



ENVIRONMENTAL PRODUCT DECLARATION

In accordance with ISO 14025:2006 and
EN 15804:2012+A2:2019/AC:2021 for:

weber.therm armadura base

Version 1

Version Date: 2025/07/31

Validity: 5 years

Validity Date: 2030/07/30



The International EPD® System
Programme operator: EPD International AB
Registration number: EPD-IES-0025517:001



SAINT-GOBAIN Weber GmbH

An EPD may be updated or depublished if conditions change.
To be find the lates version of the EPD and to confirm its
validity, see www.environdec.com

GENERAL INFORMATION

Programme information

PROGRAMME: The International EPD® System
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PCR information

Product Category rules (PCR)

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

Product category rules (PCR): PCR 2019:14 Construction Products, version 2.0.1

PCR review was conducted by: The Technical Committee of the International EPD® System

See www.environdec.com for a list of members.

Chairs of the PCR review: Rob Rouwette (chair), Noa Meron (co-chair).

Verification

External and independent ('third-party') verification of the declaration and data, according to ISO 14025:2006, via

EPD verification through:

- Individual EPD verification without a pre-verified LCA/EPD tool
- Individual EPD verification with a pre-verified LCA/EPD tool
- EPD process certification* without a pre-verified LCA/EPD tool
- EPD process certification* with a pre-verified LCA/EPD tool
- Fully pre-verified EPD tool

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

EPD verification by individual verifier

Third party verifier: Dr. Andrew Norton, a.norton@renewables.co.uk

Approved by: The International EPD® System

Procedure for follow-up of data during EPD validity involves third part verifier: Yes No

Ownership and limitation on use of EPD

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

EPDs within the same product category but published in different EPD programmes, may not be comparable. For two EPDs to be comparable, they shall be based on the same PCR (including the same first-digit 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 identical scope in terms of included life-cycle stages (unless the excluded life-cycle stage is demonstrated to be insignificant); apply identical impact assessment methods (including the same version of characterization factors); and be valid at the time of comparison.

Information about EPD Owner

Address and contact information about the EPD owner: SAINT-GOBAIN Weber, Willstätterstraße 60, 40549 Düsseldorf, Germany

Description of the organization of the EPD owner: Saint-Gobain designs, manufactures and distributes materials and services for the construction and industrial markets.

The integrated solutions for new constructions or the renovation of public and private buildings, lightweight construction, and decarbonization in construction and industry have been developed through a continuous innovation process and offer sustainability and performance.

Management system-related certification: DIN EN ISO 9001:2015

LCA practitioner: Heike Zehnter, SAINT-GOBAIN LCA-Team Germany, heike.zehnter@saint-gobain.com and Yuanchi Wei, wei.yuanchi@saint-gobain.com

Communication: The intended use of this EPD is for B2B communication.

Product information

Product name: weber.therm armadura base

Visual representation of the product:



UN CPC CODE: 37510 Non-refractory mortars and concretes

Manufacturing sites: SAINT-GOBAIN Weber, Monplaisierstraße 33, 39249 Barby
SAINT-GOBAIN Weber, Hauptstraße 67, 87787 Wolfertschwenden
SAINT-GOBAIN Weber, Meiersberger Straße, 42489 Wülfrath-Flandersbach

Product description

Weber.therm armadura base is a factory-mixed, mineral dry mortar in accordance with EN 998-1, designed for outdoor use. It can be applied as a thick-layer, solid and mineral reinforcing mortar or render within the high-performance, massive and fully mineral Etics (External Thermal Insulation Composite System) weber.therm circle. The base coat render of this system is particularly suitable for the facade insulation of buildings where a massive, dismantlable and recyclable structure is required.

For more information:

<https://www.de.weber/en/insulating-external-thermal-insulation-composite-system-etics/adhesive-and-reinforcing-mortar/webertherm-armadura-base>

All figures in this EPD refers to weber.therm armadura base.

