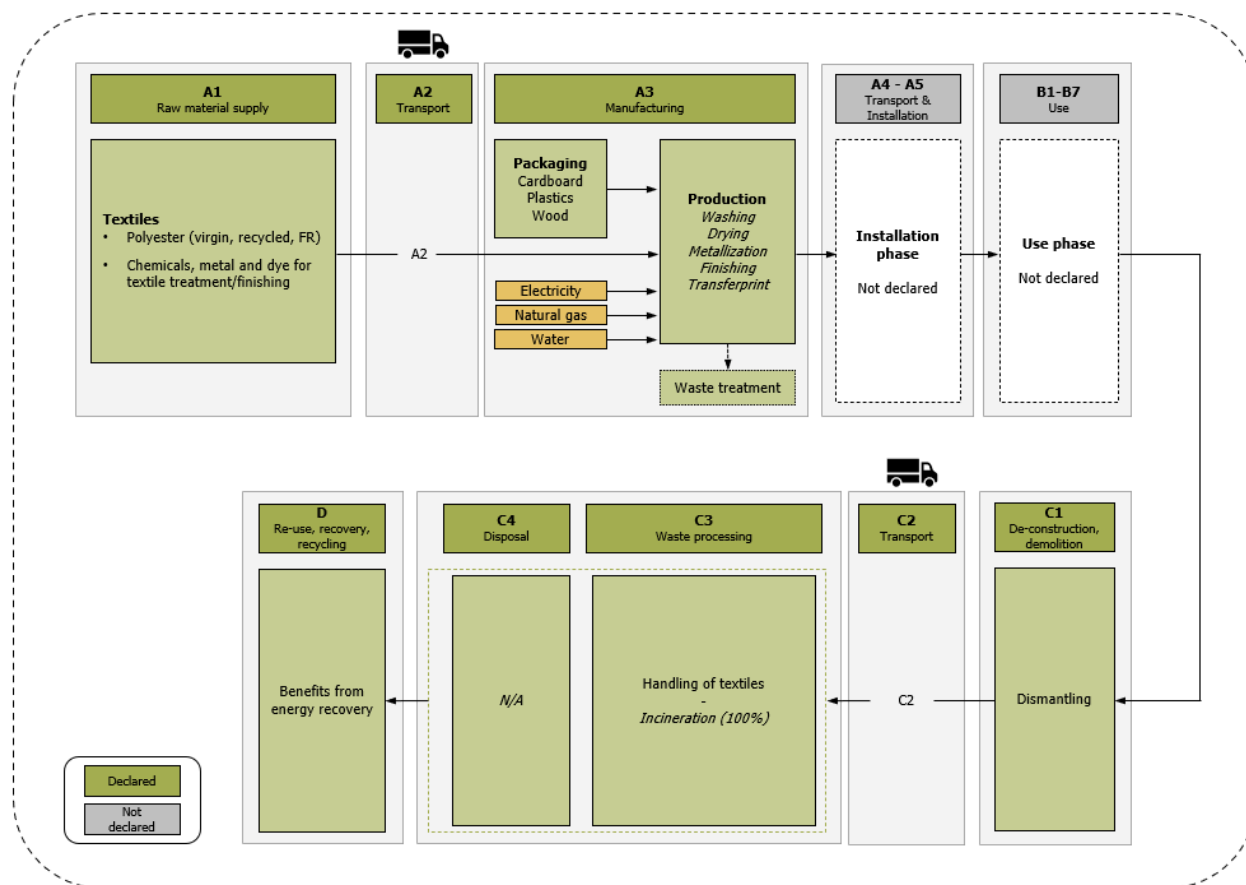
Energy mix	EF	Unit
Electricity from solar, RER, ref. year 2021	0,0110	kg CO ₂ e/kWh
Electricity from wind power, RER, ref. year 2021	0,0131	kg CO ₂ e/kWh
Electricity from biomass (solid), RER, ref. year 2021	0,0369	kg CO ₂ e/kWh
Thermal energy from natural gas, NL, ref. year 2021	0,0659	kg CO ₂ e/MJ

Background system:

Processes in the background system are modelled with average data from the Sphera or Ecoinvent database. Specific energy inputs upstream the production are modelled using the national or regional residual mix. The grid mix is used for specific energy inputs downstream production.

Flowdiagram

The flow diagram below presents the main processes included in the product system of the declared products. Note that the diagram covers all products declared in this study, and therefore, not all processes are necessarily relevant for each declared product.



System boundary

This EPD is based on a cradle-to-gate study with modules C1-C4 and module D. 100 weight-% has been accounted for in this study.

The general rules for the exclusion of inputs and outputs follows the requirements in EN 15804, 6.3.5, where the total of neglected input flows per module shall be a maximum of 5 % of energy usage and mass and 1 % of energy usage and mass for unit processes.

Product stage (A1-A3) includes:

- A1 – Extraction and processing of raw materials
- A2 – Transport to the production site
- A3 – Manufacturing processes

The product stage comprises the acquisition of all raw materials, products and energy, transport to the production site, packaging and waste processing up to the “end-of-waste” state or final disposal. The LCA results are declared in aggregated form for the product stage, which means, that the sub-modules A1, A2 and A3 are declared as one module A1-A3.

The manufacturing of roller blind textiles takes place at the production site of Kvadrat High Performance Textiles (KHPT) in Eibergen, Netherlands.

KHPT is supplied with raw fabric from weavers. The fabric for roller blinds declared in this study are made of 100% polyester (virgin, recycled, or FR). Selected fabrics undergo coating and/or dyeing externally. The coating is applied to certain textiles for block-out applications (single

or double sided). At KHPT these fabrics are treated with different finishes, depending on the final product. The treatment processes include:

1. Washing: The incoming fabric is first thoroughly cleaned. It is soaked in a water-based surfactant solution and thereafter washed and rinsed.

2. Drying and fixation: After washing, the fabric is dried and stabilized using a stenter frame, where it is exposed to high temperatures.

3. Metallization: Some fabrics undergo metallization to enhance light-blocking or reflective properties. In this process, a thin layer of aluminium is deposited onto the fabric using Physical Vapour Deposition (PVD) in a vacuum chamber.

4. Finishing: To achieve the required stiffness and stability for roller blinds, the fabrics are finished using a polyurethane dispersion (PUD). The fabric then undergoes heat treatment in the stenter frame to dry, cure, and set the coatings. If required, a flame retardant is applied at this stage.

5. Transfer printing: The fabrics not dyed externally are then dyed. Sublimation transfer printing is used, where color is printed onto paper, which is then pressed against the fabric in a heated calendar. At high temperature, the dye vaporizes and is absorbed into the textile fibers.

6. Packaging: The finished textiles are packaged in cardboard tubes sealed with plastic caps and wrap foil. The products are then ready for shipment to customers.

Construction process stage (A4-A5) includes:

Not declared.

Use stage (B1-B7) includes:

Not declared.

End of Life (C1-C4) includes:

C1 – Dismantling

C2 – Transport to recycling or disposal

C3 – Waste processing

C4 – Landfilling

The European market is the dominant customer base of the roller blind systems and therefore end-of-life processes for the roller blind textile are modelled based on a European scenario. It is chosen to model a 100% scenario, where incineration is assumed to be the most likely waste management route, reflecting current and near-future practices in the geographical areas where the products are used.

The end-of-life stage begins with dismantling of the roller blind textile from the building in which it is installed. It is assumed that the removal of the textile is performed manually or with handheld power tools, with any associated electricity consumption deemed negligible.

From the building site, the textile is transported to a waste treatment facility. In this EPD, a transport distance of 50 km is assumed. Waste treatment of the textile is based on a scenario where 100% of the textiles are treated by waste incineration with energy recovery. Any loads or benefits from waste incineration is declared in module D.

Re-use, recovery and recycling potential (D) includes:

Module D represents benefits or loads beyond the system boundary.

In this EPD, module D includes energy recovered from waste incineration. It is modeled as avoided production of European electricity and heat.

LCA results

LCA results, Retta/ Silvretta

The declared results for Retta/Silvretta represent an average (simple). This is considered valid, as the product's GWP-total impact indicators do not deviate by more than 10% from the declared average.

