

Environmental Product Declaration



In accordance with ISO 14025:2006 for:

Sliver Knit Fur Fabric from Carded Top made of Recycled Dope Dyed Polyester

from

Cafissi S.p.A



Fabrics for creating.

Programme:

Programme operator:

EPD registration number:

Publication date:

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An EPD should provide current information and may be updated if conditions change. The stated validity is therefore subject to the continued registration and publication at www.environdec.com



Programme information

Programme:	The International EPD® System
Address:	EPD International AB Box 210 60 SE-100 31 Stockholm Sweden
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Accountabilities for PCR, LCA and independent, third-party verification	
Product Category Rules (PCR)	
PCR: PCR 2022:04 FABRICS v. 1.0.3.	
PCR review was conducted by: Gorka Benito chair of the PCR review, The Technical Committee of the International EPD® System.	
Life Cycle Assessment (LCA)	
LCA accountability: Head office: via Ombrone 23 52100 Arezzo (AR) - ITALY Operative office: Sovicille 46, 53018 Siena (SI) - ITALY elena.neri@indaco2.it	
Third-party verification	
Independent third-party verification of the declaration and data, according to ISO 14025:2006, via:	
☒ EPD verification by accredited certification body	
Third-party verification: SGS ICS ITALIA S.r.l. is an approved certification body accountable for the third-party verification	
The certification body is accredited by: Accredia, certificate n. 0005VV	
Procedure for follow-up of data during EPD validity involves third-party verifier:	
☒ Yes ☐ No	

The EPD owner has the sole ownership, liability, and responsibility for the EPD.

EPDs within the same product category but registered in different EPD programmes may not be comparable. For two EPDs to be comparable, they must be based on the same PCR (including the same version number) or be based on fully-aligned PCRs or versions of PCRs; cover products with identical functions, technical performances and use (e.g. identical declared/functional units); have equivalent system boundaries and descriptions of data; apply equivalent data quality requirements, methods of data collection, and allocation methods; apply identical cut-off rules and impact assessment methods (including the same version of characterisation factors); have equivalent content declarations; and be valid at the time of comparison. For further information about comparability, see ISO 14025.

The EPD is intended for B2B communication.

Company information

Owner of the EPD: Cafissi S.p.A.

Description of the organisation

Cafissi S.p.A. is a manufacturing and commercial group founded in the 1950s by five brothers, which offers today a wide selection of fabrics for clothing, footwear, accessories and home goods. Thousands of items are entirely designed and produced in Italy, in addition to a wide range of imported products and a wide choice of stock service fabrics.

Cafissi's goal is to constantly offer unique products, diversifying through innovative research and production processes, design, customized fabric production and finishing treatments.

With over seventy years of international activity in the textile sector, Cafissi is able to meet every need in the world of fabric supply.

Each production phase for every type of finishing is carefully monitored by technicians, with trusted third-party specialists in dyeing, finishing, and fabric enhancement, printing, and bonding, in line with the excellence of Made in Italy.

Cafissi's products can be certified GOTS, GRS, RCS, OCS, RWS, OEKOTEX 100%CO organic, OEKOTEX 100%WO, OEKOTEX 100%PL. Further details about the certificated products are available on request.

Name and location of production sites:

- Site - Via della Fattoria 4, Tavola - Prato (PO)
- Subsidiary - Via Sabadell, 58, Prato (PO)
- Fabric warehouse - Via del Lazzeretto 184, Prato (PO)
- Raw material warehouse - Via Bocca di Stella 8, Prato (PO)
- Caficarda (knitting site) - Via I Maggio, 25, Montemurlo - Prato (PO)



Figure 1 - Cafissi site in Via Sabadell, Prato (PO).

Product information

Product name: Sliver Knit Fur Fabric from Carded Top made of Dope Dyed Polyester, with a recycled content over 80% (hereafter “recycled polyester”).

Product description

Sliver knit fur is a pile knit fabric characterized by a plush, fur-like surface, commonly used as an alternative to shearling and teddy fabrics. This textile is produced through a specialized knitting process that integrates recycled unspun fibers, known as sliver, directly into the fabric structure supported by a backing recycled texturized yarn. The weight can range 0.32 ± 0.04 g/m².

Sliver knit fur has multiple applications in the clothing field, both as a fabric for clothing and footwear.

UN CPC code: 2811 - Pile fabrics and terry fabrics, knitted or crocheted

Geographical scope: Global

Content declaration and technical specification

Table 1 - Content declaration for 1 UD of Sliver Knit Fur Fabric (1 m²).

Product components	kg	%	Recycled content
Polyester	0.355	100%	84%

Table 2 - Content declaration of packaging for 1 UD of Sliver Knit Fur Fabric (1 m²).

