

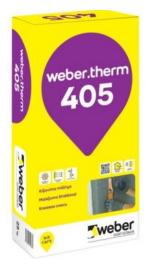
# **ENVIRONMENTAL PRODUCT DECLARATION**

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

### weber.therm 405

Version: 1 Issue date: 2024-02-27 Valid to: 2029-02-26 Scope of the EPD®: Lithuania Manufacture: Saint-Gobain Statybos Gaminiai UAB Programme: The International EPD® System, www.environdec.com Programme operator: EPD International AB

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





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® System:

S-P-11351



## We care about people and their environment

At Weber, we believe that what matters most in the construction industry is to care about people and their environment. Weber develops, produces and sells solutions based an industrial mortars and constructions chemicals for building construction and renovation. Weber is made up of 10,000 people in 64 countries supported by almost 200 production units. Weber's services and solutions aim to help customers save time, feel confident and comfortable, be successful in their work and grow their business.

#### Our brand promises:

- **Well-being:** We care for the safety and benefit of all. Making lives easier, more convenient and more comfortable.
- **Empathy:** We care about people. Listening to what matters to people and taking into account theirs needs. Helping everyone to grow. Responding to the multiplicity of challenges in today's world and adapting to the diversity of the lives that populate it.
- **Long-lasting:** We care about today, but also for the future. Taking responsibility to lead the change and build a tomorrow that is in harmony with its environment.

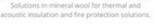
#### Weber, a Saint-Gobain brand

Saint-Gobain designs, manufactures and distributes materials and solutions for the construction, mobility, healthcare and other industrial application markets. Developed through a continuous innovation process, they can be found everywhere in our living places and daily life, providing wellbeing, performance and safety, while addressing the challenges of sustainable construction, resource efficiency and the fight against climate change.

This strategy of responsible growth is guided by the Saint-Gobain purpose, "MAKING THE WORLD A BETTER HOME", which responds to the shared ambition of all the women and men in the Group to act every day to make the world a more beautiful and sustainable place to live in.

#### Saint-Gobain Statybos Gaminiai, UAB represents three brands







Products and solutions in plaster for new.



Reference in mortars for different application in construction.

#### Company management systems



ISO 9001 - Quality management systems ISO 14001 - Environment management systems



### **General information**

Product name: weber.therm 405 CPC code: 37510 Non-refractory mortars and concretes GTIN(s): 4779024420632

Owner of the declaration: Saint-Gobain Statybos Gaminiai UAB Manufacturer: Saint-Gobain Statybos Gaminiai UAB, Menulio str. 7, LT-04326 Vilnius, Lithuania Tel.: (+370) 5 230 1118 / e-mail: info.lt@saint-gobain.com / web: https://www.lt.weber/

Production sites: Contact:	Neveronys plant, Alytaus g. 12A, LT-54479 Kaunas district, Lithuania Laima Biezumaite-Anceviciene (Laima.Biezumaite@saint-gobain.com)
Geographical scope:	Lithuania
EPD® prepared by:	Helene Lovkvist Andersen (Saint-Gobain Nordic & Baltic) Asta Juskyte (Saint-Gobain Statybos Gaminiai UAB)

**Declared unit:** 1 kg of weber.therm 405 **EPD registration number/declaration number**: S-P-11351

Declaration issued: 2024-02-27, valid until: 2029-02-26

**Demonstration of verification:** an independent verification of the declaration was made, according to EN ISO 14025:2006.

This verification was external and conducted by a third party, based on the PCR mentioned below.

Programme	The international EPD <sup>©</sup> System
Adress:	EPD© International AB Box 210 60 SE-100 31 Stockholm Sweden
Website:	www.environdec.com
E-mail:	info@environdec.com

CEN standard UNE-EN 15804 serves as the Core Product Category Rules (PCR) Product category rules (PCR): PCR 2019:14 Construction Products, version 1.3.1

PCR review was conducted by: El Comité Técnico del Sistema Internacional EPD©

Independent third-party verification of the declaration and data, according to ISO 14025:2006: □ EPD process certification ⊠ EPD verification

Third party verifier: Marcel Gomez

Marcel Gómez Consultoria Ambiental Tlf 0034 630 64 35 93 - 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.

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 14025:2006.



