

# ENVIRONMENTAL PRODUCT DECLARATION

IN ACCORDANCE WITH EN 15804+A2 & ISO 14025

**SMA Mineral Oy**  
**Limestone Aggregates - SMA Mineral Loukolampi site**  
**Product-EPD**



Rakennustieto EPD

EPD Number: RTS\_400.1\_25

Publication date: 25.06.2025

Valid until: 25.06.2030

# GENERAL INFORMATION

## MANUFACTURER INFORMATION

<b>Manufacturer</b>	SMA Mineral Oy
<b>Address</b>	Selleenkatu 281, 95450 Tornio
<b>Contact details</b>	sma@smamineral.com
<b>Website</b>	<a href="http://www.smamineral.com">http://www.smamineral.com</a>

## PRODUCT IDENTIFICATION

<b>Component EPD product group</b>	Limestone Aggregates - SMA Mineral Loukolampi site
<b>Product name</b>	Peat lime
<b>Additional label(s)</b>	
<b>Product number / reference</b>	
<b>Place(s) of production</b>	Röyttä, Ankele and Loukolampi (Finland)

The manufacturer 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. 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. EN15804 impact assessment indicators are based on EF 3.1.

## EPD INFORMATION

<b>EPD program operator</b>	Rakennustieto EPD, Malminkatu 16 A, 00100 Helsinki, Finland <a href="https://ymparisto.rakennustieto.fi/">https://ymparisto.rakennustieto.fi/</a>
<b>EPD standards</b>	This EPD is in accordance with EN 15804+A2 and ISO 14025 standards.
<b>Product category rules</b>	The CEN standard EN 15804 serves as the core PCR. RTS PCR 2024
<b>Component EPD number</b>	RTS_400.0_25
<b>Product EPD verifier</b>	Anni Oviir, LCA Support
<b>Product EPD number</b>	RTS_400.1_25
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<b>Product EPD valid until</b>	25.06.2030




Jukka Seppänen  
RTS EPD Committee Secretary



Laura Apilo  
Managing Director



# VERIFICATION STATEMENT

Verified according to the requirements of EN 15804+A2 (product category rules)	
Independent verification of the declaration, according to EN ISO 14025:2010	
<input checked="" type="checkbox"/> External	<input type="checkbox"/> Internal
<p>Third party verifier:</p>  <p>Anni Oviir, LCA Support - Rangi Maja OÜ, Tallinn, Estonia</p>	

# PRODUCT INFORMATION

## PRODUCT DESCRIPTION

Loukolampi production site's lime aggregate products consist of either dolomite, dolomite (low grade), calcite, or both calcite and dolomite.

This product-EPD declares EPD results of peat lime which is used as a growth medium in industry. The peat lime raw material composition is presented in the following tables.

## PRODUCT APPLICATION

Calcite is utilized for various purposes such as sulfur removal in flue gas, water treatment, pH adjustment, alkalinity control, and occasionally as an auxiliary material in the production of glass wool. It is also used as a filler material in the concrete and mortar industry as an aggregate and additive, and as raw materials in the feed industry (animal nutrition). Dolomite is a widely used mineral in agriculture for its high magnesium content and as a filler, particularly in the paint and plastics sectors. It is also utilized in the asphalt industry for asphalt mixes and paved roads, in the concrete industry, and for field liming purposes. Low grade dolomite is mainly used as road gravel/aggregate, also to some extent as construction materials for various other purposes.

## COMPONENT RAW MATERIAL COMPOSITION

Component	Contents	Declared unit	Origin	Renewable material content (%)	Non-renewable material content (%)	Post-consumer recycled material content (%)
<b>Calcite</b>	100 % Calcite	1 kg	Europe	0 %	100 %	0 %
<b>Dolomite</b>	100 % Dolomite	1 kg	FI	0 %	100 %	0 %
<b>Dolomite (low grade)</b>	100 % Dolomite (low grade)	1 kg	FI	0 %	100 %	0 %

## PRODUCT COMPONENT COMPOSITION

Product-specific component quantities are presented in the table below.

Component	Peat lime
Calcite	0,5 kg
Dolomite	0,5 kg

## PACKAGING MATERIAL COMPOSITION

Main packaging materials of products per declared unit are presented in the table below.

