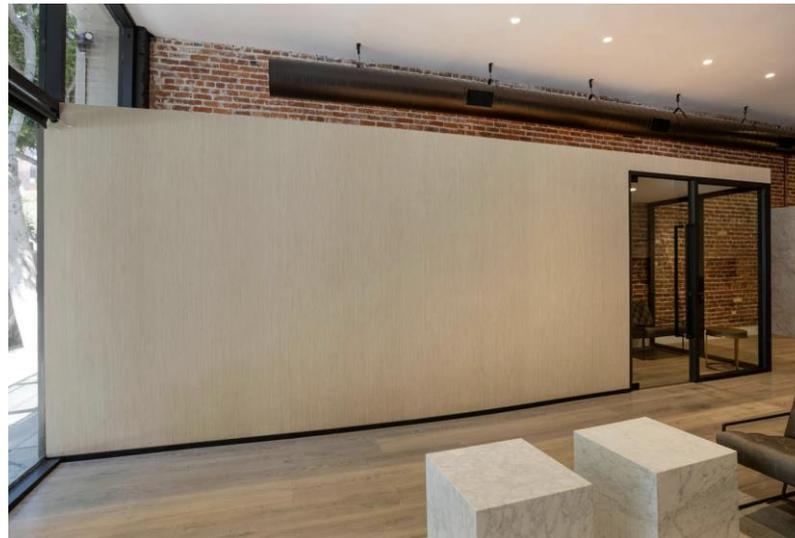




# ENVIRONMENTAL PRODUCT DECLARATION

IN ACCORDANCE WITH ISO 21930 & ISO 14025

eKOA (BARE)  
Lingrove, Inc.



**EPD HUB, EPD number HUB-4536**

Published on 26.11.2025, last updated on 26.11.2025, valid until 26.05.2027

Life Cycle Assessment study has been performed in accordance with the requirements of ISO 21930 & ISO 14025, EPD Hub PCR version 1.2 (24 Mar 2025) and JRC characterization factors EF 3.1.

## GENERAL INFORMATION

### MANUFACTURER

Manufacturer	Lingrove, Inc.
Address	100 Pelican Way, Suite A, San Rafael, CA, 94901
Contact details	operations@lingrove.com
Website	https://lingrove.com/

### EPD STANDARDS, SCOPE AND VERIFICATION

Program operator	EPD Hub, hub@epdhub.com
Reference standard	ISO 21930:2017 and ISO 14025
PCR	EPD Hub Core PCR Version 1.2, 24 Mar 2025
Sector	Construction product
Category of EPD	Design phase EPD
Parent EPD number	-
Scope of the EPD	Cradle to gate with options, A4-A5, and modules C1-C4, D
EPD author	Travis Dahl, Dahl Management Inc.
EPD verification	Independent verification of this EPD and data, according to ISO 14025: <input type="checkbox"/> Internal verification <input checked="" type="checkbox"/> External verification
EPD verifier	Sergio Ballen Zamora, as an authorized verifier for EPD Hub

This EPD is intended for business-to-business and/or business-to-consumer communication. The manufacturer has the sole ownership, liability, and responsibility for the EPD. EPDs within the same product category but from different programs may not be comparable. EPDs of construction products may not be comparable if they do not comply with ISO 21930 and if they are not compared in a building context.

### PRODUCT

Product name	eKOA (BARE)
Additional labels	-
Product reference	-
Place(s) of raw material origin	United States of America
Place of production	San Rafael, California
Place(s) of installation and use	United States of America
Period for data	December 2024 - Annual production data averaged to 1 month to capture renewable energy purchases.
Averaging in EPD	No grouping
Variation in GWP-fossil for A1-A3 (%)	-
GTIN (Global Trade Item Number)	-
A1-A3 Specific data (%)	52.7

## ENVIRONMENTAL DATA SUMMARY

Declared unit	1 m <sup>2</sup>
Declared unit mass	0,697 kg
GWP-TRACI, A1-A3 (kgCO <sub>2</sub> e)	1,29E+00
Secondary material, inputs (%)	0,11
Secondary material, outputs (%)	0
Total energy use, A1-A3 (kWh)	4,4
Net freshwater use, A1-A3 (m <sup>3</sup> )	0,03

## PRODUCT AND MANUFACTURER

### ABOUT THE MANUFACTURER

At Lingrove, we're revolutionizing the built environment with our eco-friendly, high-performance interior products. We're pioneering next-generation plant-based composites, offering superior alternatives to plastics and wood. All products are manufactured in-house at our headquarters in California.