Description	Value	Unit
weber.therm armadura base	1	kg of dry mortar
Lifespan	50	Years

Technical data/physical characteristics:

Parameter	Value / Description	
Reaction to fire	A1 (non-combustible)	EN 13501-1
Mortar group	P II	DIN 18550
Application thickness	10 mm - 15 mm	
Water demand	6.5 liters/25 kg	
Installation information (kg/m ²)	12.5 kg/m ² (10 mm thickness)	
Yield	approx. 800 liters/ton	

Content declaration

Description of the main components and/or materials:

Product components	Weight [%]	Post-consumer recycled material weight [%]	Biogenic material, weight [%]	Biogenic material [kg C/kg of DU]
Total Binder	10 – 20%	0%	0%	0 kg C/DU
Total Minerals inert	70 – 90%	0%	0%	0 kg C/DU
Total Other additives	1 – 5%	0%	0.11%	0.0011 kg C/DU
Sum	100%	0%	0.11%	
Packaging materials	Weight [kg]	Weight versus the product [%]	Weight biogenic carbon [%]	Biogenic material [kg C/kg of DU]
Composite bag (85% paper + 15% LDPE)	0.004 kg	0.4%	0.15%	0.001 kg C/DU
Polyethylene film (LDPE)	0.0006 kg	0.06%	0%	0 kg C/DU
Wooden pallet	0.021 kg	2.1%	0.86%	0.008 kg C/DU

Hazardous substances

At the date of issue of this declaration, there is no “Substance of Very High Concern” (SVHC) in concentration above 0.1% by weight in product or packaging, following the European REACH regulation (Registration, Evaluation, Authorization and Restriction of Chemicals).

LCA information

TYPE OF EPD	Cradle to gate with options, module C1-C4, module D and optional modules (A4–A5 + B1–B7).
DECLARED UNIT	1 kg of dry mortar
SYSTEM BOUNDARIES	Cradle to gate with options, module C1-C4, module D and optional modules (A4–A5 + B1–B7).
REFERENCE SERVICE LIFE (RSL)	The Reference Service Life (RSL) of the mortar product is 50 years. This 50-year value is the amount of time that we recommend our products last for without refurbishment and corresponds to standard building design life.
CUT-OFF RULES	<p>In the case that there is not enough information, the process energy and materials representing less than 1% of the whole energy and mass used can be excluded (if they do not cause significant impacts). The addition of all the inputs and outputs excluded cannot be bigger than the 5% of the whole mass and energy used, as well of the emissions to environment occurred.</p> <p>Flows related to human activities such as employee transport are excluded.</p> <p>The construction of plants, production of machines and transportation systems are excluded since the related flows are supposed to be negligible compared to the production of the building product when compared at these systems lifetime level.</p>
ALLOCATIONS	<p>Allocation has been avoided when possible and when not possible a mass allocation has been applied.</p> <p>The polluter pays and the modularity principles as well have been followed.</p>
DATA QUALITY ASSESSMENT	Data quality of primary and secondary data had been judged by its precision (measured, calculated, or estimated), completeness (e.g., unreported emissions), consistency (degree of uniformity of the methodology applied), and representativeness (geographical, technological, and temporal).
GEOGRAPHICAL COVERAGE AND TIME PERIOD	<p>Scope: Europe</p> <p>Data is collected from three Weber production sites in Germany: Barby, Wolfertschwenden and Wülfrath-Flandersbach,</p> <p>Data collected for the year 2024</p>
BACKGROUND DATA SOURCE	The databases Sphera CUP2024.2 and ecoinvent v.3.10 EF Package 3.1
SOFTWARE	Sphera LCA for experts (GaBi) 10

Data quality declaration

Data collection	Data collection period 01.01.2024 to 31.12.2024
Sites used	Barby, Wolfertschwenden and Wülfrath-Flandersbach
Geography	Produce in Germany Sold in Europe Use and disposal in Europe
Technology	Mortars are produced by mixing cement, others minerals and some additives.
Averaging	Production weighted average covering 100% of production by the company
LCI/LCA database	Sphera CUP2024.2 and ecoinvent v.3.10
EPD used	Primary data from the EPDs of the cement used as raw materials are applied.
Data Quality Scheme	EN 15804:2012+A2:2019, Annex E, Table E.2
Use of Fair data with more than 30 % of a core impact	None
Use of Poor relevant data	None
Use of Very Poor relevant data	None