Product	Quantity	Weight % of total
Wood pallets	0.0000027 kg	30 %
Safesack FIBC	0.0000063 kg	70 %
Total	0.000009 kg	

## PRODUCT STANDARDS

Not applicable product standards.

# LIFE-CYCLE ASSESSMENT

## LIFE-CYCLE ASSESSMENT INFORMATION

Period for data	1 year, 2023 (and 2022 for calcite component)
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## DECLARED AND FUNCTIONAL UNIT

Declared unit	1 kg of peat lime
Mass per declared unit	1 kg
Functional unit	-
Reference service life	-

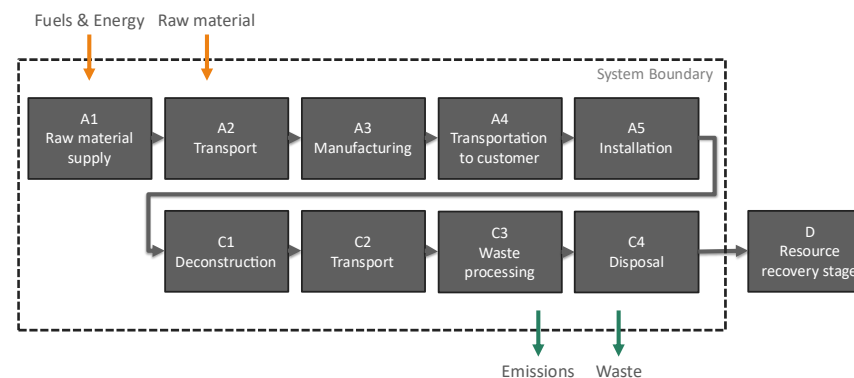
## SYSTEM BOUNDARY

The studied system boundary was cradle to gate with options, modules C1–C4 and module D (A1–A3, A4, A5, C1–C4 and D).

	Product Stage			Construction Process Stage		Use Stage											End-of-Life Stage			Benefits and loads beyond the system boundary		
	Raw material supply	Transport	Manufacturing	Transport to building	Installation to building	Use/applications	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	Deconstruction/demolition	Transport	Waste processing	Disposal	Reuse	Recovery	Recycling			
Stage	A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D	D	D			
Included (EOL scenario 1,2)	X	X	X	X	X								X	X	X	X	X	X	X			
Included (EOL scenario 3)	X	X	X	X	X																	
Relevancy	R	R	R	R	R	NR	NR	NR	NR	NR	NR	NR	R	R	R	R	R	R	R			

Mandatory  
 Mandatory as per the RTS PCR section 6.2.1 rules and terms  
 Optional modules based on scenarios

Studied system covers the following steps of life cycle according to EN 15804: **A1** Raw material supply, **A2** Transport, **A3** Manufacturing, **A4** Transportation to customer, **A5** Installation, **C1** Deconstruction, **C2** Transportation of end-of-life, **C3** Waste processing and **C4** Disposal. In addition, the benefits and loads beyond the system boundary of stage **D** consist of product reuse, recovery and recycling. The system boundary and the related input and output flows are shown below:



### LCA System Boundary of studied products

The study does not omit any life cycle stages, processes or data needs that are mandatory according to EN 15804 and RTS PCR, except for end-of-life scenario 3, which excludes C1–C4 and module D, with valid justifications. This study has three end-of-life (EOL) scenarios, with scenario 3 involving the integration of the final product into another product. The EOL scenario 3 fulfils all three of the exemption conditions stated in EN15804+A2 standard; the product is physically integrated with other products so they cannot be physically separated at the end of life, it is unidentifiable after transformation process, and the product does not contain biogenic carbon. Thus, in EOL scenario 3 it is permitted to exempt from the mandatory C1–C4 and module D.

## THE DETERMINATION OF END-OF-WASTE POINTS

In a Component-EPD, the system boundary is defined at the level of the product being studied. The system boundary applies to the EPD component level. Descriptions of End-of-Waste points that specify the system boundary are presented below.

A1 module: It was assumed that the transportation of packaging materials from Loukolampi is included in the previous product life cycle and is not considered in this system boundary.

A3 module: The end-of-waste point of the production scraps is the point where it is processed to be ready to use in following life cycles. For example, the end-of-waste point for incinerated waste streams is after the incineration. For paper waste, it is ready to be used as secondary raw material after sorting.