ENVIRONMENTAL IMPACTS PER 1 M ² TEXTILE							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
GWP-total	[kg CO ₂ eq.]	3,27E+00	0,00E+00	1,19E-03	1,23E-01	0,00E+00	-1,74E-01
GWP-fossil	[kg CO ₂ eq.]	3,22E+00	0,00E+00	1,17E-03	1,23E-01	0,00E+00	-1,73E-01
GWP-biogenic	[kg CO ₂ eq.]	4,20E-02	0,00E+00	5,98E-06	-4,04E-05	0,00E+00	-8,89E-04
GWP-luluc	[kg CO ₂ eq.]	5,58E-03	0,00E+00	1,24E-05	9,36E-06	0,00E+00	-2,37E-04
ODP	[kg CFC 11 eq.]	4,34E-06	0,00E+00	2,00E-16	5,75E-14	0,00E+00	-1,62E-12
AP	[mol H ⁺ eq.]	1,32E-02	0,00E+00	2,01E-06	3,72E-04	0,00E+00	-2,03E-04
EP-freshwater	[kg P eq.]	7,94E-04	0,00E+00	3,24E-09	9,01E-09	0,00E+00	-1,57E-07
EP-marine	[kg N eq.]	3,18E-03	0,00E+00	8,34E-07	1,69E-04	0,00E+00	-5,89E-05
EP-terrestrial	[mol N eq.]	2,68E-02	0,00E+00	8,90E-06	1,92E-03	0,00E+00	-6,58E-04
POCP	[kg NMVOC eq.]	1,20E-02	0,00E+00	1,82E-06	4,36E-04	0,00E+00	-1,60E-04
ADPm ¹	[kg Sb eq.]	1,69E-05	0,00E+00	8,00E-11	7,05E-10	0,00E+00	-1,70E-08
ADPf ¹	[MJ]	5,60E+01	0,00E+00	1,54E-02	1,75E-01	0,00E+00	-3,05E+00
WDP ¹	[m ³ world eq. deprived]	1,53E+00	0,00E+00	5,50E-06	5,19E-02	0,00E+00	-1,79E-02
Caption	GWP-total = Globale Warming Potential - total; GWP-fossil = Global Warming Potential - fossil fuels; GWP-biogenic = Global Warming Potential - biogenic; GWP-luluc = Global Warming Potential - land use and land use change; ODP = Ozone Depletion; AP = Acidification; EP-freshwater = Eutrophication – aquatic freshwater; EP-marine = Eutrophication – aquatic marine; EP-terrestrial = Eutrophication – terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential – minerals and metals; ADPf = Abiotic Depletion Potential – fossil fuels; WDP = water depletion potential The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10 ² or 195, while 1,12E-11 is the same as 1,12*10 ⁻¹¹ or 0,0000000000112.						
Disclaimer	¹ The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.						

ADDITIONAL ENVIRONMENTAL IMPACTS PER 1 M ² TEXTILE							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
PM	[Disease incidence]	1,38E-07	0,00E+00	1,98E-11	1,16E-09	0,00E+00	-1,66E-09
IRP ²	[kBq U235 eq.]	2,04E-01	0,00E+00	4,18E-06	9,39E-04	0,00E+00	-3,77E-02
ETP-fw ¹	[CTUe]	1,65E+01	0,00E+00	2,00E-02	5,14E-02	0,00E+00	-2,68E-01
HTP-c ¹	[CTUh]	1,16E-08	0,00E+00	2,70E-13	1,28E-11	0,00E+00	-3,12E-11
HTP-nc ¹	[CTUh]	1,48E-07	0,00E+00	1,51E-11	1,17E-09	0,00E+00	-5,14E-10
SQP ¹	-	3,12E+01	0,00E+00	6,81E-03	3,42E-02	0,00E+00	-5,81E-01
Caption	PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality (dimensionless) The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10 ² or 195, while 1,12E-11 is the same as 1,12*10 ⁻¹¹ or 0,0000000000112.						
Disclaimers	¹ The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator. ² This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.						

RESOURCE USE PER 1 M ² TEXTILE							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
PERE	[MJ]	1,33E+01	0,00E+00	1,16E-03	3,24E-02	0,00E+00	-9,91E-01
PERM	[MJ]	1,28E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	1,46E+01	0,00E+00	1,16E-03	3,24E-02	0,00E+00	-9,91E-01
PENRE	[MJ]	5,60E+01	0,00E+00	1,54E-02	1,75E-01	0,00E+00	-3,05E+00
PENRM	[MJ]	5,58E+00	0,00E+00	0,00E+00	-5,49E+00	0,00E+00	0,00E+00
PENRT	[MJ]	6,16E+01	0,00E+00	1,54E-02	-5,31E+00	0,00E+00	-3,05E+00
SM	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
RSF	[MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
NRSF	[MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
FW	[m ³]	3,62E-02	0,00E+00	5,74E-07	1,22E-03	0,00E+00	-7,72E-04
Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non renewable primary energy excluding non renewable primary energy resources used as raw materials; PENRM = Use of non renewable primary energy resources used as raw materials; PENRT = Total use of non renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non renewable secondary fuels; FW = Net use of fresh water						
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10 ² or 195, while 1,12E-11 is the same as 1,12*10 ⁻¹¹ or 0,0000000000112.						

WASTE CATEGORIES AND OUTPUT FLOWS PER 1 M ² TEXTILE							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
HWD	[kg]	9,73E-02	0,00E+00	6,18E-13	6,61E-11	0,00E+00	-1,92E-09
NHWD	[kg]	2,41E-02	0,00E+00	2,15E-06	5,89E-03	0,00E+00	-1,52E-03
RWD	[kg]	1,88E-04	0,00E+00	2,91E-08	6,09E-06	0,00E+00	-2,29E-04
CRU	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	7,10E-03	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MER	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EEE	[MJ]	1,01E-01	0,00E+00	0,00E+00	8,08E-01	0,00E+00	0,00E+00
EET	[MJ]	1,78E-01	0,00E+00	0,00E+00	1,45E+00	0,00E+00	0,00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy						
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10 ² or 195, while 1,12E-11 is the same as 1,12*10 ⁻¹¹ or 0,0000000000112.						

BIOGENIC CARBON CONTENT PER 1 M ² TEXTILE		
Parameter	Unit	At the factory gate
Biogenic carbon content in product	[kg C]	0.00E+00
Biogenic carbon content in accompanying packaging	[kg C]	3,51E-02
Note	1 kg biogenic carbon is equivalent to 44/12 kg of CO ₂	

LCA results, Retta Blockout

ENVIRONMENTAL IMPACTS PER 1 M ² TEXTILE							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
GWP-total	[kg CO ₂ eq.]	4,87E+00	0,00E+00	2,41E-03	2,49E-01	0,00E+00	-3,52E-01
GWP-fossil	[kg CO ₂ eq.]	4,80E+00	0,00E+00	2,37E-03	2,49E-01	0,00E+00	-3,49E-01
GWP-biogenic	[kg CO ₂ eq.]	6,81E-02	0,00E+00	1,21E-05	-8,17E-05	0,00E+00	-1,80E-03
GWP-luluc	[kg CO ₂ eq.]	6,68E-03	0,00E+00	2,50E-05	1,89E-05	0,00E+00	-4,79E-04
ODP	[kg CFC 11 eq.]	4,39E-06	0,00E+00	4,04E-16	1,16E-13	0,00E+00	-3,27E-12
AP	[mol H ⁺ eq.]	2,01E-02	0,00E+00	4,06E-06	7,52E-04	0,00E+00	-4,12E-04
EP-freshwater	[kg P eq.]	1,19E-03	0,00E+00	6,56E-09	1,82E-08	0,00E+00	-3,18E-07
EP-marine	[kg N eq.]	4,34E-03	0,00E+00	1,69E-06	3,42E-04	0,00E+00	-1,19E-04
EP-terrestrial	[mol N eq.]	3,87E-02	0,00E+00	1,80E-05	3,88E-03	0,00E+00	-1,33E-03
POCP	[kg NMVOC eq.]	1,91E-02	0,00E+00	3,67E-06	8,81E-04	0,00E+00	-3,23E-04
ADPm ¹	[kg Sb eq.]	2,52E-05	0,00E+00	1,62E-10	1,43E-09	0,00E+00	-3,45E-08
ADPf ¹	[MJ]	8,85E+01	0,00E+00	3,12E-02	3,54E-01	0,00E+00	-6,18E+00
WDP ¹	[m ³ world eq. deprived]	3,43E+00	0,00E+00	1,11E-05	1,05E-01	0,00E+00	-3,62E-02
Caption	GWP-total = Globale Warming Potential - total; GWP-fossil = Global Warming Potential - fossil fuels; GWP-biogenic = Global Warming Potential - biogenic; GWP-luluc = Global Warming Potential - land use and land use change; ODP = Ozone Depletion; AP = Acidification; EP-freshwater = Eutrophication – aquatic freshwater; EP-marine = Eutrophication – aquatic marine; EP-terrestrial = Eutrophication – terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential – minerals and metals; ADPf = Abiotic Depletion Potential – fossil fuels; WDP = water depletion potential The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10² or 195, while 1,12E-11 is the same as 1,12*10⁻¹¹ or 0,0000000000112.						
Disclaimer	¹ The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.						