### **Product description**

#### Product description and description of use:

weber.therm 405 is a cementitious adhesive for gluing mineral wool (MW) insulation boards and expanded polystyrene (EPS) insulation boards in facade composite thermal insulation systems. Application: part of External Thermal Insulation Composite Systems (ETICS) such as Weber MW F030.

The product is delivered in 25 kg bags.

All technical characteristics and properties for the product could be find on the website: <u>https://www.lt.weber/fasadu-siltinimo-sistemos-etics/klijavimo-armavimo-misiniai/webertherm-405</u>

Technical data / physical characteristics										
Reaction to fire	A2	EN 13501-1:2019								
Mass of declared unit (kg/m <sup>2</sup> )	5,0 - 6,0									
Bond strength between the base coat and insulation product	≥ 0,8 N/mm <sup>2</sup>	ETAG 004								
Bond strength between the base coat and insulation product after imersion in water 2 days and 2 h drying at (23±2)oC and (50±5)% RH	≥ 0,5 N/mm²	ETAG 004								
Bond strength between the base coat and insulation product after imersion in water 2 days and at least 7 days drying at (23±2)oC and (50±5)% RH	≥ 0,8 N/mm²	ETAG 004								
Bond strength between insulation product and the thermal insulation board	≥ 0,1 N/mm <sup>2</sup>	ETAG 004								
Bond strength between insulation product and the thermal insulation board after imersion in water 2 days and 2 h drying at (23±2)oC and (50±5)% RH	≥ 0,1 N/mm²	ETAG 004								
Bond strength between insulation product and the thermal insulation board after imersion in water 2 days and at least 7 days drying at (23±2)oC and (50±5)% RH	≥ 0,1 N/mm²	ETAG 004								

#### Description of the main product components and/or materials:

All raw materials contributing more than 5% to any environmental impact are listed in the following table.

Product components	Weight (%)	Post-consumer material weight (%)	Biogenic material weight (%)			
Standard product	100%					
Binder	25% - 40%	0%	0%			
Filler / aggregates	60%- 75%	0%	0%			
Additives	0,5 % – 4%	0%	0,23% with 0,66 kg C/kg			
Packaging	Weight (kg) per 1 kg of product	Weight (%) (versus the DU)	Biogenic material weight (%)			
Polyethylene	0,0004 kg	0,04%	0%			
Composite bag	0,003 kg	0,3%	36 %			
Pallet	0,016	1,6%	41 %			

#### Hazardous substances

During the life cycle of the product any hazardous substance listed in the "Candidate List of Substances of Very High Concern (SVHC) for authorization" has been used in a percentage higher than 0.1% of the weight of the product.

Substance	CAS.no	Amount
Natural sand	14808-60-7	60 - 80%
Portland cement	65997-15-1	25 - 35%

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

## LCA calculation information

EPD type	Cradle to gate with options; module A+B+C+D
Declared unit	1 kg of weber.therm 405
System boundaries	Mandatory Stages = A1-A3; C1-C4 and D, Optional stages: A4 – A5 and B.
Reference service life (RSL)	50 years
Cut-off rules	Life Cycle Inventory data for a minimum of 99% of total inflows to the upstream and core module shall be included. Flows related to human activities such as employee transport are excluded. Transportation in-site is excluded The construction of plants, production of machines and transportation systems are excluded
Allocations	Allocation criteria are based on mass. The polluter pays and modularity principles have been followed
Geographical coverage and time period	Data included is collected from 1 production site in Lithuania Production year from 2022 Background data: Ecoinvent v3.6 and GaBi ts 2020

#### Data quality

The primary data used for the LCA calculation is provided by Saint-Gobain Statybos Gaminiai UAB for the specific production site with reference year 2022. It is based on their annual environment reports.

	Year	Location country	Data record, source, year of collection, representativeness
A1-A3 Product	2022	Lithuania	Collected at factory in 2023
A4-A5 Construction process	2022	Lithuania	Transport data supplied by logistics team at site in 2023. Installation data supplied by Saint-Gobain Weber, Lithuania .
B1-B5 Use	2022	Lithuania	No data required.
C1-C4 End-of-life	2022	Lithuania	Data supplied by site in 2023.