A5 module: The end-of-waste point of the packaging materials in A5 module is the point where it is processed and to be ready to use in following life cycles. 5 % of the used Eur-flat pallets are assumed to go to shredding, and 95% is reused. Both include transportation either to waste treatment facility or a reuse location.

C1-C4 module: The end-of-waste point of the studied product is the stage at which the final products from the Loukolampi production site are either used as fertilizer in agriculture or as gravel that remains on the road (EOL 1), collected from the road for reuse in subsequent life cycles (EOL 2), or permanently integrated into another product (EOL 3).

EOL scenario 2 End-of-waste point: It is assumed that the mineral product reaches the end-of-waste point after module C1, once it has been recovered from its application site and is ready to be transported as a secondary raw material to its next use. Therefore, it is considered part of the next product's life cycle. According to the Ministry of the Environment's memorandum "Excavated Aggregates - Waste Character and Handling" dated 07.06.2015, when evaluating the waste nature of excavated materials, the general definition of waste under section 5 of the Waste Act is applied. The premise is that excavated materials removed during construction activities or similar operations, which are uncontaminated and used securely and promptly in their natural state or after pre-treatment like screening for construction purposes on-site or elsewhere, seldom exhibit the general characteristics of waste. Based on this memorandum and the definition under section 5 of the Waste Act, it can be assumed that SMA Mineral's aggregate products meeting these criteria are usable and hold market value after excavation in C1 module.



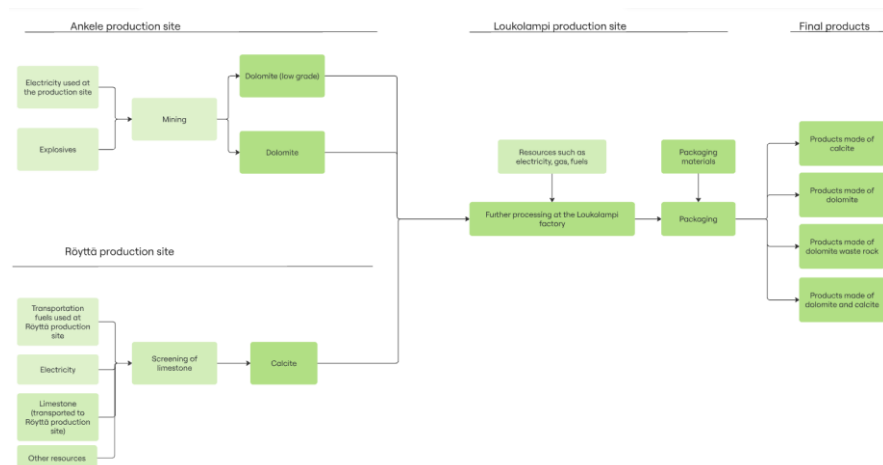
## THE PRODUCTION PROCESS OF THE STUDIED PRODUCT

The raw materials used in the production at Loukolampi are sourced from the Röyttä and Ankele production facilities. The processes of all production facilities are described below.

Production stage of Röyttä's production site cover following manufacturing processes: raw material supply of limestone, and screening of limestone. After that, products are transported to the Loukolampi production site.

Production stage of Ankele's production site cover following manufacturing processes: raw material supply of explosives, and mining. After that, dolomite and dolomite (low grade) are transported to the Loukolampi production site.

Production stage of Loukolampi's production site cover following manufacturing processes: raw material supply, further processing of the raw materials, packaging of the final products (lime aggregates). After that, the final products are transported to the customer.



SMA Mineral's production processes.

## CUT-OFF CRITERIA

This study follows the cut-off criteria stated in RTS PCR and EN 15804 -standard. This study does not exclude any modules or processes which represent more than 1 % of the emissions of the studied life cycle stage. The study does not exclude any hazardous materials or substances.

Excluded processes and the criteria for exclusion are given in the following table. Machines and facilities (capital goods) required for and during production are excluded, as is transportation of employees.