ADDITIONAL ENVIRONMENTAL IMPACTS PER 1 M ² TEXTILE							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
PM	[Disease incidence]	2,04E-07	0,00E+00	4,01E-11	2,35E-09	0,00E+00	-3,36E-09
IRP ²	[kBq U235 eq.]	3,09E-01	0,00E+00	8,45E-06	1,90E-03	0,00E+00	-7,63E-02
ETP-fw ¹	[CTUe]	2,40E+01	0,00E+00	4,05E-02	1,04E-01	0,00E+00	-5,43E-01
HTP-c ¹	[CTUh]	1,53E-08	0,00E+00	5,47E-13	2,59E-11	0,00E+00	-6,31E-11
HTP-nc ¹	[CTUh]	4,66E-07	0,00E+00	3,06E-11	2,37E-09	0,00E+00	-1,04E-09
SQP ¹	-	4,30E+01	0,00E+00	1,38E-02	6,92E-02	0,00E+00	-1,18E+00
Caption	PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality (dimensionless) The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10² or 195, while 1,12E-11 is the same as 1,12*10⁻¹¹ or 0,0000000000112.						
Disclaimers	¹ The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator. ² This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.						

RESOURCE USE PER 1 M ² TEXTILE							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
PERE	[MJ]	1,24E+01	0,00E+00	2,35E-03	6,55E-02	0,00E+00	-2,00E+00
PERM	[MJ]	2,61E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	1,50E+01	0,00E+00	2,35E-03	6,55E-02	0,00E+00	-2,00E+00
PENRE	[MJ]	8,85E+01	0,00E+00	3,12E-02	3,54E-01	0,00E+00	-6,18E+00
PENRM	[MJ]	6,01E+00	0,00E+00	0,00E+00	-5,79E+00	0,00E+00	0,00E+00
PENRT	[MJ]	9,45E+01	0,00E+00	3,12E-02	-5,43E+00	0,00E+00	-6,18E+00
SM	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
RSF	[MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
NRSF	[MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
FW	[m ³]	8,05E-02	0,00E+00	1,16E-06	2,47E-03	0,00E+00	-1,56E-03
Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non renewable primary energy excluding non renewable primary energy resources used as raw materials; PENRM = Use of non renewable primary energy resources used as raw materials; PENRT = Total use of non renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non renewable secondary fuels; FW = Net use of fresh water						
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10 ² or 195, while 1,12E-11 is the same as 1,12*10 ⁻¹¹ or 0,0000000000112.						

WASTE CATEGORIES AND OUTPUT FLOWS PER 1 M ² TEXTILE							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
HWD	[kg]	1,45E-01	0,00E+00	1,25E-12	1,34E-10	0,00E+00	-3,89E-09
NHWD	[kg]	2,23E-02	0,00E+00	4,35E-06	1,19E-02	0,00E+00	-3,07E-03
RWD	[kg]	3,26E-04	0,00E+00	5,89E-08	1,23E-05	0,00E+00	-4,63E-04

CRU	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	1,30E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MER	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EEE	[MJ]	1,18E-01	0,00E+00	0,00E+00	1,63E+00	0,00E+00	0,00E+00
EET	[MJ]	2,03E-01	0,00E+00	0,00E+00	2,94E+00	0,00E+00	0,00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy						
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10 ² or 195, while 1,12E-11 is the same as 1,12*10 ⁻¹¹ or 0,0000000000112.						

BIOGENIC CARBON CONTENT PER 1 M ² TEXTILE		
Parameter	Unit	At the factory gate
Biogenic carbon content in product	[kg C]	0,00E+00
Biogenic carbon content in accompanying packaging	[kg C]	7,16E-02
Note	1 kg biogenic carbon is equivalent to 44/12 kg of CO ₂	

LCA results, Athos

ENVIRONMENTAL IMPACTS PER 1 M ² TEXTILE							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
GWP-total	[kg CO ₂ eq.]	2,78E+00	0,00E+00	1,01E-03	1,04E-01	0,00E+00	-1,47E-01
GWP-fossil	[kg CO ₂ eq.]	2,75E+00	0,00E+00	9,93E-04	1,04E-01	0,00E+00	-1,46E-01
GWP-biogenic	[kg CO ₂ eq.]	3,06E-02	0,00E+00	5,06E-06	-3,42E-05	0,00E+00	-7,52E-04
GWP-luluc	[kg CO ₂ eq.]	4,74E-03	0,00E+00	1,05E-05	7,92E-06	0,00E+00	-2,00E-04
ODP	[kg CFC 11 eq.]	2,74E-06	0,00E+00	1,69E-16	4,86E-14	0,00E+00	-1,37E-12
AP	[mol H ⁺ eq.]	1,04E-02	0,00E+00	1,70E-06	3,15E-04	0,00E+00	-1,72E-04
EP-freshwater	[kg P eq.]	6,08E-04	0,00E+00	2,74E-09	7,62E-09	0,00E+00	-1,33E-07
EP-marine	[kg N eq.]	2,43E-03	0,00E+00	7,06E-07	1,43E-04	0,00E+00	-4,98E-05
EP-terrestrial	[mol N eq.]	2,11E-02	0,00E+00	7,53E-06	1,62E-03	0,00E+00	-5,57E-04
POCP	[kg NMVOC eq.]	9,74E-03	0,00E+00	1,54E-06	3,69E-04	0,00E+00	-1,35E-04
ADPm ¹	[kg Sb eq.]	1,29E-05	0,00E+00	6,77E-11	5,97E-10	0,00E+00	-1,44E-08
ADPf ¹	[MJ]	4,88E+01	0,00E+00	1,30E-02	1,48E-01	0,00E+00	-2,58E+00
WDP ¹	[m ³ world eq. deprived]	1,51E+00	0,00E+00	4,65E-06	4,39E-02	0,00E+00	-1,52E-02
Caption	GWP-total = Globale Warming Potential - total; GWP-fossil = Global Warming Potential - fossil fuels; GWP-biogenic = Global Warming Potential - biogenic; GWP-luluc = Global Warming Potential - land use and land use change; ODP = Ozone Depletion; AP = Acidification; EP-freshwater = Eutrophication – aquatic freshwater; EP-marine = Eutrophication – aquatic marine; EP-terrestrial = Eutrophication – terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential – minerals and metals; ADPf = Abiotic Depletion Potential – fossil fuels; WDP = water depletion potential						
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10 ² or 195, while 1,12E-11 is the same as 1,12*10 ⁻¹¹ or 0,0000000000112.						
Disclaimer	¹ The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.						

ADDITIONAL ENVIRONMENTAL IMPACTS PER 1 M ² TEXTILE							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
PM	[Disease incidence]	1,07E-07	0,00E+00	1,68E-11	9,83E-10	0,00E+00	-1,40E-09
IRP ²	[kBq U235 eq.]	2,03E-01	0,00E+00	3,53E-06	7,94E-04	0,00E+00	-3,19E-02
ETP-fw ¹	[CTUe]	1,27E+01	0,00E+00	1,70E-02	4,35E-02	0,00E+00	-2,27E-01
HTP-c ¹	[CTUh]	8,31E-09	0,00E+00	2,29E-13	1,08E-11	0,00E+00	-2,64E-11
HTP-nc ¹	[CTUh]	1,79E-07	0,00E+00	1,28E-11	9,90E-10	0,00E+00	-4,35E-10
SQP ¹	-	2,26E+01	0,00E+00	5,77E-03	2,89E-02	0,00E+00	-4,92E-01
Caption	PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality (dimensionless)						
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10 ² or 195, while 1,12E-11 is the same as 1,12*10 ⁻¹¹ or 0,0000000000112.						
Disclaimers	¹ The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.						
	² This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.						

RESOURCE USE PER 1 M ² TEXTILE							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
PERE	[MJ]	8,40E+00	0,00E+00	9,83E-04	2,74E-02	0,00E+00	-8,39E-01
PERM	[MJ]	1,11E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	9,51E+00	0,00E+00	9,83E-04	2,74E-02	0,00E+00	-8,39E-01
PENRE	[MJ]	4,88E+01	0,00E+00	1,30E-02	1,48E-01	0,00E+00	-2,58E+00
PENRM	[MJ]	3,48E+00	0,00E+00	0,00E+00	-3,39E+00	0,00E+00	0,00E+00
PENRT	[MJ]	5,23E+01	0,00E+00	1,30E-02	-3,24E+00	0,00E+00	-2,58E+00
SM	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
RSF	[MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
NRSF	[MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
FW	[m ³]	3,58E-02	0,00E+00	4,86E-07	1,03E-03	0,00E+00	-6,53E-04
Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non renewable primary energy excluding non renewable primary energy resources used as raw materials; PENRM = Use of non renewable primary energy resources used as raw materials; PENRT = Total use of non renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non renewable secondary fuels; FW = Net use of fresh water						
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10 ² or 195, while 1,12E-11 is the same as 1,12*10 ⁻¹¹ or 0,0000000000112.						