Process	Source type	Source	Reference year	Data category	A1-A3 GWP-GHG [kg CO ₂ eq.]
Manufacturing process					
Energy specific	Database	Sphera 2024.2	<5 years old	Primary data	5.6%
RMs from EPD					
CEM EPD	EPD	EPD global	2022	Primary data	41.3%
Transportation (only if specific data collected)					
A2_Transport_Specific	Database	Sphera 2024.2 /ecoinvent 3.10	<5 years old	Primary data	1.4%
Total share of primary data					48.3%

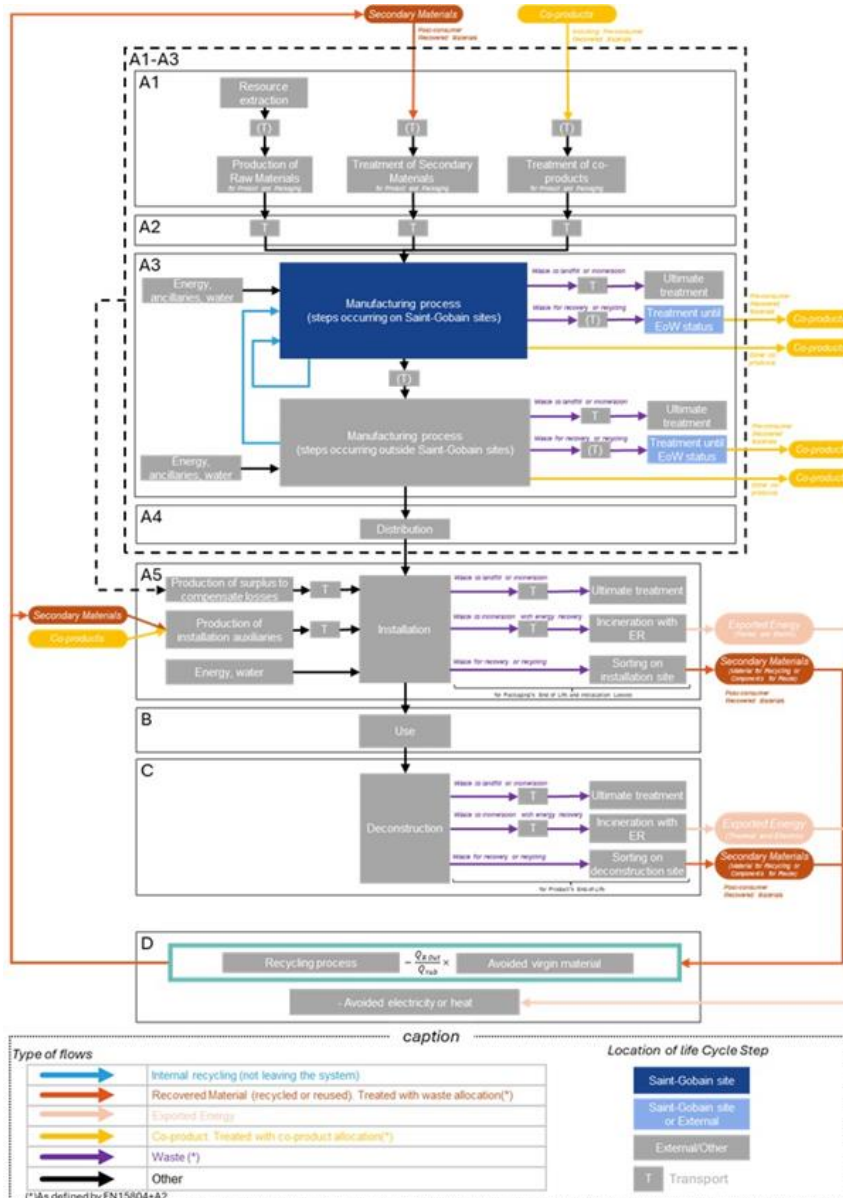
A1-A3 GWP-GHG	1.83E-01
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Description of system boundaries