Generic data is from Ecoinvent v3.6 and GaBi ts 2020.

An evaluation of the inventory, both generic and specific data, has been done, according to the defined ranking in the LCA report, and the assessment reflects good inventory data quality.



## Life cycle stages

The cradle to grave analysis take into account all stages of the life cycle of the product, including transport of raw materials to production site, transport of product to building site and transport from demolition to waste processing and/or disposal.

		RODUC STAGE			RUCTION AGE			US	E STA	GE			EN	D OF LI	BENEFITS AND LOADS BEYOND THE SYSTEM BOUNDARY		
	Raw material supply	Transport	Manufacturing	Transport	Construction-Installation	Use	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	<b>B</b> 3	B4	B5	B6	B7	C1	C2	C3	C4	D
Modules declared	Х	х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
Geography	LT	LT	LT	LT	LT	-	-	-	-	-	-	-	LT	LT	LT	LT	-
Specific data used	> 90 % GWP- GHG		-	-	-	-	-	-	-	-	-	-	-	-			
Variation products	0%			-	-	-	-	-	-	-	-	-	-	-	-		
Variation sites			09	%		-	-	-	-	-	-	-	-	-	-	-	-

Description of the system boundary, X = Included in LCA, MND = Module Not Declared

#### Flow diagram of the Life Cycle



Figure 1: Life Cycle illustration of a product for construction



#### Product stage, A1 - A3

#### Description of the stage:

The product stage of the product is subdivided into 3 modules.

#### A1, Raw material and energy supply

This part takes into account the extraction and processing of all raw materials and energy which occurs upstream to the studied manufacturing process.

The raw material supply covers sourcing (quarry) and production of all binder components and additives (e.g. sand, cement, rheology agent and others).

Use of electricity, fuels and auxiliary materials in the production is accounted for too, and the environmental profile of these energy carriers is modeled for local conditions.

#### A2, Transport to manufacturer

The raw materials are transported to the manufacturing site. The modelling includes road, boat and train transportations relevant for each raw material.

#### A3, Manufacturing

This module takes into account the manufacturing of products and linked on-site activities such as grinding, drying, storing, mixing and packing. It includes:

- Energy use, and the combustion of refinery products, like diesel, related to the production process.

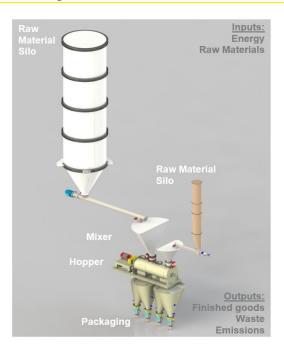
- Waste generated during the production.

- Packaging related flows related to the production process and all up-stream packaging. The supply transport and waste of packaging material are considered in the LCA model, and is reported, and allocated, to the module where the packaging is applied and where the waste is generated. It is assumed that packaging waste generated during the production and up-stream processes is 100% collected and either recycled or incinerated with energy recovery.

During the manufacturing process, 100% renewable electricity bought with Guarantee of Origin (GO) has been used. 100% of the electricity consumption is covered by the GO's. See description of the electricity in "Additional Information"

Aggregation of the modules A1, A2 and A3 is possible according to the EN 15804 standard. This rule is applied in this EPD.

Manufacturing process flow diagram: Basic scheme of a Mortar Production line





#### Construction process stage, A4 - A5

#### Description of the stage:

The construction process is divided into 2 modules:

#### A4, Transport to the building site

This module includes transport from the production gate to the building site and is calculated based on a scenario with the parameters described below.

Parameter	Value / description
Fuel type and consumption of vehicle or vehicle type used for transport.	Truck: 38 I / 100km for 24t load
Distance	140 km
Capacity utilization (including empty returns)	100 % of weight 30% of empty returns 0,85 by mass (default)
Bulk density of transported products	1550 kg/m <sup>3</sup>

#### A5, Installation into the building.

The powder is mixed with water using a drill whisk. The glue is applied to the surface manually with a notched trowel. The water for mixing, and the energy used to run the mixing equipment have been accounted for.

Packaging materials and leftovers are considered as landfilled in module A5 and C4 accordingly.