WASTE CATEGORIES AND OUTPUT FLOWS PER 1 M ² TEXTILE							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
HWD	[kg]	7,44E-02	0,00E+00	5,23E-13	5,59E-11	0,00E+00	-1,62E-09
NHWD	[kg]	1,68E-02	0,00E+00	1,82E-06	4,99E-03	0,00E+00	-1,28E-03
RWD	[kg]	4,33E-04	0,00E+00	2,46E-08	5,15E-06	0,00E+00	-1,93E-04

CRU	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	6,00E-03	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MER	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EEE	[MJ]	1,01E-01	0,00E+00	0,00E+00	6,83E-01	0,00E+00	0,00E+00
EET	[MJ]	1,78E-01	0,00E+00	0,00E+00	1,23E+00	0,00E+00	0,00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy						
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10 ² or 195, while 1,12E-11 is the same as 1,12*10 ⁻¹¹ or 0,0000000000112.						

BIOGENIC CARBON CONTENT PER 1 M ² TEXTILE		
Parameter	Unit	At the factory gate
Biogenic carbon content in product	[kg C]	0.00E+00
Biogenic carbon content in accompanying packaging	[kg C]	3,04E-02
Note	1 kg biogenic carbon is equivalent to 44/12 kg of CO ₂	

LCA results, Enviroscreen

ENVIRONMENTAL IMPACTS PER 1 M ² TEXTILE							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
GWP-total	[kg CO ₂ eq.]	2,06E+00	0,00E+00	1,00E-03	1,03E-01	0,00E+00	-1,46E-01
GWP-fossil	[kg CO ₂ eq.]	2,03E+00	0,00E+00	9,89E-04	1,03E-01	0,00E+00	-1,46E-01
GWP-biogenic	[kg CO ₂ eq.]	2,07E-02	0,00E+00	5,04E-06	-3,40E-05	0,00E+00	-7,49E-04
GWP-luluc	[kg CO ₂ eq.]	4,81E-03	0,00E+00	1,04E-05	7,88E-06	0,00E+00	-2,00E-04
ODP	[kg CFC 11 eq.]	2,27E-08	0,00E+00	1,68E-16	4,84E-14	0,00E+00	-1,36E-12
AP	[mol H ⁺ eq.]	8,83E-03	0,00E+00	1,69E-06	3,13E-04	0,00E+00	-1,71E-04
EP-freshwater	[kg P eq.]	5,56E-04	0,00E+00	2,73E-09	7,59E-09	0,00E+00	-1,32E-07
EP-marine	[kg N eq.]	2,35E-03	0,00E+00	7,02E-07	1,42E-04	0,00E+00	-4,96E-05
EP-terrestrial	[mol N eq.]	1,95E-02	0,00E+00	7,49E-06	1,62E-03	0,00E+00	-5,54E-04
POCP	[kg NMVOC eq.]	7,43E-03	0,00E+00	1,53E-06	3,67E-04	0,00E+00	-1,35E-04
ADPm ¹	[kg Sb eq.]	6,87E-06	0,00E+00	6,74E-11	5,94E-10	0,00E+00	-1,43E-08
ADPf ¹	[MJ]	3,11E+01	0,00E+00	1,30E-02	1,47E-01	0,00E+00	-2,57E+00
WDP ¹	[m ³ world eq. deprived]	1,24E+00	0,00E+00	4,63E-06	4,37E-02	0,00E+00	-1,51E-02
Caption	GWP-total = Globale Warming Potential - total; GWP-fossil = Global Warming Potential - fossil fuels; GWP-biogenic = Global Warming Potential - biogenic; GWP-luluc = Global Warming Potential - land use and land use change; ODP = Ozone Depletion; AP = Acidification; EP-freshwater = Eutrophication – aquatic freshwater; EP-marine = Eutrophication – aquatic marine; EP-terrestrial = Eutrophication – terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential – minerals and metals; ADPf = Abiotic Depletion Potential – fossil fuels; WDP = water depletion potential The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10² or 195, while 1,12E-11 is the same as 1,12*10⁻¹¹ or 0,0000000000112.						
Disclaimer	¹ The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.						

ADDITIONAL ENVIRONMENTAL IMPACTS PER 1 M ² TEXTILE							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
PM	[Disease incidence]	9,55E-08	0,00E+00	1,67E-11	9,79E-10	0,00E+00	-1,40E-09
IRP ²	[kBq U235 eq.]	1,33E-01	0,00E+00	3,52E-06	7,91E-04	0,00E+00	-3,18E-02
ETP-fw ¹	[CTUe]	1,08E+01	0,00E+00	1,69E-02	4,33E-02	0,00E+00	-2,26E-01
HTP-c ¹	[CTUh]	7,88E-09	0,00E+00	2,28E-13	1,08E-11	0,00E+00	-2,63E-11
HTP-nc ¹	[CTUh]	1,20E-07	0,00E+00	1,27E-11	9,85E-10	0,00E+00	-4,33E-10
SQP ¹	-	4,41E+01	0,00E+00	5,74E-03	2,88E-02	0,00E+00	-4,90E-01
Caption	PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality (dimensionless) The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10² or 195, while 1,12E-11 is the same as 1,12*10⁻¹¹ or 0,0000000000112.						
Disclaimers	¹ The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator. ² This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.						

RESOURCE USE PER 1 M ² TEXTILE							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
PERE	[MJ]	2,11E+01	0,00E+00	9,79E-04	2,73E-02	0,00E+00	-8,35E-01
PERM	[MJ]	1,11E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	2,22E+01	0,00E+00	9,79E-04	2,73E-02	0,00E+00	-8,35E-01
PENRE	[MJ]	3,11E+01	0,00E+00	1,30E-02	1,47E-01	0,00E+00	-2,57E+00
PENRM	[MJ]	4,71E+00	0,00E+00	0,00E+00	-4,62E+00	0,00E+00	0,00E+00
PENRT	[MJ]	3,58E+01	0,00E+00	1,30E-02	-4,47E+00	0,00E+00	-2,57E+00
SM	[kg]	2,10E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
RSF	[MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
NRSF	[MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
FW	[m ³]	2,92E-02	0,00E+00	4,84E-07	1,03E-03	0,00E+00	-6,50E-04
Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non renewable primary energy excluding non renewable primary energy resources used as raw materials; PENRM = Use of non renewable primary energy resources used as raw materials; PENRT = Total use of non renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non renewable secondary fuels; FW = Net use of fresh water						
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10 ² or 195, while 1,12E-11 is the same as 1,12*10 ⁻¹¹ or 0,0000000000112.						

WASTE CATEGORIES AND OUTPUT FLOWS PER 1 M ² TEXTILE							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
HWD	[kg]	6,51E-02	0,00E+00	5,21E-13	5,57E-11	0,00E+00	-1,62E-09
NHWD	[kg]	1,68E-02	0,00E+00	1,81E-06	4,96E-03	0,00E+00	-1,28E-03
RWD	[kg]	4,44E-05	0,00E+00	2,45E-08	5,13E-06	0,00E+00	-1,93E-04

CRU	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	8,92E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MER	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EEE	[MJ]	1,01E-01	0,00E+00	0,00E+00	6,80E-01	0,00E+00	0,00E+00
EET	[MJ]	1,78E-01	0,00E+00	0,00E+00	1,22E+00	0,00E+00	0,00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy						
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10 ² or 195, while 1,12E-11 is the same as 1,12*10 ⁻¹¹ or 0,0000000000112.						

