

# ENVIRONMENTAL PRODUCT DECLARATION

*In accordance with ISO 14025:2006 and EN 15804+A2:2019/AC:2021 for*

## FibaTape<sup>®</sup> Drywall tape

Classic (Blue), Standard (White), Mold-X(Green) and Xtreme(Orange)

from: Saint-Gobain ADFORS Industrial Fabrics

Version 1  
Publication date: 2023-04-04  
Validity: 5 years  
Valid until: 2028-04-03

Scope of the EPD<sup>®</sup>: Europe

Programme: The International EPD<sup>®</sup> System, [www.environdec.com](http://www.environdec.com)

Programme operator: EPD International AB

Production plant: Saint-Gobain ADFORS CZ, s.r.o;  
Sokolovská 106 570 01 Litomyšl; The Czech Republic

EPD of multiple products, based on a representative product

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](http://www.environdec.com)



The environmental impacts of this product have been assessed over its whole life cycle. Its Environmental Product Declaration has been verified by an independent third party.

Registration number  
The International EPD<sup>®</sup>  
System: S-P-13077

# General information

## Company information

**Manufacturer:** Saint-Gobain ADFORS Industrial Fabrics - Sokolovská 106 570 01 Litomyšl (The Czech Republic). <https://eu.adfors.com/>

**Production plant:** Sokolovská 106 570 01 Litomyšl (The Czech Republic)

**Framework:** The LCA is based on 2022 production data for one site in Czech Republic.

**Geographical scope :** Europe

**UN CPC CODE:** 26890, Woven fabrics (including narrow fabrics) of glass fibres

**Owner of the declaration:** Saint-Gobain ADFORS Industrial Fabrics

**Product name and manufacturer represented:** Woven fabrics (including narrow fabrics) of glass fibres. Saint-Gobain ADFORS Industrial Fabrics

This EPD covers Cradle to gate with options and optional modules (A+B+C+D) as defined in EN 15804:2012 + A2:2019/AC:2021

**EPD<sup>®</sup> prepared by:** Kršková Jana (SAINT-GOBAIN ADFORS CZ, s.r.o., (Jana.Krskova@saint-gobain.com) & MARTIN, Joffrey (Saint-Gobain LCA central team, Joffrey.martin@saint-gobain.com))

The intended use of this EPD is for B2B communication.

**EPD<sup>®</sup> registration number:** S-P-13077

**Declaration issued:** 2023-04-04, **valid until:** 2028-04-03

**Demonstration of verification:** an independent verification of the declaration was made, according to EN ISO 14025:2010. This verification was external and conducted by a third party, based on the PCR mentioned above (see information below).

<b>Programme</b>	The international EPD <sup>®</sup> System		
<b>Address:</b>	EPD <sup>®</sup> International AB Box 210 60 SE-100 31 Stockholm Sweden		
<b>Website:</b>	<a href="http://www.environdec.com">www.environdec.com</a>	<b>E-mail:</b>	<a href="mailto:info@environdec.com">info@environdec.com</a>

CEN standard EN 15804:2012 + A2:2019/AC:2021 serves as the Core Product Category Rules (PCR)

Product category rules (PCR): PCR 2019:14 Construction Products, version 1.3.3

PCR review was conducted by: The Technical Committee of the International EPD System. See [www.environdec.com](http://www.environdec.com) for a list of members. Review chair: Claudia A. Peña, University of Concepción, Chile. The review panel may be contacted via the Secretariat [www.environdec.com/contact](http://www.environdec.com/contact).

Independent third-party verification of the declaration and data, according to ISO 14025:2006:

EPD process certification     EPD verification

LCA Accountability: Joffrey MARTIN

Independent third-party verification of the declaration and data, according to ISO 14025:2006:

EPD verification by individual verifier

Third party verifier : Marcel Gomez

Marcel Gómez Consultoria Ambiental Tlf 0034 630 64 35 93 - [info@marcelgomez.com](mailto:info@marcelgomez.com)

Approved by: The International EPD<sup>®</sup> System

Procedure for follow-up of data during EPD validity involves third part verifier:

Yes     No

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

# Product Information

## Product information and description of use

ADFORS has a very diverse set of processing technologies and materials. Leveraging on this expertise, we can provide innovative solutions that combine different products (e.g., non-woven, laid scrim, woven fabrics) and materials (e.g., glass, polyester) resulting into unique benefits and features that can be adapted to each application.