Process/Materials excluded from study	Cut-off criteria	Quantified contribution from process
<b>Packaging materials used at Röyttä production site (calcite component)</b>	No significant impact to the product weight, no significant impact to the product environmental impact	< 1%
<b>Waste solids from the quarry water at Ankele production site</b>	No significant impact to the product weight, no significant impact to the product environmental impact	< 1%



## ALLOCATION

Allocation rules used are made according to ISO14044:2006. Allocation is avoided when possible and when necessary, allocation is made based on physical shares and also avoiding double calculations. Allocation is required if the production process produces more than one product and the flows of materials, energy and waste cannot be separately measured for the studied product. Allocation used in generic data sources follow the requirements of the EN 15804 -standard. It should be noticed that the allocation method 'Allocation, cut-off, EN15804' has been used for Ecoinvent 3.9.1 data, which complies with EN 15804.

For the following inputs, allocation was necessary as the information was only measured at factory level.

- Electricity consumption, fuels for processing: only measured on factory level.
- Production waste flows: only measured on factory level.
- Production water consumption: only measured on factory level
- Packaging materials: only measured on factory level.

According to EN 15804, flows leaving the system at the end-of-waste boundary of the product stage (A1-A3) are allocated as co-products. According to EN 15804, processes that have a very low contribution to the overall revenue may be neglected in co-product allocation.

## KEY ASSUMPTIONS

**Transport to building (A4):** Transport to building site was assessed based on the transportation distance from Loukolampi production site to Helsinki.

**Installation to building (A5):** The Installation to building A5 consists of only treatment of the packaging materials. It was assumed that 95 % of the pallets are fit to be re-used as pallets. Plastics are assumed to be 100 % incinerated among municipal waste.

**Use of 2022 data for Röyttä production site:** Due to the exceptional circumstances in 2023, the production data for that year of 2023 does not reflect the Röyttä production site's typical operations. The production figures and emission intensity from 2022 provides a more accurate representation of Röyttä lime factory's operations under normal conditions.

**End of life scenarios:** This study has three end-of-life (EOL) scenarios, and the EOL scenario is chosen based on the final products in which the component is used. Dolomite and dolomite (low grade) components have multiple EOL scenarios.

Component	EOL Scenario
Calcite	EOL scenario 1
Dolomite	EOL scenario 1, 2, 3
Dolomite (low grade)	EOL scenario 1, 2

**EOL scenario 1:** The final product is used as fertilizer in agriculture or as gravel that remains on the road (not collected).

- C1-C3, and module D: Not considered relevant, as fertilizer absorbs into the soil, and gravel would stay on the road. It was assumed that the emissions are considered to be 0.
- C4 Disposal: As the fertilizer is absorbed into the soil and does not require any treatment, it was assumed that the emissions are considered to be 0.

EOL scenario 2: The final product is used as gravel that is collected from the road.

- C1 Deconstruction/demolition: During the demolition phase C1, the gravel is excavated from the ground using the mass of the final product as the input data. The excavated gravel is assumed to be 80% recyclable, while the remaining 20% is assumed to remain in the soil or/and at the processing site. It is assumed that the demolition phase takes place with a diesel-powered machine, which consumes 0.079 l/m<sup>3</sup> (Hagström, M. et al., 2011).
- C2 Transportation: It is assumed that the mineral product reaches the end-of-waste point after module C1, once it has been recovered from its application site and is ready to be transported as a secondary raw material to its next use. Therefore, it is considered part of the next product's life cycle.
- C3-C4 Waste processing and final disposal: Not considered relevant, as the aggregate can be reused.
- D Reuse/Recovery/Recycling: Module D covers the net benefits and loads arising from the reuse of products or the recycling or recovery of energy from end-of-waste state materials. The excavated gravel is assumed to be 80% recyclable, with reused aggregate replacing virgin material. Module D accounts for the emissions from diesel used in gravel transport, and the reduction of emissions from the use of recycled gravel instead of producing virgin gravel.

EOL scenario 3: The final product is integrated to another product.

- In this EOL scenario, the final products fully integrate to another product, for example to concrete, asphalt or paint. Thus, the end of life is not considered in this scenario (the deviations stated in EN15804+A2 section 5.2 are met).

## DATA QUALITY

The quality requirements for the life cycle assessment were set according to the EN ISO 14044 standard (4.2.3.6) and EN 15804 standard (6.3.7).

This LCA study follows the standard EN 15804:2012+A2:2019 and RTS PCR and no decisions are made based on the values. The study does not consider long-term emissions (i.e. over 100 years). Impact assessment characterization factors are aligned with EF 3.1. 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.