BIOGENIC CARBON CONTENT PER 1 M ² TEXTILE		
Parameter	Unit	At the factory gate
Biogenic carbon content in product	[kg C]	0.00E+00
Biogenic carbon content in accompanying packaging	[kg C]	3,04E-02
Note	1 kg biogenic carbon is equivalent to 44/12 kg of CO ₂	

LCA results, Apo

ENVIRONMENTAL IMPACTS PER 1 M ² TEXTILE							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
GWP-total	[kg CO ₂ eq.]	3,07E+00	0,00E+00	9,86E-04	1,02E-01	0,00E+00	-1,44E-01
GWP-fossil	[kg CO ₂ eq.]	3,04E+00	0,00E+00	9,70E-04	1,02E-01	0,00E+00	-1,43E-01
GWP-biogenic	[kg CO ₂ eq.]	2,28E-02	0,00E+00	4,95E-06	-3,34E-05	0,00E+00	-7,35E-04
GWP-luluc	[kg CO ₂ eq.]	5,42E-03	0,00E+00	1,02E-05	7,74E-06	0,00E+00	-1,96E-04
ODP	[kg CFC 11 eq.]	3,66E-06	0,00E+00	1,65E-16	4,75E-14	0,00E+00	-1,34E-12
AP	[mol H ⁺ eq.]	1,29E-02	0,00E+00	1,66E-06	3,07E-04	0,00E+00	-1,68E-04
EP-freshwater	[kg P eq.]	7,63E-04	0,00E+00	2,68E-09	7,45E-09	0,00E+00	-1,30E-07
EP-marine	[kg N eq.]	3,14E-03	0,00E+00	6,90E-07	1,40E-04	0,00E+00	-4,87E-05
EP-terrestrial	[mol N eq.]	2,72E-02	0,00E+00	7,36E-06	1,59E-03	0,00E+00	-5,44E-04
POCP	[kg NMVOC eq.]	1,13E-02	0,00E+00	1,50E-06	3,60E-04	0,00E+00	-1,32E-04
ADPm ¹	[kg Sb eq.]	1,51E-05	0,00E+00	6,61E-11	5,83E-10	0,00E+00	-1,41E-08
ADPf ¹	[MJ]	5,24E+01	0,00E+00	1,27E-02	1,45E-01	0,00E+00	-2,52E+00
WDP ¹	[m ³ world eq. deprived]	1,46E+00	0,00E+00	4,55E-06	4,29E-02	0,00E+00	-1,48E-02
Caption	GWP-total = Globale Warming Potential - total; GWP-fossil = Global Warming Potential - fossil fuels; GWP-biogenic = Global Warming Potential - biogenic; GWP-luluc = Global Warming Potential - land use and land use change; ODP = Ozone Depletion; AP = Acidification; EP-freshwater = Eutrophication – aquatic freshwater; EP-marine = Eutrophication – aquatic marine; EP-terrestrial = Eutrophication – terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential – minerals and metals; ADPf = Abiotic Depletion Potential – fossil fuels; WDP = water depletion potential The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10² or 195, while 1,12E-11 is the same as 1,12*10⁻¹¹ or 0,0000000000112.						
Disclaimer	¹ The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.						

ADDITIONAL ENVIRONMENTAL IMPACTS PER 1 M ² TEXTILE							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
PM	[Disease incidence]	1,35E-07	0,00E+00	1,64E-11	9,61E-10	0,00E+00	-1,37E-09
IRP ²	[kBq U235 eq.]	1,99E-01	0,00E+00	3,45E-06	7,76E-04	0,00E+00	-3,12E-02
ETP-fw ¹	[CTUe]	1,52E+01	0,00E+00	1,66E-02	4,25E-02	0,00E+00	-2,22E-01
HTP-c ¹	[CTUh]	1,08E-08	0,00E+00	2,23E-13	1,06E-11	0,00E+00	-2,58E-11
HTP-nc ¹	[CTUh]	1,30E-07	0,00E+00	1,25E-11	9,67E-10	0,00E+00	-4,25E-10
SQP ¹	-	4,66E+01	0,00E+00	5,63E-03	2,83E-02	0,00E+00	-4,81E-01
Caption	PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality (dimensionless) The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10² or 195, while 1,12E-11 is the same as 1,12*10⁻¹¹ or 0,0000000000112.						
Disclaimers	¹ The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator. ² This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.						

RESOURCE USE PER 1 M ² TEXTILE							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
PERE	[MJ]	2,20E+01	0,00E+00	9,61E-04	2,68E-02	0,00E+00	-8,20E-01
PERM	[MJ]	1,06E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	2,30E+01	0,00E+00	9,61E-04	2,68E-02	0,00E+00	-8,20E-01
PENRE	[MJ]	5,24E+01	0,00E+00	1,27E-02	1,45E-01	0,00E+00	-2,52E+00
PENRM	[MJ]	4,62E+00	0,00E+00	0,00E+00	-4,53E+00	0,00E+00	0,00E+00
PENRT	[MJ]	5,71E+01	0,00E+00	1,27E-02	-4,39E+00	0,00E+00	-2,52E+00
SM	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
RSF	[MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
NRSF	[MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
FW	[m ³]	3,46E-02	0,00E+00	4,75E-07	1,01E-03	0,00E+00	-6,39E-04
Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non renewable primary energy excluding non renewable primary energy resources used as raw materials; PENRM = Use of non renewable primary energy resources used as raw materials; PENRT = Total use of non renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non renewable secondary fuels; FW = Net use of fresh water						
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10 ² or 195, while 1,12E-11 is the same as 1,12*10 ⁻¹¹ or 0,0000000000112.						

WASTE CATEGORIES AND OUTPUT FLOWS PER 1 M ² TEXTILE							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
HWD	[kg]	9,36E-02	0,00E+00	5,11E-13	5,47E-11	0,00E+00	-1,59E-09
NHWD	[kg]	2,23E-02	0,00E+00	1,78E-06	4,87E-03	0,00E+00	-1,25E-03
RWD	[kg]	1,58E-04	0,00E+00	2,41E-08	5,04E-06	0,00E+00	-1,89E-04

CRU	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	8,82E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MER	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EEE	[MJ]	1,01E-01	0,00E+00	0,00E+00	6,68E-01	0,00E+00	0,00E+00
EET	[MJ]	1,78E-01	0,00E+00	0,00E+00	1,20E+00	0,00E+00	0,00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy						
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10 ² or 195, while 1,12E-11 is the same as 1,12*10 ⁻¹¹ or 0,0000000000112.						

BIOGENIC CARBON CONTENT PER 1 M ² TEXTILE		
Parameter	Unit	At the factory gate
Biogenic carbon content in product	[kg C]	0.00E+00
Biogenic carbon content in accompanying packaging	[kg C]	2,89E-02
Note	1 kg biogenic carbon is equivalent to 44/12 kg of CO ₂	

LCA results, Clearview

ENVIRONMENTAL IMPACTS PER 1 M ² TEXTILE							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
GWP-total	[kg CO ₂ eq.]	2,97E+00	0,00E+00	9,35E-04	9,64E-02	0,00E+00	-1,36E-01
GWP-fossil	[kg CO ₂ eq.]	2,94E+00	0,00E+00	9,21E-04	9,64E-02	0,00E+00	-1,36E-01
GWP-biogenic	[kg CO ₂ eq.]	2,15E-02	0,00E+00	4,69E-06	-3,17E-05	0,00E+00	-6,98E-04
GWP-luluc	[kg CO ₂ eq.]	5,33E-03	0,00E+00	9,71E-06	7,34E-06	0,00E+00	-1,86E-04
ODP	[kg CFC 11 eq.]	3,51E-06	0,00E+00	1,57E-16	4,51E-14	0,00E+00	-1,27E-12
AP	[mol H ⁺ eq.]	1,25E-02	0,00E+00	1,58E-06	2,92E-04	0,00E+00	-1,60E-04
EP-freshwater	[kg P eq.]	7,36E-04	0,00E+00	2,54E-09	7,07E-09	0,00E+00	-1,23E-07
EP-marine	[kg N eq.]	3,04E-03	0,00E+00	6,54E-07	1,33E-04	0,00E+00	-4,62E-05
EP-terrestrial	[mol N eq.]	2,64E-02	0,00E+00	6,98E-06	1,50E-03	0,00E+00	-5,16E-04
POCP	[kg NMVOC eq.]	1,09E-02	0,00E+00	1,42E-06	3,42E-04	0,00E+00	-1,25E-04
ADPm ¹	[kg Sb eq.]	1,45E-05	0,00E+00	6,28E-11	5,53E-10	0,00E+00	-1,34E-08
ADPf ¹	[MJ]	5,07E+01	0,00E+00	1,21E-02	1,37E-01	0,00E+00	-2,40E+00
WDP ¹	[m ³ world eq. deprived]	1,41E+00	0,00E+00	4,32E-06	4,07E-02	0,00E+00	-1,40E-02
Caption	GWP-total = Globale Warming Potential - total; GWP-fossil = Global Warming Potential - fossil fuels; GWP-biogenic = Global Warming Potential - biogenic; GWP-luluc = Global Warming Potential - land use and land use change; ODP = Ozone Depletion; AP = Acidification; EP-freshwater = Eutrophication – aquatic freshwater; EP-marine = Eutrophication – aquatic marine; EP-terrestrial = Eutrophication – terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential – minerals and metals; ADPf = Abiotic Depletion Potential – fossil fuels; WDP = water depletion potential The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10² or 195, while 1,12E-11 is the same as 1,12*10⁻¹¹ or 0,0000000000112.						
Disclaimer	¹ The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.						