Glass fibers are weaned to obtain a greige and put in a water-based solution. The greige then goes through a binder applicator where a liquid binder is applied. The bonded greige is then impregnated with glue. Material is wound on a paper tube and finally packed according to customer specification.

The FibaTape® range of drywall joint tapes and crack repair products offers strength, flexibility, easy installation and considerable cost savings. FibaTape® provides faster jointing of plasterboards with a 30% time saving compared to using standard paper tape. Its open fiberglass mesh eliminates blisters and bubbles, while also increasing joint strength. The tapes are easy to cut. Its application makes it the ideal solution for ceilings and high or more technically-demanding areas.

FibaTape® joint tapes are CE certified.

## Technical characteristics for product

Essential characteristics		Performance	Harmonized technical specification
Tensile strength (min)	Warp	400	EAD070002-00-0505:2016
	Weft	800	
Weight (g/m <sup>2</sup> ) ± 10%		60	
Deposit per unit (%) ± 10%		38	
Thickness (mm)		0.26	
Settings (ends/ 10 cm)	Warp	35.4	
	Weft	35.4	

Product	Description
FibaTape® Classic (blue)	Classic FibaTape® under Adfors brand
FibaTape® standard (white)	Standard FibaTape® un-branded/private brand
FibaTape® Mold-X (green)	FibaTape® with antimicrobial coating for added protection against mould and mildew
FibaTape® Xtreme (orange)	FibaTape® designed to provide a secure grip when applying in environments with extreme temperature and humidity

The FibaTape® Classic is considered to be the representative product used in this EPD. This product is the best seller of the brand and all results are displayed for it.

## Declaration of the main product components and/or materials

Description of the main components and/or materials for 1 m<sup>2</sup> of FibaTape® Classic, Standard, mold-S and Xtreme:

Product components	Weight %	Post-consumer recycled material (Weight %)	Biogenic Material (Weight % and kgC/DU)
Greige	60-80%	0%	4.51E-06
Binder	10-20%	0%	0%
Glue	10-20%	0%	0%
Product	Weight (kg/m <sup>2</sup> )		
<b>FibaTape®</b>	<b>0.060</b>	<b>0</b>	4.51E-06
Packaging materials	Weight (kg/m <sup>2</sup> )	Weight%	Weight Biogenic carbon (kg C/DU)
Paper tube	3.43E-03	6%	1.47E-03
Paper label	7.19E-04	1%	3.09E-04
LDPE film	5.79E-04	1%	0.00E+00
Wooden pallet	1.11E-02	19%	4.55E-03
Cardboard	3.61E-03	6%	1.55E-03

At the date of issue of this declaration, there is no “Substance of Very High Concern” (SVHC) in concentration above 0.1% by weight, and neither do their packaging, following the European REACH regulation (Registration, Evaluation, Authorization and Restriction of Chemicals).

The verifier and the program operator do not make any claim nor have any responsibility of the legality of the product.

## LCA calculation information

<b>Type of EPD</b>	Cradle to gate with options and optional modules (A+B+C+D)
<b>Declared Unit</b>	1 m <sup>2</sup> of tape to facilitate the application of plasterboard sealant installed and with a life of 50 years
<b>System boundaries</b>	Mandatory stages = A1-A3; C1-C4 and D; Optional stages = A4-A5; B1-B7
<b>Service life (SL)</b>	The Reference Service Life (RSL) of the FibaTape® product is 50 years. This value is the one commonly used in the main application for FibaTape® which is plasterboard sealing.
<b>Cut-off rules</b>	The LCI data shall include, in accordance with EN 15804, a minimum of 95% of the total input flows (mass and energy) per module (e.g. A1-A3, A4-A5, B1-B5, B6-B7, C1-C4 and module D). In addition, this PCR applies the extended cut-off rule of ISO 21930, which states at least 95% of the environmental impact per module. Plausibility assessments and expert judgement may be used to demonstrate compliance with these criteria Long-term emissions have been included.
<b>Allocations</b>	Allocation has been avoided when possible. The polluter pays, and modularity principles have been followed
<b>Geographical coverage and period</b>	Data included is collected from 1 production site in Litomysl (The Czech Republic) Production year from 2022

<b>Background data source</b>	Ecoinvent v3.9.1 (2023) and GaBi 2023.2
<b>Software</b>	GaBi 10.7.1

EPDs within the same product category but registered in different EPD programmes, or not compliant with EN 15804, 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 EN 15804 and ISO 14025.