Packaging components	kg	Recycled content
PE packaging film	0.004	95%
cardboard	0.003	-

Provenience of recycled materials in the product: the recycled material in the product and in the packaging is post-consumer.

The recycled content in the product is based on weighted average 2022 and 2023, in order to consider a more representative series of product batches.

The product does not contain any hazardous substances present in the SVHC list (REACH Regulation (EC) No 1907/2006).

Technical specification

Technical Specification	Reference Standard	Value		
Composition	ISO 1833-2:2020. ISO 1833-1/22 except 5-13-15-16-17-19-21	100% POLYESTER		
Width and Length	UNI EN 1773:1998	total	155.3 cm	
		utile	150.1 cm	
Surface fuzzing and pilling	ISO 12945-2: 2020; ISO 12945-4:2020	4		
Determination of pH	ISO 3071:2020	5.3		
Elasticity	ISO 20932-1:2018/Amd 1:2021	WARP	Estension at 15 N	avg. 19.3%
			Un-recovered elongation after 1'	avg. 2.0%
			Un-recovered elongation after 30'	avg. 1.1%
			Recovery after 1'	avg. 89.6%
			Recovery after 30'	avg. 94.3%
		WEFT	Estension at 15 N	avg. 104.5%
			Un-recovered elongation after 1'	avg. 18.8%
			Un-recovered elongation after 30'	avg. 9.8%
			Recovery after 1'	avg. 82.0%
			Recovery after 30'	avg. 90.6%
Dimensional change to washing	ISO 3759:2011+ ISO 6330:2021+ISO 5077:2007	WARP	avg. -4.3%	
		WEFT	avg. -2.1%	
Colour fastness to artificial light: Xenon arc fading lamp test	ISO 105-B02: 2014 (except p.8.3.3 method 2 and p. 8.3.6 method 5)	>4		
Colour fastness to water	ISO 105 E01:2013			
Colour fastness to dry rubbing	ISO 105X12: 2016	4/5		
Colour fastness to wet rubbing	ISO 105X12: 2016	4/5		
Colour fastness to laundering	ISO 105 C06: 2010 A1S - 40°C	4/5		
Appearance of apparel and other textile end products after domestic washing and drying	ISO 15487:2018	Slight mutting effect		

LCA information

Declared unit: 1 m² of fabric and its packaging (the area of the packaging is not included in this 1 m²).

Time representativeness: site specific data are based on 1-year (year 2023).

Database and LCA software used: Ecoinvent v3.10, SimaPro 9.6

Description of system boundaries: from cradle to gate with module C1-C3.

Lifecycle is structured in the following modules that define the system boundaries:

- **A1:** includes upstream processes for Cafissi's activity: extraction and processing of raw materials and the recycling processes of secondary materials components purchased from suppliers (fibres and yarn that constitute the fabric); production of maintenance materials, auxiliaries, packaging of the components and the final product.
- **A2:** includes transports of purchased raw materials, from suppliers to Cafissi's warehouse location.
- **A3:** includes the core processes of manufacturing of the product under study, i.e. transports among production sites; electricity (both from the grid and auto-produced by photovoltaic panels) and fuels used in the manufacturing; transport and treatment of wastes produced in this module. The production process consists in 3 main steps:
Carded Top Preparation: the recycled polyester is processed to create a carded sliver, ensuring uniform fiber distribution and orientation.
Knitting Process: the carded sliver is fed into a circular knitting machine, where it is mechanically knit by a recycled texturized polyester yarn into a stable base fabric while simultaneously forming a pile surface.
Finishing Treatments: the fabric is sent to finishing process: shearing, tumbling, resin and stabilization, which refine the final aspect of the product.
- **C1:** includes the end-of-life product sorting stage. It is assumed a manual sorting before the destination to landfill or recycling/reuse.
- **C2:** this module includes transportation of the waste to landfill/ recycling site (assumed distance of 100 km).
- **C3:** it includes final waste disposal processes, i.e. landfill disposal 80% and 20% collected for reuse or recycling (Moazeem et al., 2021).