ADDITIONAL ENVIRONMENTAL IMPACTS PER 1 M ² TEXTILE							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
PM	[Disease incidence]	1,30E-07	0,00E+00	1,56E-11	9,12E-10	0,00E+00	-1,30E-09
IRP ²	[kBq U235 eq.]	1,92E-01	0,00E+00	3,28E-06	7,37E-04	0,00E+00	-2,96E-02
ETP-fw ¹	[CTUe]	1,46E+01	0,00E+00	1,57E-02	4,03E-02	0,00E+00	-2,10E-01
HTP-c ¹	[CTUh]	1,04E-08	0,00E+00	2,12E-13	1,01E-11	0,00E+00	-2,45E-11
HTP-nc ¹	[CTUh]	1,25E-07	0,00E+00	1,19E-11	9,18E-10	0,00E+00	-4,03E-10
SQP ¹	-	4,61E+01	0,00E+00	5,35E-03	2,68E-02	0,00E+00	-4,56E-01
Caption	PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality (dimensionless) The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10² or 195, while 1,12E-11 is the same as 1,12*10⁻¹¹ or 0,0000000000112.						
Disclaimers	¹ The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator. ² This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.						

RESOURCE USE PER 1 M ² TEXTILE							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
PERE	[MJ]	2,19E+01	0,00E+00	9,12E-04	2,54E-02	0,00E+00	-7,78E-01
PERM	[MJ]	1,02E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	2,29E+01	0,00E+00	9,12E-04	2,54E-02	0,00E+00	-7,78E-01
PENRE	[MJ]	5,07E+01	0,00E+00	1,21E-02	1,37E-01	0,00E+00	-2,40E+00
PENRM	[MJ]	4,40E+00	0,00E+00	0,00E+00	-4,31E+00	0,00E+00	0,00E+00
PENRT	[MJ]	5,51E+01	0,00E+00	1,21E-02	-4,17E+00	0,00E+00	-2,40E+00
SM	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
RSF	[MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
NRSF	[MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
FW	[m ³]	3,35E-02	0,00E+00	4,50E-07	9,59E-04	0,00E+00	-6,06E-04
Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non renewable primary energy excluding non renewable primary energy resources used as raw materials; PENRM = Use of non renewable primary energy resources used as raw materials; PENRT = Total use of non renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non renewable secondary fuels; FW = Net use of fresh water						
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10 ² or 195, while 1,12E-11 is the same as 1,12*10 ⁻¹¹ or 0,0000000000112.						

WASTE CATEGORIES AND OUTPUT FLOWS PER 1 M ² TEXTILE							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
HWD	[kg]	9,02E-02	0,00E+00	4,85E-13	5,19E-11	0,00E+00	-1,51E-09
NHWD	[kg]	2,21E-02	0,00E+00	1,69E-06	4,62E-03	0,00E+00	-1,19E-03
RWD	[kg]	1,51E-04	0,00E+00	2,28E-08	4,78E-06	0,00E+00	-1,79E-04

CRU	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	8,82E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MER	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EEE	[MJ]	1,01E-01	0,00E+00	0,00E+00	6,34E-01	0,00E+00	0,00E+00
EET	[MJ]	1,78E-01	0,00E+00	0,00E+00	1,14E+00	0,00E+00	0,00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy						
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10 ² or 195, while 1,12E-11 is the same as 1,12*10 ⁻¹¹ or 0,0000000000112.						

BIOGENIC CARBON CONTENT PER 1 M ² TEXTILE		
Parameter	Unit	At the factory gate
Biogenic carbon content in product	[kg C]	0.00E+00
Biogenic carbon content in accompanying packaging	[kg C]	2,80E-02
Note	1 kg biogenic carbon is equivalent to 44/12 kg of CO ₂	

LCA results, Ferrite

ENVIRONMENTAL IMPACTS PER 1 M ² TEXTILE							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
GWP-total	[kg CO ₂ eq.]	2,29E+00	0,00E+00	1,19E-03	1,23E-01	0,00E+00	-1,74E-01
GWP-fossil	[kg CO ₂ eq.]	2,25E+00	0,00E+00	1,17E-03	1,23E-01	0,00E+00	-1,73E-01
GWP-biogenic	[kg CO ₂ eq.]	2,77E-02	0,00E+00	5,98E-06	-4,04E-05	0,00E+00	-8,89E-04
GWP-luluc	[kg CO ₂ eq.]	5,23E-03	0,00E+00	1,24E-05	9,36E-06	0,00E+00	-2,37E-04
ODP	[kg CFC 11 eq.]	2,58E-08	0,00E+00	2,00E-16	5,75E-14	0,00E+00	-1,62E-12
AP	[mol H ⁺ eq.]	9,94E-03	0,00E+00	2,01E-06	3,72E-04	0,00E+00	-2,03E-04
EP-freshwater	[kg P eq.]	6,28E-04	0,00E+00	3,24E-09	9,01E-09	0,00E+00	-1,57E-07
EP-marine	[kg N eq.]	2,62E-03	0,00E+00	8,34E-07	1,69E-04	0,00E+00	-5,89E-05
EP-terrestrial	[mol N eq.]	2,16E-02	0,00E+00	8,90E-06	1,92E-03	0,00E+00	-6,58E-04
POCP	[kg NMVOC eq.]	8,37E-03	0,00E+00	1,82E-06	4,36E-04	0,00E+00	-1,60E-04
ADPm ¹	[kg Sb eq.]	7,77E-06	0,00E+00	8,00E-11	7,05E-10	0,00E+00	-1,70E-08
ADPf ¹	[MJ]	3,44E+01	0,00E+00	1,54E-02	1,75E-01	0,00E+00	-3,05E+00
WDP ¹	[m ³ world eq. deprived]	1,40E+00	0,00E+00	5,50E-06	5,19E-02	0,00E+00	-1,79E-02
Caption	GWP-total = Globale Warming Potential - total; GWP-fossil = Global Warming Potential - fossil fuels; GWP-biogenic = Global Warming Potential - biogenic; GWP-luluc = Global Warming Potential - land use and land use change; ODP = Ozone Depletion; AP = Acidification; EP-freshwater = Eutrophication – aquatic freshwater; EP-marine = Eutrophication – aquatic marine; EP-terrestrial = Eutrophication – terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential – minerals and metals; ADPf = Abiotic Depletion Potential – fossil fuels; WDP = water depletion potential						
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10 ² or 195, while 1,12E-11 is the same as 1,12*10 ⁻¹¹ or 0,0000000000112.						
Disclaimer	¹ The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.						

ADDITIONAL ENVIRONMENTAL IMPACTS PER 1 M ² TEXTILE							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
PM	[Disease incidence]	1,08E-07	0,00E+00	1,98E-11	1,16E-09	0,00E+00	-1,66E-09
IRP ²	[kBq U235 eq.]	1,50E-01	0,00E+00	4,18E-06	9,39E-04	0,00E+00	-3,77E-02
ETP-fw ¹	[CTUe]	1,22E+01	0,00E+00	2,00E-02	5,14E-02	0,00E+00	-2,68E-01
HTP-c ¹	[CTUh]	8,92E-09	0,00E+00	2,70E-13	1,28E-11	0,00E+00	-3,12E-11
HTP-nc ¹	[CTUh]	1,39E-07	0,00E+00	1,51E-11	1,17E-09	0,00E+00	-5,14E-10
SQP ¹	-	4,59E+01	0,00E+00	6,81E-03	3,42E-02	0,00E+00	-5,81E-01
Caption	PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality (dimensionless)						
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10 ² or 195, while 1,12E-11 is the same as 1,12*10 ⁻¹¹ or 0,0000000000112.						
Disclaimers	¹ The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.						
	² This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.						

RESOURCE USE PER 1 M ² TEXTILE							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
PERE	[MJ]	2,15E+01	0,00E+00	1,16E-03	3,24E-02	0,00E+00	-9,91E-01
PERM	[MJ]	1,28E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	2,28E+01	0,00E+00	1,16E-03	3,24E-02	0,00E+00	-9,91E-01
PENRE	[MJ]	3,44E+01	0,00E+00	1,54E-02	1,75E-01	0,00E+00	-3,05E+00
PENRM	[MJ]	5,57E+00	0,00E+00	0,00E+00	-5,48E+00	0,00E+00	0,00E+00
PENRT	[MJ]	3,99E+01	0,00E+00	1,54E-02	-5,30E+00	0,00E+00	-3,05E+00
SM	[kg]	2,49E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
RSF	[MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
NRSF	[MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
FW	[m ³]	3,31E-02	0,00E+00	5,74E-07	1,22E-03	0,00E+00	-7,72E-04
Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non renewable primary energy excluding non renewable primary energy resources used as raw materials; PENRM = Use of non renewable primary energy resources used as raw materials; PENRT = Total use of non renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non renewable secondary fuels; FW = Net use of fresh water						
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10 ² or 195, while 1,12E-11 is the same as 1,12*10 ⁻¹¹ or 0,0000000000112.						