## LCA scope

System boundaries (X=included. MND=module not declared)																	
	PRODUCT STAGE			CONSTRUCTION STAGE		USE STAGE							END OF LIFE STAGE				BENEFITS AND LOADS BEYOND THE SYSTEM BOUNDARY
	Raw material supply	Transport	Manufacturing	Transport	Construction-Installation process	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-construction demolition	Transport	Waste processing	Disposal	Reuse-recovery
Module	A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Modules declared	X			X	X	X	X	X	X	X	X	X	X	X	X	X	X
Geography	CZ			EU27	EU27	EU27	EU27	EU27	EU27	EU27	EU27	EU27	EU27	EU27	EU27	EU27	EU27
Share of specific data	>90% GWP- GHG																
Variation products	<2% GWP-GHG																
Variation sites	0%																

### A1-A3, Product stage

**Description of the stage:** the product stage of the FibaTape® products is subdivided into 3 modules A1, A2 and A3 respectively “Raw materials supply”, “Transport to the manufacturer” and “Manufacturing”.

The aggregation of the modules A1, A2 and A3 is mandatory by the EN 15 804 standard. This rule is applied in this EPD.

#### Description of the scenarios and other additional technical information:

##### A1, Raw materials supply

This module considers the extraction and processing of all raw materials and energy which occur upstream to the studied manufacturing process. Specifically, the raw material supply covers production of binder components and glass yarn.

##### A2, Transport to the manufacturer

The raw materials are transported to the manufacturing site. In our case, all the raw materials are transported by truck.

##### A3, Manufacturing

This module includes the manufacturing of the product and packaging. Specifically, it covers the manufacturing of FibaTape® and the packaging.

The production of FibaTape® can be divided in 4 steps:

- Weaning – process where the greige mesh is produced
- Coating – the mesh is coated to give it the desired physical properties. It is at this stage that the product is colored since the colorant is added to the binder.
- The mesh is then dried and impregnated with glue
- Formatting and packaging – the FibaTape® are formatted (rolled and cut as the desired size) and wrapped.

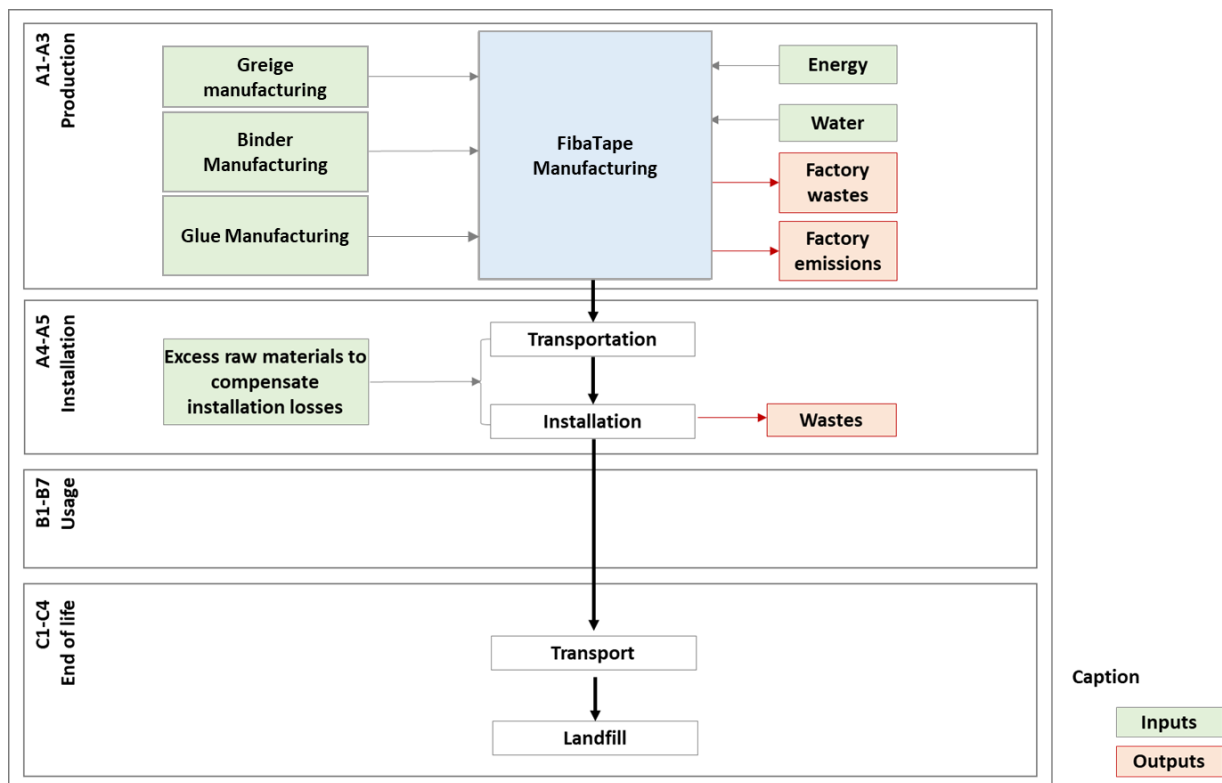
The EPD represents sales of product sold in Europe. The manufacturing site Litomysl is based in Czech Republic and use 100% nuclear electricity.