Parameter	Value / description
Secondary materials for installation (specified by materials)	None
Water use	0,24 l/kg
Other resource use	None
Quantitative description of energy type and consumption during the installation process	0,00528 MJ/kg
Wastage of materials on the building site before waste processing, generated by the product's installation (specified by type)	Product: During Installation: 0 % (to landfill) In bags and mixer: 3 % (to landfill) Packaging: 100% (to landfill)
Output materials (specified by type) as results of waste processing at the building site e.g. collection for recycling, disposal	Product: 0,03 kg (landfill) Composite bag: 0,003 kg (landfill) Polyethylene: 0,0004 kg (landfill) Wooden pallet: 0,016 kg (landfill)
Direct emissions to ambient air, soil and water	None

Transport of waste from building site to landfill is modelled as module C2



#### Description of the stage:

The use stage is divided into the following modules: B1 (Use), B2 (Maintenance), B3 (Repair), B4 (Replacement), B5 (Refurbishment), B6 and B7 (Operational energy and water).

Once installation is complete, no actions or technical operations are required during the use stages.

- Maintenance, repair, replacement or restoration are irrelevant in the specified applications.
- The product does not require any energy, water or material input to keep it in working order.
- It is not exposed to the indoor atmosphere of the building, nor is it in contact with the circulating water or the ground.

The product covered by this EPD does not declare product performances, and a working life that equals the building's lifetime can be assumed.

#### End-of-life stage C1 - C4

#### Description of the stage:

The end-of-life stage is divided into the following modules:

#### C1, Deconstruction

The deconstruction and/or dismantling of the product is part of the demolition of the entire building. In our case, the environmental impact is assumed to be very small and can be neglected.

#### C2, Transport to waste processing

The model use for the transportation is applied.

#### C3, Waste processing

The product is considered to be landfilled without reuse, recovery or recycling. It is classified as 'non-hazardous waste' in the European list of waste products.

#### C4, Disposal

100% of the product goes to landfill. This module includes transport and provision of all materials, products and related energy and water use.

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

Parameter	Value / description
Collection process specified by type	1 kg collected with mixed construction waste.
Recovery system specified by type	100% to landfill, 0% of waste to recycling
Disposal specified by type	1 kg of product to municipal landfill
Assumptions for scenario development (e.g. transportation)	Average truck trailer with 27t payload, diesel consumption 38L/100km; 25 km distance to landfill

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

100% of wastes are landfilled, so no recycling, recovery or reuse has been considered.



## **LCA results**

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 from the ILCD.

Specific data has been supplied by the plant, and generic data come from GABI and Ecoinvent databases.

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.

All emissions to air, water, and soil, and all materials and energy used have been included. LCA data results related to a declared unit of 1 kg of weber.therm 405 are detailed in the following tables.

#### **Product variants**

There are no color variants of this product.



# **Environmental Impacts**

		Product stage	Constru	ction stage	Use stage								Reuse, Recovery Recycling			
	Environmental indicators		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 (total) [kg CO <sub>2</sub> eq.]	2,53E-01	7,57E-03	5,18E-02	0	0	0	0	0	0	0	0	5,28E-05	0	2,26E-02	0
	Climate Change (fossil) [kg CO2 eq.]	2,97E-01	7,38E-03	1,30E-02	0	0	0	0	0	0	0	0	5,24E-05	0	1,65E-02	0
	Climate Change (biogenic) [kg CO2 eq.]	-4,39E-02	1,85E-04	3,87E-02	0	0	0	0	0	0	0	0	8,82E-08	0	6,07E-03	0
	Climate Change (land use change) [kg $CO_2$ eq.]	7,82E-05	4,31E-07	5,37E-06	0	0	0	0	0	0	0	0	4,25E-07	0	4,75E-05	0
$\bigcirc$	Ozone depletion [kg CFC-11 eq.]	3,27E-09	1,09E-18	1,51E-10	0	0	0	0	0	0	0	0	9,65E-21	0	6,11E-17	0
3	Acidification terrestrial and freshwater [Mole of H+ eq.]	6,90E-04	1,20E-05	3,25E-05	0	0	0	0	0	0	0	0	3,05E-07	0	1,18E-04	0
	Eutrophication freshwater [kg P eq.]	8,44E-06	1,42E-09	1,29E-06	0	0	0	0	0	0	0	0	1,60E-10	0	2,83E-08	0
	Eutrophication freshwater [kg (PO4)3 eq.]	2,59E-05	4,35E-09	3,95E-06	0	0	0	0	0	0	0	0	4,92E-10	0	8,69E-08	0
	Eutrophication marine [kg N eq.]	7,29E-04	5,00E-06	2,78E-05	0	0	0	0	0	0	0	0	1,47E-07	0	3,04E-05	0
	Eutrophication terrestrial [Mole of N eq.]	2,22E-03	5,51E-05	1,01E-04	0	0	0	0	0	0	0	0	1,63E-06	0	3,35E-04	0
P	Photochemical ozone formation - human health [kg NMVOC eq.]	6,27E-04	1,08E-05	2,90E-05	0	0	0	0	0	0	0	0	2,78E-07	0	9,22E-05	0
(7)	Resource use, mineral and metals [kg Sb eq.] $^2$	3,41E-07	8,82E-11	1,47E-08	0	0	0	0	0	0	0	0	4,25E-12	0	1,48E-09	0
W	Resource use, energy carriers [MJ] <sup>2</sup>	2,01E+00	1,02E-01	8,94E-02	0	0	0	0	0	0	0	0	7,01E-04	0	2,16E-01	0
Ø	Water scarcity [m <sup>3</sup> world equiv.]	3,01E-02	7,17E-06	1,18E-02	0	0	0	0	0	0	0	0	5,13E-07	0	1,73E-03	0