WASTE CATEGORIES AND OUTPUT FLOWS PER 1 M ² TEXTILE							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
HWD	[kg]	7,34E-02	0,00E+00	6,18E-13	6,61E-11	0,00E+00	-1,92E-09
NHWD	[kg]	2,37E-02	0,00E+00	2,15E-06	5,89E-03	0,00E+00	-1,52E-03
RWD	[kg]	5,96E-05	0,00E+00	2,91E-08	6,09E-06	0,00E+00	-2,29E-04

CRU	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	9,02E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MER	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EEE	[MJ]	1,01E-01	0,00E+00	0,00E+00	8,08E-01	0,00E+00	0,00E+00
EET	[MJ]	1,78E-01	0,00E+00	0,00E+00	1,45E+00	0,00E+00	0,00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy						
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10 ² or 195, while 1,12E-11 is the same as 1,12*10 ⁻¹¹ or 0,0000000000112.						

BIOGENIC CARBON CONTENT PER 1 M ² TEXTILE		
Parameter	Unit	At the factory gate
Biogenic carbon content in product	[kg C]	0.00E+00
Biogenic carbon content in accompanying packaging	[kg C]	3,51E-02
Note	1 kg biogenic carbon is equivalent to 44/12 kg of CO ₂	

LCA results, Graphite

ENVIRONMENTAL IMPACTS PER 1 M ² TEXTILE							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
GWP-total	[kg CO ₂ eq.]	2,04E+00	0,00E+00	9,86E-04	1,02E-01	0,00E+00	-1,44E-01
GWP-fossil	[kg CO ₂ eq.]	2,01E+00	0,00E+00	9,70E-04	1,02E-01	0,00E+00	-1,43E-01
GWP-biogenic	[kg CO ₂ eq.]	1,87E-02	0,00E+00	4,95E-06	-3,34E-05	0,00E+00	-7,35E-04
GWP-luluc	[kg CO ₂ eq.]	4,78E-03	0,00E+00	1,02E-05	7,74E-06	0,00E+00	-1,96E-04
ODP	[kg CFC 11 eq.]	2,24E-08	0,00E+00	1,65E-16	4,75E-14	0,00E+00	-1,34E-12
AP	[mol H ⁺ eq.]	8,73E-03	0,00E+00	1,66E-06	3,07E-04	0,00E+00	-1,68E-04
EP-freshwater	[kg P eq.]	5,48E-04	0,00E+00	2,68E-09	7,45E-09	0,00E+00	-1,30E-07
EP-marine	[kg N eq.]	2,33E-03	0,00E+00	6,90E-07	1,40E-04	0,00E+00	-4,87E-05
EP-terrestrial	[mol N eq.]	1,93E-02	0,00E+00	7,36E-06	1,59E-03	0,00E+00	-5,44E-04
POCP	[kg NMVOC eq.]	7,33E-03	0,00E+00	1,50E-06	3,60E-04	0,00E+00	-1,32E-04
ADPm ¹	[kg Sb eq.]	6,78E-06	0,00E+00	6,61E-11	5,83E-10	0,00E+00	-1,41E-08
ADPf ¹	[MJ]	3,08E+01	0,00E+00	1,27E-02	1,45E-01	0,00E+00	-2,52E+00
WDP ¹	[m ³ world eq. deprived]	1,22E+00	0,00E+00	4,55E-06	4,29E-02	0,00E+00	-1,48E-02
Caption	GWP-total = Globale Warming Potential - total; GWP-fossil = Global Warming Potential - fossil fuels; GWP-biogenic = Global Warming Potential - biogenic; GWP-luluc = Global Warming Potential - land use and land use change; ODP = Ozone Depletion; AP = Acidification; EP-freshwater = Eutrophication – aquatic freshwater; EP-marine = Eutrophication – aquatic marine; EP-terrestrial = Eutrophication – terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential – minerals and metals; ADPf = Abiotic Depletion Potential – fossil fuels; WDP = water depletion potential The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10² or 195, while 1,12E-11 is the same as 1,12*10⁻¹¹ or 0,0000000000112.						
Disclaimer	¹ The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.						

ADDITIONAL ENVIRONMENTAL IMPACTS PER 1 M ² TEXTILE							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
PM	[Disease incidence]	9,43E-08	0,00E+00	1,64E-11	9,61E-10	0,00E+00	-1,37E-09
IRP ²	[kBq U235 eq.]	1,31E-01	0,00E+00	3,45E-06	7,76E-04	0,00E+00	-3,12E-02
ETP-fw ¹	[CTUe]	1,07E+01	0,00E+00	1,66E-02	4,25E-02	0,00E+00	-2,22E-01
HTP-c ¹	[CTUh]	7,78E-09	0,00E+00	2,23E-13	1,06E-11	0,00E+00	-2,58E-11
HTP-nc ¹	[CTUh]	1,19E-07	0,00E+00	1,25E-11	9,67E-10	0,00E+00	-4,25E-10
SQP ¹	-	4,37E+01	0,00E+00	5,63E-03	2,83E-02	0,00E+00	-4,81E-01
Caption	PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality (dimensionless) The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10² or 195, while 1,12E-11 is the same as 1,12*10⁻¹¹ or 0,0000000000112.						
Disclaimers	¹ The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator. ² This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.						

RESOURCE USE PER 1 M ² TEXTILE							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
PERE	[MJ]	2,11E+01	0,00E+00	9,61E-04	2,68E-02	0,00E+00	-8,20E-01
PERM	[MJ]	1,06E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	2,21E+01	0,00E+00	9,61E-04	2,68E-02	0,00E+00	-8,20E-01
PENRE	[MJ]	3,08E+01	0,00E+00	1,27E-02	1,45E-01	0,00E+00	-2,52E+00
PENRM	[MJ]	4,62E+00	0,00E+00	0,00E+00	-4,53E+00	0,00E+00	0,00E+00
PENRT	[MJ]	3,54E+01	0,00E+00	1,27E-02	-4,39E+00	0,00E+00	-2,52E+00
SM	[kg]	2,06E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
RSF	[MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
NRSF	[MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
FW	[m ³]	2,89E-02	0,00E+00	4,75E-07	1,01E-03	0,00E+00	-6,39E-04
Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non renewable primary energy excluding non renewable primary energy resources used as raw materials; PENRM = Use of non renewable primary energy resources used as raw materials; PENRT = Total use of non renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non renewable secondary fuels; FW = Net use of fresh water						
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10 ² or 195, while 1,12E-11 is the same as 1,12*10 ⁻¹¹ or 0,0000000000112.						

WASTE CATEGORIES AND OUTPUT FLOWS PER 1 M ² TEXTILE							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
HWD	[kg]	6,43E-02	0,00E+00	5,11E-13	5,47E-11	0,00E+00	-1,59E-09
NHWD	[kg]	1,67E-02	0,00E+00	1,78E-06	4,87E-03	0,00E+00	-1,25E-03
RWD	[kg]	4,33E-05	0,00E+00	2,41E-08	5,04E-06	0,00E+00	-1,89E-04

CRU	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	8,82E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MER	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EEE	[MJ]	1,01E-01	0,00E+00	0,00E+00	6,68E-01	0,00E+00	0,00E+00
EET	[MJ]	1,78E-01	0,00E+00	0,00E+00	1,20E+00	0,00E+00	0,00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy						
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10 ² or 195, while 1,12E-11 is the same as 1,12*10 ⁻¹¹ or 0,0000000000112.						

BIOGENIC CARBON CONTENT PER 1 M ² TEXTILE		
Parameter	Unit	At the factory gate
Biogenic carbon content in product	[kg C]	0.00E+00
Biogenic carbon content in accompanying packaging	[kg C]	2,89E-02
Note	1 kg biogenic carbon is equivalent to 44/12 kg of CO ₂	