Type of information	Description
Location	Representative of Electricity purchased by Saint-Gobain ADFORS Industrial Fabrics
Geographical representativeness description	Nuclear 100% from Czech republic
Reference year	2022
Type of dataset	CZ Electricity from nuclear
Source	Gabi database 2023.2
CO2 emission kg CO2 eq. / kWh	4.7E-3 kgCO2/kWh

This module also includes the emissions and wastes generated during manufacturing. Waste produce during manufacturing represents around 7% of total production in 2022.

Wastes leaving the plant are sent to landfill and are transported over 50 km.

## Manufacturing process flow diagram



## A4-A5, Construction process stage

**Description of the stage:** the construction process is divided into 2 modules: A4, transport to the customer site and A5, installation. Since there is a product loss during installation (5%). The quantification of raw material compensation (A5) and its transport to the customer site (A4) are considered.

**A4, Transport to the building site:** this module includes transport from the production gate to the customer site. Transport is calculated based on a scenario with the parameters described in the following table.

	PARAMETER	VALUE
Truck	Fuel type and consumption of vehicle or vehicle type used for transport e.g., long distance truck, boat, etc.	Average truck trailer (27 t payload) with a real 24 t payload, diesel consumption 38 liters for 100 km
	Distance	1076 km. Average distance between production site and customer facilities
	Capacity utilisation (including empty returns)	Use of GaBi data, default: 85% of mass capacity 30% empty returns
	Bulk density of transported products	230 kg/m <sup>3</sup> (weight of 1m <sup>2</sup> of FibaTape®/ thickness in meter)
	Volume capacity utilisation factor	Coefficient < 1
Boat	Fuel type and consumption of vehicle or vehicle type used for transport e.g., long distance truck, boat, etc.	GLO: Container ship, 5.000 to 200.000 dwt payload capacity, deep sea Sphera <u-so>
	Distance	35 km.
	Capacity utilisation (including empty returns)	Use of GaBi data, default: 85% of mass capacity 30% empty returns
	Bulk density of transported products	230 kg/m <sup>3</sup> (weight of 1m <sup>2</sup> of FibaTape®/ thickness in meter)
	Volume capacity utilisation factor	Coefficient < 1

**A5, Installation in the building:** this module includes:

Since the applications of the reported product are diverse, no additional accessory or energy were considered for the installation phase of the product.

PARAMETER	VALUE/DESCRIPTION
Quantity of FibaTape® for 1 m <sup>2</sup> of product	0.06 kg/m <sup>2</sup> (Wet Chopped Strands + Binder)
Thickness	0.26 mm
Auxiliary inputs for the installation	The installation method differs from the final user. This stage has not been described nor assessed
Wastage of materials on the building site before waste processing, generated by the product's installation (specified by type)	5%
Distance	50 km to landfill by truck



<b>Output materials (specified by type) as results of waste processing at the building site e.g., of collection for recycling, for energy recovering, disposal (specified by route)</b>	<p>Wooden pallet: 1.11E-02 kg/m<sup>2</sup> 5% landfill and 95% reused</p> <p>Low density polyethylene film (LDPE): 5.79E-04 kg/m<sup>2</sup> 100% landfill</p> <p>Paper (label): 7.19E-04 kg/m<sup>2</sup> 100% landfill</p> <p>Paper tube: 3.43E-03 kg/m<sup>2</sup> 100% landfill</p> <p>Cardboard: 3.61E-03 kg/m<sup>2</sup> 100% landfill</p> <p>5% waste of FibaTape® during use equivalent to 3 g/m<sup>2</sup> to landfill</p> <p>The distances used for the landfill and recycling center are 50 km</p>
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## B1-B7, Use stage (excluding potential savings)

**Description of the stage:** the use stage is divided into the following modules:

- B1: Use
- B2: Maintenance
- B3: Repair
- B4: Replacement
- B5: Refurbishment
- B6: Operational energy use
- B7: Operational water use

**Description of the scenarios and additional technical information:**

As no maintenance, repair, replacement, and refurbishment are required after use of FibaTape® by customer, no impact has been accounted for in this phase.