## PROCEDURE FOR COLLECTION OF PROCESS-SPECIFIC DATA

Production specific data was collected directly from manufacturer's production plant. The data was examined prudently, and clarifications requested from factory representatives when any suspicious or unclear values were detected. The data represents year 2023, which was the latest year with full year data. Due to the exceptional circumstances in 2023, the production data for that year of 2022 does not reflect the Röyttä production site's typical operations. The production figures and emission intensity from 2022 provide a more accurate representation of Röyttä production site's operations under normal conditions. All gathered data was used without excluding categories in advance following the system boundaries set in earlier chapters.

## CRITERIA FOR CHOOSING THE GENERIC DATA

Generic data that was used for upstream and downstream processes represents complementary data from Ecoinvent 3.9.1 database.

The datasets were chosen to represent the studied system as closely as possible. When available supplier specific information was used for instance in form of EN 15804 EPDs or emissions profile of local energy supplier. When supplier-specific information was not available the information sources were chosen based on their technical and geographical representativeness. Only when country specific or European data has not been available has global level data been used (concerns mainly data from Ecoinvent 3.9.1.)

As up-to-date data as possible was chosen and no more than five years old for producer specific data and ten years for generic data was used.

# ENVIRONMENTAL IMPACT DATA

## PEAT LIME

### CORE ENVIRONMENTAL IMPACT INDICATORS – EN 15804+A2, PEF

Impact category	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
<b>GWP – total</b>	kg CO <sub>2</sub> e	6.88E-02	3.12E-02	1.55E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
<b>GWP – fossil</b>	kg CO <sub>2</sub> e	6.88E-02	3.12E-02	1.55E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
<b>GWP – biogenic</b>	kg CO <sub>2</sub> e	-4.01E-06	0.00E+00	4.01E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
<b>GWP – LULUC</b>	kg CO <sub>2</sub> e	4.04E-05	1.47E-05	6.82E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
<b>Ozone depletion pot.</b>	kg CFC <sub>11</sub> e	1.30E-09	6.81E-10	2.55E-14	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
<b>Acidification potential</b>	mol H <sup>+</sup> e	6.00E-04	1.00E-04	5.38E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
<b>EP-freshwater<sup>3)</sup></b>	kg Pe	7.98E-06	2.22E-06	9.94E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
<b>EP-marine</b>	kg Ne	1.70E-04	3.63E-05	2.62E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
<b>EP-terrestrial</b>	mol Ne	1.85E-03	3.80E-04	2.37E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
<b>POCP (“smog”)</b>	kg NMVOCe	5.70E-04	1.60E-04	6.95E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
<b>ADP-minerals &amp; metals</b>	kg Sbe	1.42E-07	8.61E-08	2.40E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
<b>ADP-fossil resources</b>	MJ	1.18E+00	4.59E-01	1.02E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
<b>Water use<sup>2)</sup></b>	m <sup>3</sup> e depr.	8.89E-03	2.36E-03	6.42E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

1)GWP = Global Warming Potential; EP = Eutrophication potential; POCP = Photochemical ozone formation; ADP = Abiotic depletion potential. 2) EN 15804+A2 disclaimer for Abiotic depletion and Water use and optional indicators except Particulate matter and Ionizing radiation, human health. The results of these environmental impact indicators shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator. 3) Required characterisation method and data are in kg P-eq. Multiply by 3,07 to get PO<sub>4</sub>e.

## USE OF NATURAL RESOURCES

Impact category	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
<b>Renew. PER as energy</b>	MJ	2.77E-02	6.67E-03	2.86E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
<b>Renew. PER as material</b>	MJ	3.90E-05	0.00E+00	-3.90E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
<b>Total use of renew. PER</b>	MJ	2.77E-02	6.67E-03	-3.87E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
<b>Non-re. PER as energy</b>	MJ	1.11E+00	4.19E-01	9.46E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
<b>Non-re. PER as material</b>	MJ	2.90E-04	0.00E+00	-2.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
<b>Total use of non-ren. PER</b>	MJ	1.11E+00	4.19E-01	-2.81E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
<b>Secondary materials</b>	kg	1.64E-03	4.60E-04	2.75E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
<b>Renew. secondary fuels</b>	MJ	3.50E-04	1.10E-04	3.61E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
<b>Non-ren. secondary fuels</b>	MJ	4.78E-03	2.30E-04	8.62E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
<b>Use of net fresh water</b>	m <sup>3</sup>	4.50E-04	6.13E-05	2.26E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