System boundaries (X=included. MND=module not declared)

	PRODUCT STAGE			CONSTRUCTION STAGE		USE STAGE							END OF LIFE STAGE				BENEFITS AND LOADS BEYOND
	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	X	X
Geography	GLO	GLO	DE	EU	EU	EU	EU	EU	EU	EU	EU	EU	EU	EU	EU	EU	EU

System boundaries when the end-of-waste state is reached:



Life cycle stages

A1-A3. Product stage

The product stage of mortar products is subdivided into 3 modules A1, A2 and A3 respectively “raw material supply”, “transport to manufacturer” and “manufacturing”.

A1. Raw materials supply

This module includes the extraction and transformation of raw materials.

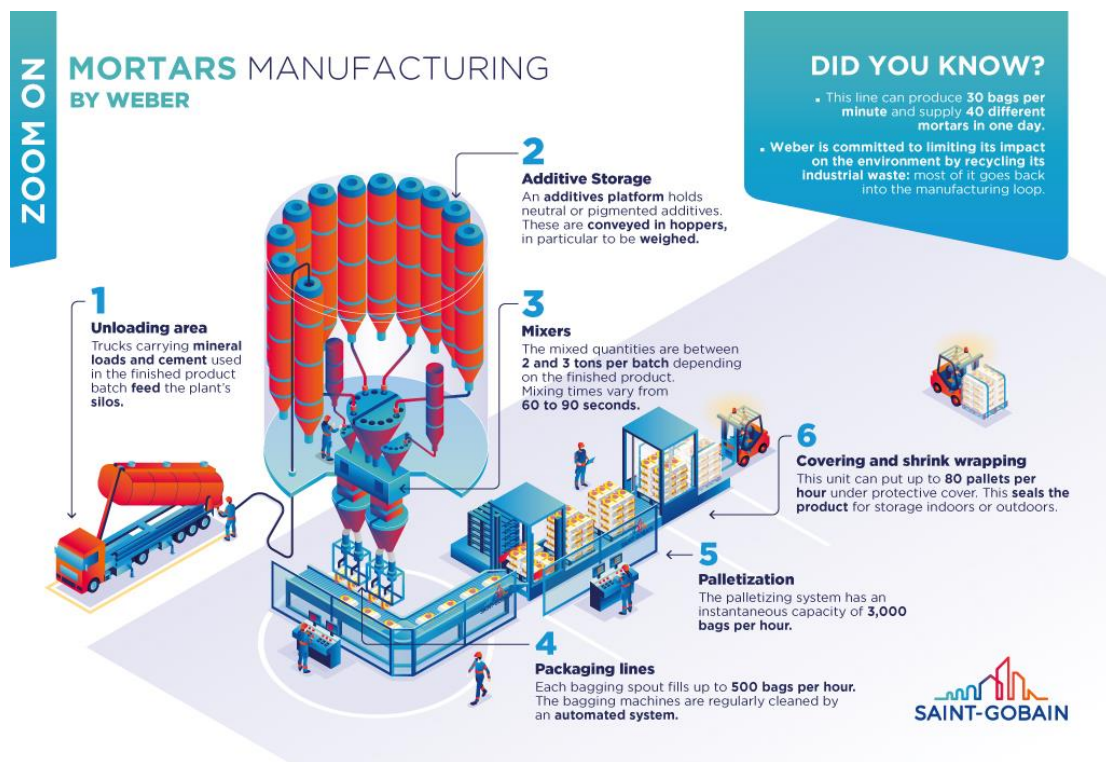
A2. Transport to the manufacturer

This module includes the transportation of raw materials and packaging to the manufacturing site. The modelling includes road, boat and/or train transportations.

A3. Manufacturing

This module includes the manufacture of products and the manufacture of packaging. The production of packaging material is considered at this stage. The processing of any waste arising from this stage is also included.