## C1-C4, End of Life Stage

**Description of the stage:** this stage includes the next modules:

### C1, Deconstruction, demolition

The de-construction and/or dismantling of FibaTape® products take part of the demolition of the entire building.

### C2, Transport to waste processing

The model use for the transportation (see A4, transportation to the customer site) is applied.

### C3, Waste processing for reuse, recovery and/or recycling

The product is landfilled without reuse, recovery, or recycling.

### C4, Disposal

The FibaTape® is assumed to be 100% landfilled.

**End of life:**

Parameter	Value/description
<b>Collection process specified by type</b>	<p>The entire product is collected alongside any mixed construction waste and sent to landfill</p> <p>0.06 kg of FibaTape® (collected with mixed construction waste)</p>
<b>Recovery system specified by type</b>	<p>There is no known recovery, recycling, or reuse of the product once it has reached its end-of-life phase.</p>

<b>Disposal specified by type</b>	The product alongside the mixed construction waste from demolishing will go to landfill 0.06 kg of FibaTape® are landfilled
<b>Assumptions for scenario development (e.g. transportation)</b>	The product alongside the mixed construction waste from demolishing will go to landfill The waste going to landfill will be transported by truck with 27 t payload, using diesel as a fuel consuming 38 liters per 100km Distance covered is 50 km

## **D, Reuse/recovery/recycling potential**

This section includes benefits linked to product waste and packaging waste. 100% of wastes are landfilled. There is no reuse, nor recovery, nor recycling of this product. Hence, no recycling benefits are reported on stage D.

## **LCA results**

As specified in EN 15804:2012+A2:2019/AC:2021 and the PCR 2019:14 Construction Products, version 1.3.3. The environmental impacts are declared and reported using the baseline characterization factors are from the ILCD. Raw materials and energy consumption, as well as transport distances have been taken directly from the manufacturing plant (Production data of 2022). Characterisation factors EN15804 based on EF 3.1.

According to the EN 15804:2012+A2:2019/AC:2021 standard, the LCIA results are relative expressions translating impacts into environmental indicators (midpoint impact categories). Thus, the estimated impact results are only relative statements, which do not indicate the endpoints of the impact categories, exceeding threshold values, safety margins and/or risks.

All the results refer to 1 m<sup>2</sup> of a FibaTape® Classic (weight of 0.06 kg/m<sup>2</sup>).

Disclaimer 1: The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the following indicators:








- Resource use, mineral and metals [kg Sb eq.]
- Resource use, energy carriers [MJ]
- Water deprivation potential [m<sup>3</sup> world equiv.]

Disclaimer 2: The following optional indicators are not declared:

- Ecotoxicity freshwater [CTUe]
- Particulate Matter emissions [Disease incidence]
- Cancer human health effects [CTUh]
- Ionizing radiation - human health [kBq U235 eq.]
- Non-cancer human health effects [CTUh]
- Land Use [Pt]











Disclaimer 3: This EPD including module C, we strongly discourage using the results of modules A1-A3 without considering the results of module C.