System diagram:

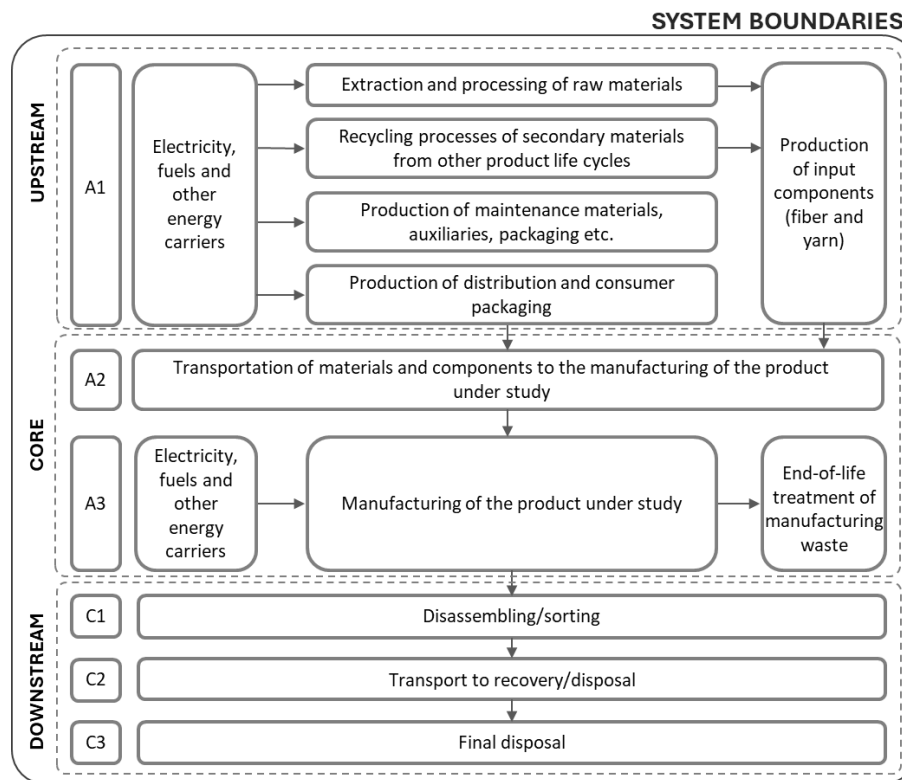


Figure 2 – System diagram of production of Sliver knit fur fabric from Cafissi S.p.A.

Excluded lifecycle stages: according to the PCR, optional modules A4, A5, B1 and B2 are excluded.

More information: the LCA has been performed in compliance with ISO 14040:2021 and ISO 14044:2021, ISO 14025:2006 (Environmental labels and declarations - Type III), and GPI (General Programme Instructions for the International EPD System), 2021-03-29 v.4.0. The LCA refers to the PCR 2022:04 v. 1.0.3. FABRICS.

Primary data have been collected in the production sites of Cafissi, in Prato, Italy, based on direct interviews with employers involved in production processes, during specific field-visits or derived from registered company reports.

All quantities derive from specific data, according to the classification of data quality. Processes from the database refer to Ecoinvent database v.3.10 (system model: Allocation, cut-off by classification). The LCA was performed based on the software LCA SimaPro 9.6.

The EN15804+A2 impact assessment method, and characterisation factors Version 2.0 of impact categories (environdec.com), EF 3.1 (February 2023) were used.

Specific and generic data, databases and accounting models are compliant with the data quality requirements (PCR par 4.7). The share of selected generic data on GWP-total of the upstream module (A1) is 13%. No proxy data were used.

The 99% of mass, energy and environmental relevance flows is included, according to the cut-off rule. The system design follows the modularity principle and the polluter pays principle (PPP).

The electricity mix refers to the Italian residual mix (AIB, 2024), whose GWP-GHG is equal to 0.659 kg CO₂eq/kWh.

The LCA study was performed by Gaia Esposito, Elena Neri, Francesca Rossetti (INDACO2, 2025).

Results of the environmental performance indicators

Impact category indicators

Results are reported per 1 DU (1 m² of fabric).