### PRODUCT DESCRIPTION

Our eco-friendly ekoa® plant-based surfaces, panels, and 3D products can replace wood and laminates in all interior applications – from walls to ceilings to casework, and so on – with a cost-competitive, carbon-neutral, clean chemistry product that delivers a higher strength-to-weight ratio than steel.

Further information can be found at:  
<https://lingrove.com/>

### PRODUCT RAW MATERIAL MAIN COMPOSITION

Raw material category	Amount, mass %	Material origin
Metals	0	-
Minerals	0	-
Fossil materials	27.6%	-
Bio-based materials	72.4%	-

### BIOGENIC CARBON CONTENT

Product's biogenic carbon content at the factory gate

Biogenic carbon content in product, kg C	1,276
Biogenic carbon content in packaging, kg C	0,0136

### FUNCTIONAL UNIT AND SERVICE LIFE

Declared unit	1 m <sup>2</sup>
Mass per declared unit	0,697 kg
Functional unit	1 m <sup>2</sup> of laminated wall covering installed and maintained over a reference service life of 20 years, providing durable interior surface protection and aesthetic finish under typical commercial or institutional building conditions.
Reference service life	20

### SUBSTANCES, REACH - VERY HIGH CONCERN

The product does not contain any REACH SVHC substances in amounts greater than 0,1 % (1000 ppm).

# PRODUCT LIFE-CYCLE

## SYSTEM BOUNDARY

This EPD covers the life-cycle modules listed in the following table.

Product stage			Assembly stage		Use stage							End of life stage				Beyond the system boundaries		
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D		
x	x	x	x	x	MND	MND	MND	MND	MND	MND	MND	x	x	x	x	x		
Raw materials	Transport	Manufacturing	Transport	Assembly	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	Deconstruction/ demolition	Transport	Waste processing	Disposal	Reuse	Recovery	Recycling

Modules not declared = MND. Modules not relevant = MNR

### MANUFACTURING AND PACKAGING (A1-A3)

The environmental impacts considered for the product stage cover the manufacturing of raw materials used in the production as well as packaging materials and other ancillary materials. Also, fuels used by machines, and handling of waste formed in the production processes at the manufacturing facilities are included in this stage. The study also considers the material losses occurring during the manufacturing processes as well as losses during electricity transmission.

A market-based approach is used in modelling the electricity mix utilized in the factory.

Lingrove employs a high throughput, low-energy, continuous manufacturing process powered entirely by renewable energy, enabling scalable, efficient, and climate-friendly production of advanced composite materials.

The use of green energy in manufacturing is demonstrated through contractual instruments (GOs, RECs, etc.), and its use is ensured throughout the validity period of this EPD.

### TRANSPORT AND INSTALLATION (A4-A5)

Transportation impacts occurred from final products delivery to construction site (A4) cover fuel direct exhaust emissions, environmental impacts of fuel production, as well as related infrastructure emissions.

Transport (website): We take care to package your ekoa® to ensure that there is no damage. Typical orders ship on pallets. Large orders ship in crates. For small orders, ekoa® Surface veneer rolls or sheets will be shipped rolled in boxes; and panels will be padded and wrapped.

### PRODUCT USE AND MAINTENANCE (B1-B7)

This EPD does not cover the use phase.

Air, soil, and water impacts during the use phase have not been studied.