# Environmental Impacts








Environmental indicators		Product stage	Construction stage			Use stage							End of life stage			Reuse, Recovery Recycling
		A1 / A2 / A3	A4 Transport	A5 Installation	B1 Use	B2 Maintenance	B3 Repair	B4 Replacement	B5 Refurbishment	B6 Operational energy use	B7 Operational water use	C1 Deconstruction / demolition	C2 Transport	C3 Waste processing	C4 Disposal	D Reuse, recovery, recycling
	Climate Change [kg CO <sub>2</sub> eq.]	1.69E-01	4.70E-03	8.87E-03	0	0	0	0	0	0	0	2.39E-04	2.13E-04	0	2.38E-03	0
	Climate Change (fossil) [kg CO <sub>2</sub> eq.]	1.73E-01	4.64E-03	8.91E-03	0	0	0	0	0	0	0	2.39E-04	2.10E-04	0	2.38E-03	0
	Climate Change (biogenic) [kg CO <sub>2</sub> eq.]	-2.93E-02	1.08E-05	7.03E-02	0	0	0	0	0	0	0	8.02E-08	4.89E-07	0	3.70E-05	0
	Climate Change (land use change) [kg CO <sub>2</sub> eq.]	1.93E-04	4.34E-05	1.20E-05	0	0	0	0	0	0	0	2.39E-08	1.98E-06	0	2.37E-06	0
	Ozone depletion [kg CFC-11 eq.]	9.41E-08	4.12E-16	4.70E-09	0	0	0	0	0	0	0	5.15E-11	1.87E-17	0	2.63E-15	0
	Acidification [Mole of H+ eq.]	4.18E-04	6.33E-06	2.12E-05	0	0	0	0	0	0	0	2.50E-06	2.46E-07	0	9.32E-06	0
	Eutrophication aquatic freshwater [kg P eq.]	1.27E-05	1.71E-08	6.34E-07	0	0	0	0	0	0	0	7.47E-09	7.79E-10	0	3.66E-07	0
	Eutrophication aquatic marine [kg N eq.]	1.15E-04	2.08E-06	5.88E-06	0	0	0	0	0	0	0	1.11E-06	8.48E-08	0	2.19E-06	0
	Eutrophication terrestrial [Mole of N eq.]	1.08E-03	2.43E-05	5.55E-05	0	0	0	0	0	0	0	1.22E-05	1.00E-06	0	2.40E-05	0
	Photochemical ozone formation [kg NMVOC eq.]	3.65E-04	5.32E-06	1.86E-05	0	0	0	0	0	0	0	3.34E-06	2.14E-07	0	6.87E-06	0
	Depletion of abiotic resources - mineral and metals [kg Sb eq.] <sup>1</sup>	3.18E-07	3.05E-10	1.59E-08	0	0	0	0	0	0	0	1.24E-10	1.39E-11	0	1.80E-10	0
	Depletion of abiotic resources – fossil fuels [MJ] <sup>1</sup>	3.88E+00	6.40E-02	1.97E-01	0	0	0	0	0	0	0	3.29E-03	2.90E-03	0	3.42E-02	0
	Water use [m <sup>3</sup> world equiv.] <sup>1</sup>	4.70E-02	5.40E-05	2.35E-03	0	0	0	0	0	0	0	8.10E-06	2.46E-06	0	3.22E-05	0

<sup>1</sup> The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator

# Resources Use

		Product stage	Construction stage	Use stage							End of life stage			D Reuse, recovery, recycling		
Resources Use indicators		A1 / A2 / A3	A4 Transport	A5 Installation	B1 Use	B2 Maintenance	B3 Repair	B4 Replacement	B5 Refurbishment	B6 Operational energy use	B7 Operational water use	C1 Deconstruction / demolition	C2 Transport	C3 Waste processing	C4 Disposal	D Reuse, recovery, recycling
	Use of renewable primary energy excluding renewable primary energy resources used as raw materials (PERE) [MJ]	2.81E-01	4.51E-03	1.43E-02	0	0	0	0	0	0	0	1.86E-05	2.06E-04	0	3.13E-03	0
	Use of renewable primary energy resources used as raw materials (PERM) [MJ]	2.88E-01	0	1.44E-02	0	0	0	0	0	0	0	0	0	0	0	0
	Total use of renewable primary energy resources (PERT) [MJ]	5.69E-01	4.51E-03	2.87E-02	0	0	0	0	0	0	0	1.86E-05	2.06E-04	0	3.13E-03	0
	Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials (PENRE) [MJ]	3.88E+00	6.42E-02	1.98E-01	0	0	0	0	0	0	0	3.29E-03	2.91E-03	0	3.42E-02	0
	Non-renewable primary energy resources used as raw materials (PENRM) [MJ]	1.94E-01	0	9.74E-03	0	0	0	0	0	0	0	0	0	0	0	0
	Total use of non-renewable primary energy resources (PENRT) [MJ]	4.08E+00	6.42E-02	2.07E-01	0	0	0	0	0	0	0	3.29E-03	2.91E-03	0	3.42E-02	0
	Use of secondary material (SM) [kg]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Use of renewable secondary fuels (RSF) [MJ]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Use of non-renewable secondary fuels (NRSF) [MJ]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Net use of fresh water (FW) [m3]	1.30E-03	4.97E-06	6.53E-05	0	0	0	0	0	0	0	1.89E-07	2.26E-07	0	1.98E-06	0