Manufacturing process flow diagram



The manufacturing activities include grinding, drying, storing, mixing, packing and internal transportation. Packaging-related flows in the production process and all up-stream packaging are included in the manufacturing module, i.e., wooden pallets, bags, and LDPE film.

A4-A5. Construction process stage

The construction process is divided into 2 modules: A4, Transport to the building site and A5, Installation in the building.

A4. Transport to the building site

This module includes transport from the production gate to the building site. Transport is calculated based on a scenario with the parameters described in the following table.

Parameter	Value / Description
Fuel type and consumption of vehicle or vehicle type used for transport e.g. long-distance truck, boat, etc.	Freight truck trailer 27 t payload, diesel consumption 38 liters for 100 km
Distance	100 km
Capacity utilisation (including empty returns)	68.4% of the capacity in mass 30% of empty returns
Bulk density of transported products*	1173.8 kg/m ³
Volume capacity utilisation factor	1 (by default)

To adjust the effects of transport for further distances, you will find the corresponding multiplication factors in the table “Influence of transportation to other countries” in Additional Information.

A5. Installation in the building

This module includes: the installation of the product, the surplus of raw materials and packaging (cradle to gate) to compensate for the loss of product during the installation, the transport and management of packaging and product waste.

In this module the following was taken into consideration:

- Energy used in the equipment to prepare the product.

Not taken into consideration:

- Additional accessories for installation
- Energy used to install the product (manual tools are used instead).

Parameter	Value / Description
Ancillary materials for installation (specified by materials)	None
Water use	0.26 l/kg of product
Other resource use	None
Quantitative description of energy type (regional mix) and consumption during the installation process	0.00396 MJ/kg of product
Wastage of materials on the building site before waste processing, generated by the product's installation (specified by type)	5% losses during installation
Output materials (specified by type) as results of waste processing at the building site e.g. of collection for recycling, for energy recovering, disposal	Product waste: 0.05 mortar kg (landfill) Packaging waste: Composite bag (85% paper + 15% LDPE): 0.004 kg/kg of product (100% Incineration with thermal energy use) Polyethylene film (LDPE): 0.0006 kg/kg of product (100% Recycling) Wooden pallet: 0.021 kg/kg of product (100% Incineration with thermal energy use after using 8 times)
Direct emissions to ambient air, soil, and water	None

B1-B7. Use stage (excluding potential savings)

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

The product has a reference service life of 50 years. This assumes that the product will last in situ with no requirements for maintenance, repair, replacement, or refurbishment throughout this period. Therefore, it has no impact at this stage.

C1-C4. End of Life Stage

This stage includes the next modules:

- **C1: Deconstruction, demolition.** The de-construction and/or dismantling of the product take part of the demolition of the entire building. The energy considered for demolition is 0.018 MJ/kg.
- **C2: Transport to waste processing**
- **C3: Waste processing for reuse, recovery and/or recycling**
- **C4: Waste disposal,** including physical pre-treatment and site management.

Description of the scenarios and additional technical information for the end of life:

Parameter	Value / Description
Collection process specified by type	1.13 kg/m ² of dry mortar (1 kg of dry mortar powder + 0.13 kg of water content) is collected with mixed construction waste
Disposal specified by type	100% (1.13 kg) to municipal landfill
Assumptions for scenario development (e.g. transportation)	Average truck trailer with 27 t payload, diesel consumption 38 l/100 km; 50 km distance to landfill

D. Reuse/recovery/recycling potential

In the module D are declared the environmental benefits and loads from reusable products, recyclable materials, or energy recovery. Module D considers:

- Inputs of secondary materials: recycled raw materials for product and packaging (pre- and post-consumer),
- Outputs of secondary materials: product and/or packaging sent to recycling,
- Exported energy (electric or thermal): product and/or packaging sent to incineration

Environmental performance

As specified in EN 15804:2012+A2:2019/AC:2021 and the Product-Category Rules, the environmental impacts are declared and reported using the baseline characterization factors based on EF 3.1. Raw materials and energy consumption, as well as transport distances have been taken directly from the manufacturing plant.