ENVIRONMENTAL IMPACT CATEGORY INDICATORS										
		Upstream	Core				Downstream			
Indicator	Unit	A1	A2	A3	A1-A3	C1	C2	C3	TOTAL	
GWP-fossil	kg CO2 eq.	1.21E+00	1.02E-01	1.18E+00	2.49E+00	0.00E+00	5.49E-03	2.32E-02	2.52E+00	
GWP-biogenic	kg CO2 eq.	8.16E-02	1.24E-05	1.62E-01	2.44E-01	0.00E+00	6.48E-07	2.81E-05	2.44E-01	
GWP-luluc	kg CO2 eq.	1.18E-03	2.97E-06	3.58E-05	1.22E-03	0.00E+00	1.60E-07	1.42E-06	1.22E-03	
GWP-total	kg CO2 eq.	1.29E+00	1.02E-01	1.34E+00	2.73E+00	0.00E+00	5.49E-03	2.32E-02	2.76E+00	
ODP	kg CFC 11 eq.	1.11E-06	1.41E-09	2.16E-08	1.14E-06	0.00E+00	7.36E-11	7.73E-11	1.14E-06	
AP	mol H+ eq.	5.14E-03	9.88E-04	3.57E-03	9.70E-03	0.00E+00	1.49E-05	2.14E-05	9.73E-03	
EP-freshwater	kg P eq.	6.77E-05	2.11E-07	2.27E-05	9.07E-05	0.00E+00	1.36E-08	2.63E-08	9.07E-05	
EP-marine	kg N eq.	9.32E-04	2.70E-04	5.77E-04	1.78E-03	0.00E+00	5.41E-06	3.35E-05	1.82E-03	
EP-terrestrial	mol N eq.	9.78E-03	2.99E-03	6.47E-03	1.92E-02	0.00E+00	5.93E-05	9.11E-05	1.94E-02	
POCP	kg NMVOC eq.	4.11E-03	8.87E-04	2.92E-03	7.92E-03	0.00E+00	2.22E-05	3.57E-05	7.98E-03	
ADP-minerals&metals*	kg Sb eq.	8.49E-06	4.85E-09	1.14E-08	8.51E-06	0.00E+00	3.25E-10	1.08E-09	8.51E-06	
ADP-fossil*	MJ	1.87E+01	1.34E+00	1.72E+01	3.72E+01	0.00E+00	7.33E-02	6.63E-02	3.73E+01	
WDP*	m³ eq	2.42E-01	1.07E-03	2.72E-01	5.15E-01	0.00E+00	6.75E-05	-4.54E-02	4.70E-01	
Acronyms	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 = Depletion potential of the stratospheric ozone layer; AP = Acidification potential, Accumulated Exceedance; EP-freshwater = Eutrophication potential, fraction of nutrients reaching freshwater end compartment; EP-marine = Eutrophication potential, fraction of nutrients reaching marine end compartment; EP-terrestrial = Eutrophication potential, Accumulated Exceedance; POCP = Formation potential of tropospheric ozone; ADP-minerals&metals = Abiotic depletion potential for non-fossil resources; ADP-fossil = Abiotic depletion for fossil resources potential; WDP = Water (user) deprivation potential, deprivation-weighted water consumption									
* Disclaimer: The results of this environmental impact indicator shall be used with care as the uncertainties of these results are high or as there is limited experience with the indicator.										

Results interpretation: Modules A1 and A3 mainly contributes to overall impacts. Specifically, the production of recycled fiber and yarn (purchased materials), in module A1, and electricity and natural gas consumption for processing, in module A3, constitute the most relevant aspects for all impact categories.

Hotspots highlighted by result analysis represent a starting point for identifying and developing impact mitigation measures and optimizing the production process, for a continuous improvement of the company's environmental performance.

Resource use indicators

Results per 1 DU (1 m² of fabric).

The option B was used for calculating the primary energy use indicators (Annex 3, PCR 2019:14 v.1.3.4).

RESOURCE USE INDICATORS									
		Upstream	Core			Downstream			
Indicator	Unit	A1	A2	A3	A1-A3	C1	C2	C3	TOTAL
PERE	MJ	8.82E-01	2.25E-03	5.09E-01	1.39E+00	0.00E+00	1.18E-04	7.10E-04	1.39E+00
PERM	MJ	1.66E-01	0.00E+00	-4.58E-02	1.20E-01	0.00E+00	0.00E+00	0.00E+00	1.20E-01
PERT	MJ	1.05E+00	2.25E-03	4.63E-01	1.51E+00	0.00E+00	1.18E-04	7.10E-04	1.51E+00
PENRE	MJ	1.74E+01	1.34E+00	1.72E+01	3.59E+01	0.00E+00	7.33E-02	1.70E+00	3.77E+01
PENRM	MJ	9.68E+00	0.00E+00	-4.26E-02	9.64E+00	0.00E+00	0.00E+00	-1.63E+00	8.00E+00
PENRT	MJ	2.71E+01	1.34E+00	1.72E+01	4.56E+01	0.00E+00	7.33E-02	6.63E-02	4.57E+01
SM	kg	3.69E-01	0.00E+00	0.00E+00	3.69E-01	0.00E+00	0.00E+00	0.00E+00	3.69E-01
RSF	MJ	0.00E+00	0.00E+00	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	0.00E+00	0.00E+00
FW	m ³	7.41E-03	4.06E-05	6.52E-03	1.40E-02	0.00E+00	2.46E-06	-1.05E-03	1.29E-02
Acronyms	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 re-sources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Use of net fresh water MJ = MJ net calorific value								

Contacts

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Programme operator:	 INTERNATIONAL EPD SYSTEM EPD International AB www.environdec.com info@environdec.com

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- PCR 2019:14 CONSTRUCTION PRODUCTS v.1.3.4
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- Prè Consultant - SimaPro LCA software <http://www.pre.nl/content/simapro-lca-software>