# Waste Category & Output flows


Waste Category & Output Flows		Product stage	Construction stage		Use stage							End of life stage				D Reuse, recovery, recycling
		A1 / A2 / A3	A4 Transport	A5 Installation	B1 Use	B2 Maintenance	B3 Repair	B4 Replacement	B5 Refurbishment	B6 Operational energy use	B7 Operational water use	C1 Deconstruction / demolition	C2 Transport	C3 Waste processing	C4 Disposal	D Reuse, recovery, recycling
	Hazardous waste disposed (HWD) [kg]	1.19E-05	2.37E-13	5.96E-07	0	0	0	0	0	0	0	0	1.08E-14	0	1.03E-10	0
	Non-hazardous waste disposed (NHWD) [kg]	6.99E-03	9.24E-06	3.95E-04	0	0	0	0	0	0	0	0	4.20E-07	0	5.99E-02	0
	Radioactive waste disposed (RWD) [kg]	9.00E-05	8.30E-08	4.50E-06	0	0	0	0	0	0	0	0	3.76E-09	0	4.14E-07	0
	Components for re-use (CRU) [kg]	0	0	6.34E-04	0	0	0	0	0	0	0	0	0	0	0	0
	Materials for Recycling (MFR) [kg]	1.80E-04	0	9.00E-06	0	0	0	0	0	0	0	0	0	0	0	0
	Materials for Energy Recovery (MER) [kg]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Exported energy (EE) [MJ]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

# Environmental impacts according to EN 15804:2012 + A1

The following tables presents results of a FibaTape® Classic (0.06 kg/m<sup>2</sup>) according to EN 15804 +A1.



	Product stage	Construction stage		Use stage							End of life stage			Reuse, recovery, recycling		
	A1 / A2 / A3	A4 Transport	A5 Installation	B1 Use	B2 Maintenance	B3 Repair	B4 Replacement	B5 Refurbishment	B6 Operational energy use	B7 Operational water use	C1 Deconstruction / demolition	C2 Transport	C3 Waste processing	C4 Disposal	D Reuse, recovery, recycling	
Environmental impacts	Global Warming Potential (GWP) [kg CO <sub>2</sub> eq.]	1.67E-01	4.63E-03	8.74E-03	0	0	0	0	0	0	0	2.38E-04	2.10E-04	0	2.33E-03	0
	Ozone depletion (ODP) [kg CFC 11eq.]	6.51E-08	4.85E-16	3.26E-09	0	0	0	0	0	0	0	4.08E-11	2.20E-17	0	3.10E-15	0
	Acidification potential (AP) [kg SO <sub>2</sub> eq.]	3.33E-04	4.65E-06	1.69E-05	0	0	0	0	0	0	0	1.79E-06	1.78E-07	0	7.52E-06	0
	Eutrophication potential (EP) [kg (PO <sub>4</sub> ) <sub>3</sub> -eq.]	9.50E-05	9.16E-07	4.81E-06	0	0	0	0	0	0	0	4.27E-07	3.84E-08	0	5.56E-06	0
	Photochemical ozone creation (POCP) - [kg Ethylene eq.]	4.40E-05	-2.72E-07	2.20E-06	0	0	0	0	0	0	0	1.84E-07	-1.43E-08	0	6.47E-07	0
	Abiotic depletion potential for non-fossil resources (ADP-elements) [kg Sb eq.]	3.18E-07	3.03E-10	1.60E-08	0	0	0	0	0	0	0	1.24E-10	1.38E-11	0	1.82E-10	0
	Abiotic depletion potential for fossil resources (ADP-fossil fuels) [MJ]	3.56E+00	6.32E-02	1.81E-01	0	0	0	0	0	0	0	3.27E-03	2.87E-03	0	3.30E-02	0

# Additional mandatory indicators from EN 15804

Environmental indicators	Product stage	Construction stage			Use stage							End of life stage			Reuse, Recovery Recycling
	A1 / A2 / A3	A4 Transport	A5 Installation	B1 Use	B2 Maintenance	B3 Repair	B4 Replacement	B5 Refurbishment	B6 Operational energy use	B7 Operational water use	C1 Deconstruction / demolition	C2 Transport	C3 Waste processing	C4 Disposal	D Reuse, recovery, recycling
 GWP-GHG [kg CO <sub>2</sub> eq.] <sup>2</sup>	1.99E-01	4.69E-03	-6.14E-02	0	0	0	0	0	0	0	2.39E-04	2.13E-04	0	2.34E-03	0

<sup>2</sup> The indicator includes all greenhouse gases included in GWP-total but excludes biogenic carbon dioxide uptake and emissions and biogenic carbon stored in the product. This indicator is thus almost equal to the GWP indicator originally defined in EN 15804+A2:2019/AC:2021.