<sup>2</sup> Disclaimer 2: 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	Constructi	on stage	Use stage								Reuse, recovery, recycling			
	Resources Use indicators		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
<b>(*</b>	Use of renewable primary energy excluding renewable energy resources used as raw materials (PERE) [MJ]	6,91E-01	2,46E-03	2,05E-02	0	0	0	0	0	0	0	0	4,06E-05	0	2,83E-02	0
<b>(*</b>	Use of Renewable primary energy resources used as raw materials (PERM) [MJ]	3,85E-01	0	1,16E-02	0	0	0	0	0	0	0	0	0	0	0	0
<b>*</b>	Total use of renewable primary energy resources (PERT) [MJ]	1,08E+00	2,46E-03	3,20E-02	0	0	0	0	0	0	0	0	4,06E-05	0	2,83E-02	0
٥	Use of non-renewable primary energy excluding non-renewable energy resources used as raw materials (PENRE) [MJ]	2,02E+00	1,02E-01	8,94E-02	0	0	0	0	0	0	0	0	7,04E-04	0	2,16E-01	0
0	Use of non-renewable primary energy resources used as raw materials (PENRM) [MJ]	3,75E-02	0	1,12E-03	0	0	0	0	0	0	0	0	0	0	0	0
0	Total use of non-renewable primary energy resources (PENRT) [MJ]	2,05E+00	1,02E-01	9,05E-02	0	0	0	0	0	0	0	0	7,04E-04	0	2,16E-01	0
5	Input of secondary material (SM) [kg]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>*</b>	Use of renewable secondary fuels (RSF) [MJ]	0	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
0	Use of net fresh water (FW) [m <sup>3</sup> ]	7,74E-04	4,48E-07	2,75E-04	0	0	0	0	0	0	0	0	4,73E-08	0	5,46E-05	0

# Waste Category & Output flows

		Product stage	Constructio			ι	Jse sta	age				Reuse, recovery, recycling				
	Waste Category & Output Flows		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	C4 Disposal	D Reuse, recovery, recycling
	Hazardous waste disposed (HWD) [kg]	3,61E-09	6,57E-12	2,69E-10	0	0	0	0	0	0	0	0	3,26E-11	0	3,30E-09	0
	Non-hazardous waste disposed (NHWD) [kg]	2,95E-02	2,06E-06	4,90E-02	0	0	0	0	0	0	0	0	1,12E-07	0	1,09E+00	0
Ŵ	Radioactive waste disposed (RWD) [kg]	4,05E-05	1,16E-07	1,62E-07	0	0	0	0	0	0	0	0	1,30E-09	0	2,46E-06	0
	Components for re-use (CRU) [kg]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Materials for Recycling (MFR) [kg]	1,10E-03	0	3,29E-05	0	0	0	0	0	0	0	0	0	0	0	0
6	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	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>5</b>	Exported thermal energy (EET) [MJ]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