The estimated impact results are only relative statements which do not indicate the end points of the impact categories, exceeding threshold values, safety margins or risks.

The results of the end-of-life stage (modules C1-C4) should be considered when using the results of the product stage (modules A1-A3)

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 [m³ world equiv.]
- Land use [Pt]
- Human toxicity (cancer) [CTUh]
- Human toxicity (non-cancer) [CTUh]
- Ecotoxicity (freshwater) [CTUe]

Disclaimer 2: The impact category Ionizing radiation, human health [kBq U235 eq.] 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 material is also not measured by this indicator.

Disclaimer 3: The assumptions for the modules are in accordance with the project report (LCA study).








The following non-mandatory additional environmental 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].

Results refer to a declared unit of 1kg of dry mortar.











The following results corresponds to a single product manufactured in three production plants located in Germany: Barby, Wolfertschwenden and Wülfrath-Flandersbach.

Environmental Impacts

Environmental indicators		PRODUCT STAGE	CONSTRUCTION STAGE		USE STAGE						END OF LIFE STAGE				BENEFITS AND LOADS BEYOND THE LIFE CYCLE
		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
	Climate Change [kg CO ₂ eq.]	1.43E-01	7.96E-03	5.04E-02	0	0	0	0	0	0	1.74E-03	4.12E-03	0	2,01E-02	-3.74E-03
	Climate Change (fossil) [kg CO ₂ eq.]	1.80E-01	7.81E-03	1.32E-02	0	0	0	0	0	0	1.74E-03	4.04E-03	0	1,57E-02	-3.73E-03
	Climate Change (biogenic) [kg CO ₂ eq.]	-3.92E-02	2.15E-05	3.71E-02	0	0	0	0	0	0	1.49E-06	1.15E-05	0	4,33E-03	-5.44E-07
	Climate Change (land use change) [kg CO ₂ eq.]	1.68E-03	1.29E-04	9.96E-05	0	0	0	0	0	0	6.33E-08	6.72E-05	0	9,40E-05	-6.40E-07
	Ozone depletion [kg CFC-11 eq.]	1.45E-09	7.75E-16	7.53E-11	0	0	0	0	0	0	1.48E-16	5.89E-16	0	4,23E-14	-1.09E-10
	Acidification terrestrial and freshwater [Mole of H ⁺ eq.]	3.64E-04	8.75E-06	2.83E-05	0	0	0	0	0	0	3.98E-06	5.37E-06	0	1,11E-04	-9.92E-06
	Eutrophication freshwater [kg P eq.]	1.81E-06	3.28E-08	1.04E-07	0	0	0	0	0	0	3.31E-10	1.71E-08	0	3,56E-08	-4.82E-08
	Eutrophication marine [kg N eq.]	1.06E-04	2.90E-06	8.17E-06	0	0	0	0	0	0	1.60E-06	1.93E-06	0	2,86E-05	-1.56E-06
	Eutrophication terrestrial [Mole of N eq.]	1.08E-03	3.54E-05	8.73E-05	0	0	0	0	0	0	1.76E-05	2.30E-05	0	3,15E-04	-1.70E-05
	Photochemical ozone formation - human health [kg NMVOC eq.]	3.72E-04	8.17E-06	2.72E-05	0	0	0	0	0	0	4.72E-06	5.33E-06	0	8,76E-05	-8.66E-06
	Resource use, mineral and metals [kg Sb eq.] ¹	4.21E-07	6.55E-10	2.23E-08	0	0	0	0	0	0	4.18E-11	3.48E-10	0	1,01E-09	-1.27E-09
	Resource use, energy carriers [MJ] ¹	1.78E+00	1.00E-01	1.21E-01	0	0	0	0	0	0	2.25E-02	5.27E-02	0	2,07E-01	-5.42E-02
	Water deprivation potential [m ³ world equiv.] ¹	2.57E-02	1.15E-04	1.58E-02	0	0	0	0	0	0	4.72E-06	6.19E-05	0	1,79E-03	-3.64E-04