### PRODUCT END OF LIFE (C1-C4, D)

The declared unit includes only materials delivered with the product, totaling 0.916 kg per m<sup>2</sup>. Site-applied installation materials—specifically 0.2 kg of high-strength clay adhesive and 0.1 kg of primer—are not included in the product’s A1–A3 inputs in accordance with standard modeling conventions, as they are applied during installation on-site.

However, these materials are included in Module A5 (Installation) and

subsequently modeled in Module C4 (Disposal), as they become inseparable from the finished installed product. This results in a total disposal mass of 1.216 kg per m<sup>2</sup>.

Consequently, the total mass of outputs exceeds the inputs, producing a mass balance over 100%. This deviation is permissible under EN 15804 and EPD Hub guidance when site-applied materials are excluded from manufacturing inputs but included at end of life. The intent is to ensure completeness and represent real disposal burdens without mischaracterizing product delivery scope.

#### Product End of Life (C1–C4, D)

Modules C1–C4 represent the end-of-life stages of the installed product. In this EPD, C1 includes minimal energy for deconstruction, while C2 is assumed to reflect average regional transport to waste treatment. The entire installed assembly—including product, adhesive, and primer—is modeled as inert waste sent to landfill in Module C4. No reuse, recycling, or energy recovery is assumed.

Module D is not modeled in this EPD, as there are no secondary material flows or avoided burdens beyond the system boundary.

## MANUFACTURING PROCESS

# How ekoa is made

### Flax Plant

Flax is a fast growing plant that sequesters 1.4kg of CO2 per kg of fiber.



### Flax Fabric

The roving is made into a high-quality unidirectional fabric that creates the matrix base for our innovative composites.



### Roving

The dried fibers are organized unidirectionally and wound into long bundles of fiber for processing into textiles and fabric.

### ekoa

Through our proprietary technology, we add plant resin to transform flax fabric into high-performance ekoa sheets.

## LIFE-CYCLE ASSESSMENT

### CUT-OFF CRITERIA

The study does not exclude any modules or processes which are stated mandatory in the reference standard and the applied PCR. The study does not exclude any hazardous materials or substances. The study includes all major raw material and energy consumption. All inputs and outputs of the unit processes, for which data is available for, are included in the calculation. There is no neglected unit process more than 1% of total mass or energy flows. The module specific total neglected input and output flows also do not exceed 5% of energy usage or mass.

The production of capital equipment, construction activities, and infrastructure, maintenance and operation of capital equipment, personnel-related activities, energy and water use related to company management and sales activities are excluded.

### VALIDATION OF DATA

Data collection for production, transport, and packaging was conducted using time and site-specific information, as defined in the general information section on page 1 and 2. Upstream process calculations rely on generic data as defined in the Bibliography section. Manufacturer-provided specific and generic data were used for the product's manufacturing stage. The analysis was performed in One Click LCA EPD Generator, with the 'Cut-Off, EN 15804+A2' allocation method, and characterization factors according to EN 15804:2012+A2:2019/AC:2021 and JRC EF 3.1.

### ALLOCATION, ESTIMATES AND ASSUMPTIONS

Allocation is required if some material, energy, and waste data cannot be measured separately for the product under investigation. All allocations are done as per the reference standards and the applied PCR. In this study, allocation has been done in the following ways:

Data type	Allocation
Raw materials	No allocation
Packaging material	Allocated by mass or volume
Ancillary materials	Allocated by mass or volume
Manufacturing energy and waste	Allocated by mass or volume

### PRODUCT & MANUFACTURING SITES GROUPING

Type of grouping	No grouping
Grouping method	Not applicable
Variation in GWP-fossil for A1-A3, %	-

This EPD represents a single product. There is no averaging.

### LCA SOFTWARE AND BIBLIOGRAPHY

This EPD has been created using One Click LCA EPD Generator. The LCA and EPD have been prepared according to the reference standards and ISO 14040/14044. The EPD Generator uses Ecoinvent v3.10.1, EPDs with TRACI methodologies, and the Federal LCA Commons as sources of environmental data. Allocation used in Ecoinvent 3.10.1 environmental data sources follow the methodology 'allocation, cut-off, EN 15804+A2'.