### **Optional indicators**

	Product stage	Construction stage				ι	Jse sta	ige				Reuse, recovery, recycling			
Optional 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
Particulate Matter emissions [Disease incidences]	9,14E-09	6,41E-11	3,75E-10	0	0	0	0	0	0	0	0	1,74E-12	0	1,46E-09	0
Ionizing radiation, human health [kBq U235 eq.] <sup>1+2</sup>	9,89E-03	1,14E-05	4,05E-04	0	0	0	0	0	0	0	0	1,91E-07	0	2,53E-04	0
Eco-toxicity (freshwater) [CTUe] <sup>2</sup>	9,80E-01	1,38E-02	6,19E-02	0	0	0	0	0	0	0	0	5,25E-04	0	1,24E-01	0
Human toxicity, cancer effects [CTUh] <sup>2</sup>	5,93E-11	2,79E-13	3,28E-12	0	0	0	0	0	0	0	0	1,09E-14	0	1,83E-11	0
Human toxicity, non-cancer effects [CTUh] <sup>2</sup>	4,22E-09	1,49E-11	2,70E-10	0	0	0	0	0	0	0	0	6,17E-13	0	2,02E-09	0
Land use related impacts / Soil quality (SQP) <sup>2</sup> [dimensionless]	3,24E+00	3,25E-04	9,98E-02	0	0	0	0	0	0	0	0	2,46E-04	0	4,51E-02	0

<sup>1</sup> Disclaimer 1: 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 soil, from radon an from come construction materials is also not measured by this indicator. <sup>2</sup> Disclaimer 2: 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.

### **Optional indicators from EN 15804+A2**

	Product stage	Constructio	n stage	Use stage							Reuse, recovery, recycling				
Impact indicators		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.)	2,97E-01	7,38E-03	1,30E-02	0	0	0	0	0	0	0	0	5,24E-05	0	1,65E-02	0

This indicator includes all greenhouse gases included in GWP-total but excludes biogenic carbon dioxide uptake and emissions and biogenic carbon stored in the product and packaging.

## **Biogenic carbon content**

		Product stage
	Biogenic Carbon Content	A1- A3
9	Biogenic carbon content in product [kg]	1,53E-03
<b>(</b>	Biogenic carbon content in packaging [kg]	1,05E-02

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

# **Additional information**

### **Electricity description**

Parameter	Value / description								
Location	Representative of Electricity purchased by Saint-Gobain Statybos Gaminiai UAB								
Geographical representativeness description and split of energy	Wind power: 61,70% Hydro Power: 28,85%   Solar: 6,49% Biomass solid: 1,82%   Biogas: 0,71% Biofuel 0,35%   Waste energy 0,08% Total: 100,00 %								
Reference year	2021 - 2023								
Type of data set	Cradle to gate from Thinkstep and ecoinvent databases								
Source	Guarantee of Origin certificates from Ignitis (2021-2023). Will be prolonged to be valid at least to the validity of this EPD.								
Global warming potential (excluding biogenic Carbon)	0,018 kg of CO <sub>2</sub> eq /kWh								



### Information related to sector EPD

This is an individual EPD

### **Differences versus previous versions**

This is the first version of the EPD

### **References**

- General Programme Instructions for the International EPD® System. Version 4.0, (2021-03-29)
- The International EPD System PCR 2019:14. Construction products and Construction services, (1.3.1)
- EN 15804:2012 + A2:2019/AC:2021 Sustainability of construction works Environmental product declarations Core rules for the product category of construction products
- ISO 14025:2006 environmental labels and declarations type III Environmental Declarations Principles and procedure (2009)
- ISO 14040: Environmental management Life Cycle Assessment Principles and framework (2006)
- ISO 14044: Environmental management Life Cycle Assessment Requirements and guidelines (2006)
- ISO 14020:2000 Environmental labels and Declarations General principles
- EN 15978 Sustainability of construction works Assessment of environmental performance of buildings Calculation method
- LCA report, Information for the Environmental Product Declaration of Mortar product by Saint-Gobain Statybos Gaminiai, UAB, May 2023, version 1.3.1