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 indicator

Resources Use


Resources Use indicators ²	PRODUCT STAGE	CONSTRUCTION STAGE		USE STAGE							END OF LIFE STAGE				BENEFITS AND LOADS BEYOND THE LIFE CYCLE
	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 (PERE) [MJ] ³	1.17E-01	8.49E-03	4.25E-02	0	0	0	0	0	0	0	1.12E-04	4.54E-03	0	3.60E-02	-2.39E-02
 Primary energy resources used as raw materials (PERM) [MJ] ²	4.91E-01	0	-3.05E-01	0	0	0	0	0	0	0	0	0	0	0	0
 Total use of renewable primary energy resources (PERT) [MJ] ²	6.07E-01	8.49E-03	-2.62E-01	0	0	0	0	0	0	0	1.12E-04	4.54E-03	0	3.60E-02	-2.39E-02
 Use of non-renewable primary energy (PENRE) [MJ] ²	1.25E+00	1.00E-01	1.02E-01	0	0	0	0	0	0	0	2.25E-02	5.27E-02	0	2.07E-01	-5.42E-02
 Non-renewable primary energy resources used as raw materials (PENRM) [MJ] ²	5.60E-01	0	-1.22E-02	0	0	0	0	0	0	0	0	0	0	0	0
 Total use of non-renewable primary energy resources (PENRT) [MJ] ²	1.81E+00	1.00E-01	9.05E-02	0	0	0	0	0	0	0	2.25E-02	5.27E-02	0	2.07E-01	-5.42E-02
 Use of secondary material (SM) [kg]	2.72E-03	0	1.36E-04	0	0	0	0	0	0	0	0	0	0	0	0
 Use of renewable secondary fuels (RSF) [MJ]	9.04E-02	0	4.52E-03	0	0	0	0	0	0	0	0	0	0	0	0
 Use of non-renewable secondary fuels (NRSF) [MJ]	2.13E-01	0	1.06E-02	0	0	0	0	0	0	0	0	0	0	0	0
 Use of net fresh water (FW) [m ³]	9.24E-04	9.53E-06	3.86E-04	0	0	0	0	0	0	0	1.69E-07	5.06E-06	0	5.47E-05	-8.53E-06

³ From EPD International Construction Product PCR 2.0.1 (Annex 3). The option B was retained to calculate the primary energy use indicators.

Waste Category & Output flows



Waste Category & Output Flows	PRODUCT STAGE	CONSTRUCTION STAGE		USE STAGE							END OF LIFE STAGE				BENEFITS AND LOADS BEYOND THE LIFE CYCLE
	A1 / A2 / A3	A4 Transport	A5 Installation	B1 Use	B2 Maintenance	B3 Repair	B4 Replacement	B5 Refurbishment	B6 Operational	B7 Operational water use	C1 Deconstruction / demolition	C2 Transport	C3 Waste processing	C4 Disposal	D Reuse, recovery, recycling
 Hazardous waste disposed (HWD) [kg]	1.51E-03	3.25E-12	8.86E-05	0	0	0	0	0	0	0	6.94E-13	2.02E-12	0	5.15E-11	-3.12E-05
 Non-hazardous waste disposed (NHWD) [kg]	4.99E-02	1.56E-05	5.55E-02	0	0	0	0	0	0	0	4.73E-06	8.60E-06	0	1.05E+00	-4.73E-04
 Radioactive waste disposed (RWD) [kg]	3.03E-05	1.30E-07	2.92E-06	0	0	0	0	0	0	0	2.54E-08	9.59E-08	0	2.17E-06	-2.47E-08
 Components for re-use (CRU) [kg]	0	0	1.93E-02	0	0	0	0	0	0	0	0	0	0	0	0
 Materials for Recycling (MFR) [kg]	1.82E-03	0	7,45E-04	0	0	0	0	0	0	0	0	0	0	0	0
 Material for Energy Recovery (MER) [kg]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
 Exported electrical energy (EEE) [MJ]	0	0	1,83E-02	0	0	0	0	0	0	0	0	0	0	0	0
 Exported thermal energy (EET) [MJ]	0	0	3,30E-02	0	0	0	0	0	0	0	0	0	0	0	0