1)PER = primary energy resources; Non-ren = Non renewable

## END OF LIFE – WASTE

Impact category	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
<b>Hazardous waste</b>	kg	1.08E-03	4.30E-04	2.34E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
<b>Non-hazardous waste</b>	kg	3.86E-02	3.95E-02	7.36E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
<b>Radioactive waste</b>	kg	4.16E-06	1.39E-07	5.18E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

## END OF LIFE – OUTPUT FLOWS

Impact category	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
<b>Components for re-use</b>	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
<b>Materials for recycling</b>	kg	9.60E-04	4.00E-04	1.19E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
<b>Materials for energy recovery</b>	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
<b>Exported energy</b>	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

## BIOGENIC CARBON CONTENT

Biogenic carbon content	Unit (expressed per declared unit)
<b>Biogenic carbon content in product</b>	0 kg
<b>Biogenic carbon content in accompanying packaging</b>	1.09E-06 kg

NOTE 1 kg biogenic carbon is equivalent to 44/12 kg of CO<sub>2</sub>

# SCENARIO DOCUMENTATION

## MANUFACTURING ENERGY SCENARIO DOCUMENTATION

Scenario parameter	Value
Electricity data source and quality	Electricity, medium voltage, residual mix (Reference product: electricity, medium voltage), EN15804+A2, Finland, 2022, Ecoinvent 3.9.1
Electricity CO <sub>2</sub> e / kWh	0,398 kg CO <sub>2</sub> e / kWh

## TRANSPORTATION SCENARIO

Parameter	Value
<b>Fuel type and consumption of vehicle used for transport</b>	Truck: diesel, maximum load capacity 34 t. Specific transport emissions 0,11 kg CO <sub>2</sub> equiv. / tn x km
<b>Distance (km)</b>	Average transport distance 300 km
<b>Capacity utilization (%)</b>	100 % for truck
<b>Density of transported products (kg/m<sup>3</sup>)</b>	Density varies depending on the mass and size of the product type
<b>Volume capacity utilization factor</b>	1



## INSTALLATION OF THE PRODUCT IN THE BUILDING

Parameter	Unit
Ancillary materials for installation (specified by material)	Disposable gloves (not included in the analysis due to insignificant amount)
Water use	0 m <sup>3</sup>
Other resource use	0 kWh (energy use is insignificant)
Quantitative description of energy type (regional mix) and consumption during the installation process	
Waste materials generated by product installation	Packaging materials per 1 kg of products:
	Wood pallets 0.0000027 kg
	Safesack FIBC 0.0000063 kg

## END OF LIFE SCENARIO DOCUMENTATION

Peat lime		
Process flow		Mass
Collection process specified by type	kg collected separately	-
	kg collected with mixed construction waste	-
Recovery system specified by type	kg for reuse	-
	kg for recycling	-
	kg for energy recovery	-
Disposal specified by type	kg material for final deposition	-
Assumptions for scenario development	units as appropriate	

## REFERENCES

ISO 14025:2010 Environmental labels and declarations – Type III environmental declarations. Principles and procedures.

ISO 14040:2006 Environmental management. Life cycle assessment. Principles and frameworks.

ISO 14044:2006 Environmental management. Life cycle assessment. Requirements and guidelines.

Ecoinvent database v3.9.1, System model: Allocation, cut-off, EN15804 (2022)

EN 15804:2012+A2:2021 Sustainability in construction works – Environmental product declarations – Core rules for the product category of construction products.

Ministry of Environment. 2015. Kaivetut maa-ainekset -jäteluonne ja käsittely. Available:[https://ym.fi/documents/1410903/38439968/YM\\_Maa-ainesmuistio\\_FINAL\\_03072015-5E488047\\_B25B\\_45E4\\_AAE2\\_6495FBB53B5B-110447.pdf](https://ym.fi/documents/1410903/38439968/YM_Maa-ainesmuistio_FINAL_03072015-5E488047_B25B_45E4_AAE2_6495FBB53B5B-110447.pdf)

The Building Information Foundation RTS (RTS EPD Product Category Rules). Rakennustietosäätiö RTS sr (RTS EPD PCR menetelmäohje 15804:2019, 20.12.2024)

The Finnish RTS EPD programme RTS EPD Guideline, 18.2.2021.