LCA results, Unlit Blockout

ENVIRONMENTAL IMPACTS PER 1 M ² TEXTILE							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
GWP-total	[kg CO ₂ eq.]	3,74E+00	0,00E+00	1,55E-03	1,60E-01	0,00E+00	-2,27E-01
GWP-fossil	[kg CO ₂ eq.]	3,70E+00	0,00E+00	1,53E-03	1,60E-01	0,00E+00	-2,25E-01
GWP-biogenic	[kg CO ₂ eq.]	3,57E-02	0,00E+00	7,80E-06	-5,27E-05	0,00E+00	-1,16E-03
GWP-luluc	[kg CO ₂ eq.]	6,69E-03	0,00E+00	1,61E-05	1,22E-05	0,00E+00	-3,09E-04
ODP	[kg CFC 11 eq.]	2,90E-06	0,00E+00	2,60E-16	7,49E-14	0,00E+00	-2,11E-12
AP	[mol H ⁺ eq.]	1,55E-02	0,00E+00	2,62E-06	4,85E-04	0,00E+00	-2,65E-04
EP-freshwater	[kg P eq.]	8,80E-04	0,00E+00	4,23E-09	1,17E-08	0,00E+00	-2,05E-07
EP-marine	[kg N eq.]	3,48E-03	0,00E+00	1,09E-06	2,20E-04	0,00E+00	-7,68E-05
EP-terrestrial	[mol N eq.]	3,18E-02	0,00E+00	1,16E-05	2,50E-03	0,00E+00	-8,58E-04
POCP	[kg NMVOC eq.]	1,42E-02	0,00E+00	2,37E-06	5,68E-04	0,00E+00	-2,08E-04
ADPm ¹	[kg Sb eq.]	1,76E-05	0,00E+00	1,04E-10	9,20E-10	0,00E+00	-2,22E-08
ADPf ¹	[MJ]	6,65E+01	0,00E+00	2,01E-02	2,28E-01	0,00E+00	-3,98E+00
WDP ¹	[m ³ world eq. deprived]	2,46E+00	0,00E+00	7,17E-06	6,77E-02	0,00E+00	-2,33E-02
Caption	GWP-total = Globale Warming Potential - total; GWP-fossil = Global Warming Potential - fossil fuels; GWP-biogenic = Global Warming Potential - biogenic; GWP-luluc = Global Warming Potential - land use and land use change; ODP = Ozone Depletion; AP = Acidification; EP-freshwater = Eutrophication – aquatic freshwater; EP-marine = Eutrophication – aquatic marine; EP-terrestrial = Eutrophication – terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential – minerals and metals; ADPf = Abiotic Depletion Potential – fossil fuels; WDP = water depletion potential The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10² or 195, while 1,12E-11 is the same as 1,12*10⁻¹¹ or 0,0000000000112.						
Disclaimer	¹ The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.						

ADDITIONAL ENVIRONMENTAL IMPACTS PER 1 M ² TEXTILE							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
PM	[Disease incidence]	1,57E-07	0,00E+00	2,59E-11	1,52E-09	0,00E+00	-2,16E-09
IRP ²	[kBq U235 eq.]	2,39E-01	0,00E+00	5,45E-06	1,22E-03	0,00E+00	-4,92E-02
ETP-fw ¹	[CTUe]	1,88E+01	0,00E+00	2,61E-02	6,70E-02	0,00E+00	-3,50E-01
HTP-c ¹	[CTUh]	1,12E-08	0,00E+00	3,52E-13	1,67E-11	0,00E+00	-4,06E-11
HTP-nc ¹	[CTUh]	3,16E-07	0,00E+00	1,97E-11	1,53E-09	0,00E+00	-6,70E-10
SQP ¹	-	5,21E+01	0,00E+00	8,88E-03	4,46E-02	0,00E+00	-7,58E-01
Caption	PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality (dimensionless) The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10² or 195, while 1,12E-11 is the same as 1,12*10⁻¹¹ or 0,0000000000112.						
Disclaimers	¹ The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator. ² This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.						

RESOURCE USE PER 1 M ² TEXTILE							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
PERE	[MJ]	2,17E+01	0,00E+00	1,51E-03	4,22E-02	0,00E+00	-1,29E+00
PERM	[MJ]	1,70E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	2,33E+01	0,00E+00	1,51E-03	4,22E-02	0,00E+00	-1,29E+00
PENRE	[MJ]	6,65E+01	0,00E+00	2,01E-02	2,28E-01	0,00E+00	-3,98E+00
PENRM	[MJ]	3,85E+00	0,00E+00	0,00E+00	-3,72E+00	0,00E+00	0,00E+00
PENRT	[MJ]	7,04E+01	0,00E+00	2,01E-02	-3,49E+00	0,00E+00	-3,98E+00
SM	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
RSF	[MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
NRSF	[MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
FW	[m ³]	5,81E-02	0,00E+00	7,49E-07	1,59E-03	0,00E+00	-1,01E-03
Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non renewable primary energy excluding non renewable primary energy resources used as raw materials; PENRM = Use of non renewable primary energy resources used as raw materials; PENRT = Total use of non renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non renewable secondary fuels; FW = Net use of fresh water						
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10 ² or 195, while 1,12E-11 is the same as 1,12*10 ⁻¹¹ or 0,0000000000112.						

WASTE CATEGORIES AND OUTPUT FLOWS PER 1 M ² TEXTILE							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
HWD	[kg]	1,07E-01	0,00E+00	8,06E-13	8,62E-11	0,00E+00	-2,50E-09
NHWD	[kg]	2,88E-02	0,00E+00	2,81E-06	7,68E-03	0,00E+00	-1,98E-03
RWD	[kg]	2,71E-04	0,00E+00	3,79E-08	7,94E-06	0,00E+00	-2,98E-04

CRU	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	9,22E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MER	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EEE	[MJ]	1,08E-01	0,00E+00	0,00E+00	1,05E+00	0,00E+00	0,00E+00
EET	[MJ]	1,89E-01	0,00E+00	0,00E+00	1,89E+00	0,00E+00	0,00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy						
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10 ² or 195, while 1,12E-11 is the same as 1,12*10 ⁻¹¹ or 0,0000000000112.						

BIOGENIC CARBON CONTENT PER 1 M ² TEXTILE		
Parameter	Unit	At the factory gate
Biogenic carbon content in product	[kg C]	0.00E+00
Biogenic carbon content in accompanying packaging	[kg C]	4,65E-02
Note	1 kg biogenic carbon is equivalent to 44/12 kg of CO ₂	

Additional information

LCA interpretation

A contribution analysis has been conducted with the aim of identifying which processes and materials contribute the most to the core environmental impacts. Overall, the results show that the greatest environmental impacts for the roller blind textiles take place in the life cycle modules A1-A3, with the production of textile materials (polyester and blackout coating) having the largest contribution to the overall results in most impact categories.

Technical information on scenarios

End of life (C1-C4)

Scenario information	P1	P2	P3	P4	P5	P6	P7	P8	P9	Unit
Collected separately	100	100	100	100	100	100	100	100	100	%
Collected with mixed waste	0	0	0	0	0	0	0	0	0	%
For reuse	0	0	0	0	0	0	0	0	0	kg
For recycling	0	0	0	0	0	0	0	0	0	kg
For energy recovery	0,260	0,525	0,220	0,220	0,215	0,205	0,260	0,215	0,340	kg
For final disposal	0	0	0	0	0	0	0	0	0	kg
Assumptions for scenario development	100% scenario, waste incineration.									-

Re-use, recovery and recycling potential (D)

Scenario information/material	P1	P2	P3	P4	P5	P6	P7	P8	P9	Unit
Electricity recovery from waste incineration	0,81	1,63	0,68	0,68	0,67	0,63	0,81	0,67	1,05	MJ
Heat recovery from waste incineration	1,45	2,94	1,23	1,22	1,20	1,14	1,45	1,20	1,89	MJ

Indoor air

The EPD does not give information on release of dangerous substances to indoor air because the horizontal standards on the relevant measurements are not available. Read more in EN15804+A1 chapter 7.4.1.

Note that the products covered in the EPD are GREENGUARD® certified and comply with respective Indoor climate minimum requirements. This certification attests that the products do not exceed established limits for emissions of harmful substance (VOCs), thereby supporting a healthier indoor climate.

Soil and water

The EPD does not give information on release of dangerous substances to soil and water because the horizontal standards on the relevant measurements are not available. Read more in EN15804+A1 chapter 7.4.2.

References

Publisher	 epddanmark www.epddanmark.dk Template version 2025.1
Programme operator	Danish Technological Institute Gregersensvej DK-2630 Taastrup www.teknologisk.dk
LCA-practitioner	Line Granheim Danish Technological Institute Gregersensvej DK-2630 Taastrup www.teknologisk.dk
LCA software / background data	LCA for Experts version 10.9, databases 2024.2 https://sphera.com EcoInvent 3.10 database <i>EN 15804 reference package 3.1</i>
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General programme instructions

General Programme Instructions, version 3.0, spring 2025
www.epddanmark.dk

Technical Rules and Guidelines

Technical Rules and Guidelines, version 1.0, spring 2025
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EN 15804

DS/EN 15804 + A2:2019 - "Sustainability of construction works – Environmental product declarations – Core rules for the product category of construction products"

EN 15942

DS/EN 15942:2011 – " Sustainability of construction works – Environmental product declarations – Communication format business-to-business"

ISO 14025

DS/EN ISO 14025:2010 – " Environmental labels and declarations – Type III environmental declarations – Principles and procedures"

ISO 14040

DS/EN ISO 14040:2008 – " Environmental management – Life cycle assessment – Principles and framework"

ISO 14044

DS/EN ISO 14044:2008 – " Environmental management – Life cycle assessment – Requirements and guidelines"