## Information on biogenic carbon content

Biogenic Carbon Content		Product stage
		A1 / A2 / A3
	Biogenic carbon content in product [kg]	4.51E-06
	Biogenic carbon content in packaging [kg]	7.99E-03

Note: 1 kg biogenic carbon is equivalent to 44/12 kg CO<sub>2</sub>.

The biogenic carbon content for packaging is quantified for the wooden pallet, for the paper label and the paper cores.

The biogenic carbon content for product is quantified for some of the raw materials used in the binder.

## Variation between the different products

This is an EPD of multiple products, based on a representative product. Hence, the variation of impact between products has to be displayed for all environmental indicator where the variation is above 10%.

The only indicators for which the variation is above 10% is "Depletion of abiotic resources - mineral and metals [kg Sb eq.]". The results for the 4 products covered by this EPD on this indicator are displayed for module A1-A3 in the following table.

Product	Climate Change [kg CO <sub>2</sub> eq.]	Resource use, mineral and metals [kg Sb eq.]
FibaTape® Classic (blue)	1.69E-01	3.18E-07
FibaTape® standard (white)	1.69E-01	3.11E-07
FibaTape® Mold-X (green)	1.70E-01	4.02E-07
FibaTape® Xtreme (orange)	1.72E-01	3.50E-07
Deviation between min and max	2%	30%

## Appendix:

### Electricity information

TYPE OF INFORMATION	DESCRIPTION
Location	Residual nuclear electricity mix on the market purchased by Saint-Gobain ADFORS Industrial Fabrics CZ, s.r.o
Geographical representativeness description	Nuclear 100 %



<b>Reference year</b>	2022 AIB European Residual Mix report
<b>Type of data set</b>	Cradle to gate from Thinkstep database Dataset: CZ Electricity grid mix ts
<b>Source</b>	AIB European Residual Mix report Background data: Gabi database 2022: dataset valid until 2024
<b>Emissions kg CO<sub>2</sub> eq. / kWh</b>	4.69E-03 kg CO <sub>2</sub> eq. / kWh

The Guarantees of Origin is valid for at least the upcoming year and Vetrotech makes a commitment to buy Guarantees of Origin for the full validity period of the EPD. If the electricity mix changes during the EPD validity in a way that has an impact on the results or other contents of the EPD, the rules of the GPI will be followed.

## Data quality

Inventory data quality is judged by geographical, temporal, and technological representativeness. To cover these requirements and to ensure reliable results, first-hand industry data crossed with LCA background datasets were used. The data was collected from internal records and reporting documents from Saint-Gobain ADFORS Industrial Fabrics. After evaluating the inventory, according to the defined ranking in the LCA report, the assessment reflects fair inventory data quality for the geographical representation, fair for technological and good for temporal representation.

## Bibliography

1. Product Category Rules for Building-Related Products and Services Part A: Life Cycle Assessment Calculation Rules and Report Requirements
2. PCR Guidance for Building-Related Products and Services Part B: Joint Compound EPD Requirements
3. UL program instruction, version 2.5, march 2020
4. ISO 14040:2006: Environmental Management-Life Cycle Assessment-Principles and framework.
5. ISO 14044:2006: Environmental Management-Life Cycle Assessment-Requirements and guidelines.
6. ISO 21930:2017 Sustainability in buildings and civil engineering works — Core rules for environmental product declarations of construction products and services.
7. ISO 14025:2006: Environmental labels and Declarations-Type III Environmental Declarations-Principles and procedures.
8. EN 15804:2012+A1:2013: Sustainability of construction works - Environmental product declarations - Core rules for the product category of construction products
9. EN 15804:2012+A2:2019/AC:2021- Sustainability of construction works - Environmental product declarations - Core rules for the product category of construction products
10. The International EPD System PCR 2019:14 (EN 15804: A2). Construction products and Construction services, (1.3.3)
11. European Chemical Agency, Candidate List of substances of very high concern for Authorization.
12. Gabi 2023.2 Database
13. Ecoinvent 3.8 database
14. US LCI database
15. EPD International (2021) The general program instructions (GPI 4.0) for the international EPD®
16. Adfors FibaTape®: <https://www.adfors.com/drywall-finishing/FibaTape-drywall-joint-tapes-and-accessories/FibaTape-drywall-joint-tapes-0>