Additional voluntary indicators from EN 15804

		PRODUCT STAGE	CONSTRUCTION STAGE		USE STAGE						END OF LIFE STAGE				BENEFITS AND LOADS BEYOND THE LIFE CYCLE	
Environmental 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
	GWP-GHG [kg CO ₂ eq.] ⁴	1.83E-01	7.90E-03	1.34E-02	0	0	0	0	0	0	0	1.72E-03	4.09E-03	0	1.57E-02	-3.70E-03

⁴ 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 15804:2012+A1:2013.

Information on biogenic carbon content

		PRODUCT STAGE
Biogenic Carbon Content in kg C		A1 / A2 / A3
	Biogenic carbon content in product [kg]	1.11E-03
	Biogenic carbon content in packaging [kg]	1.01E-02

Note: 1 kg biogenic carbon is equivalent to 44/12 kg CO₂.

Additional environmental information:

Influence of transportation to other countries

The result of stage A4 (transportation of product) in the table of this EPD refers to transportation of 100 km. This product might also be delivered to the countries in the table below. To adapt the impact of transportation in the A4 column, the results expressed in this EPD must be multiplied by a corresponding multiplication factor below.

Destination	Average distance [km]	Multiplication factor
Europe (EPD reference value)	100	1
Germany	350	3.5
Austria	816	8.2
Belgium	450	4.5
Czech Republic	484	4.8
Denmark	631	6.3
England	1013	10.1
Finland	1973	19.7
France	726	7.3
Hungary	1148	11.5
Ireland	1495	15.0
Italy	1654	16.5
Netherlands	360	3.6
Norway	1039	10.4
Poland	948	9.5
Romania	1484	14.8
Slovakia	854	8.5
Slovenia	1000	10.0
Spain	2031	20.3
Switzerland	688	6.9
Turkey	2803	28.1

Electricity information

The SAINT-GOBAIN Weber Germany factories based in Barby, Wolfertschwenden and Wülfrath-Flandersbach use electricity with Guarantee of Origin certificate (GO). Hence, the electricity mix considered for the manufacturing of the studied product is modelled according to the electricity mix described in the Guarantee of Origin certificate. The amount of electricity purchased with GO covers 100% of the electricity consumption on the manufacturing site.

Parameter	Value / Description
Location	Representative of the Guarantee of Origin purchased by SAINT-GOBAIN
Share of electricity covered by Guarantee of Origin	100% of the energy consumption is covered by the GO
Energy sources for electricity	Share of energy sources Hydro 100%
Dataset version	2% transmission losses Sphera CUP2024.2 ecoinvent 3.10
Source	Guarantee of Origin certificate: Ökostrom Zertifikat Pfalzwerke
GWP-GHG CO ₂ eq.	0.00614 kg of CO ₂ eq./kWh

An EPD is valid for 5 years. Therefore, the GO will be prolonged continuously to be valid for the whole validity of the EPD. If not prolonged, the EPD will be updated.

Other additional environmental information

No additional information displayed.

Additional social and economic information

No additional information displayed.

ABBREVIATIONS

DU	Declared unit
EPD	Environmental Product Declaration
eq.	equivalents
FU	Functional unit
g	gram
GJ	Giga Joules (as Net Calorific Value)
GO	Guaranties of origin
GWP	Global warming potential
GWP-GHG	Global warming potential-Greenhouse Gas
kg	kilogram
kWh	kilowatt-hour
L	liter
LCA	Life Cycle Assessment
LCI	Life Cycle Inventory Analysis
LCIA	Life Cycle Impact Assessment
MJ	Mega Joules (as Net Calorific Value)
PCR	Product Category Rules
RSL	Reference Service Life (in years)
ton	metric ton

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