## ENVIRONMENTAL IMPACT DATA

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.

### ENVIRONMENTAL IMPACTS – TRACI 2.1. / ISO 21930

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Global Warming Pot.	kg CO <sub>2</sub> e	8,10E-01	3,30E-01	1,49E-01	1,29E+00	3,28E-02	6,04E-01	0,00E+00	9,53E-02	0,00E+00	9,71E-01	0,00E+00	0,00E+00	0,00E+00	2,71E-03	5,40E-03	0,00E+00	1,11E-02	0,00E+00
Ozone Depletion	kg CFC <sub>11</sub> e	7,08E-08	5,34E-09	1,90E-09	7,81E-08	5,64E-10	4,73E-09	0,00E+00	5,44E-11	0,00E+00	5,53E-08	0,00E+00	0,00E+00	0,00E+00	1,80E-11	9,31E-11	0,00E+00	2,99E-10	0,00E+00
Acidification	kg SO <sub>2</sub> e	8,69E-03	2,64E-03	7,43E-04	1,21E-02	7,33E-05	2,21E-03	0,00E+00	4,05E-04	0,00E+00	8,59E-03	0,00E+00	0,00E+00	0,00E+00	5,16E-06	1,21E-05	0,00E+00	1,03E-04	0,00E+00
Eutrophication	kg Ne	2,13E-03	1,50E-04	6,68E-04	2,95E-03	9,03E-06	2,55E-04	0,00E+00	7,19E-05	0,00E+00	2,14E-03	0,00E+00	0,00E+00	0,00E+00	2,07E-06	1,49E-06	0,00E+00	1,51E-05	0,00E+00
POCP ("smog")	kg O <sub>3</sub> e	3,38E-02	5,32E-02	1,52E-02	1,02E-01	1,57E-03	2,89E-02	0,00E+00	5,54E-04	0,00E+00	7,41E-02	0,00E+00	0,00E+00	0,00E+00	9,02E-05	2,58E-04	0,00E+00	1,98E-03	0,00E+00
ADP-fossil	MJ	2,75E+01	4,74E+00	-4,14E-01	3,18E+01	5,01E-01	1,36E+01	0,00E+00	6,09E-01	0,00E+00	2,29E+01	0,00E+00	0,00E+00	0,00E+00	4,28E-02	8,26E-02	0,00E+00	2,48E-01	0,00E+00

### USE OF NATURAL RESOURCES

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Renew. PER as energy <sup>1)</sup>	MJ	1,00E+01	5,90E-02	-1,35E+00	8,73E+00	6,85E-03	1,19E+00	0,00E+00	2,29E-03	0,00E+00	5,97E-03	0,00E+00	0,00E+00	0,00E+00	1,48E-02	1,13E-03	0,00E+00	3,64E-03	0,00E+00
Renew. PER as material	MJ	3,03E+00	0,00E+00	5,59E-02	3,09E+00	0,00E+00	-3,93E-01	0,00E+00	-2,70E+00	0,00E+00									
Total use of renew. PER	MJ	1,31E+01	5,90E-02	-1,30E+00	1,18E+01	6,85E-03	7,97E-01	0,00E+00	2,29E-03	0,00E+00	5,97E-03	0,00E+00	0,00E+00	0,00E+00	1,48E-02	1,13E-03	0,00E+00	-2,69E+00	0,00E+00
Non-re. PER as energy	MJ	2,51E+00	4,74E+00	-1,53E-01	7,09E+00	5,00E-01	9,83E+00	0,00E+00	6,52E-03	0,00E+00	4,36E-01	0,00E+00	0,00E+00	0,00E+00	4,28E-02	8,25E-02	0,00E+00	2,48E-01	0,00E+00
Non-re. PER as material	MJ	1,23E-02	0,00E+00	3,36E-02	4,58E-02	0,00E+00	-3,49E-02	0,00E+00	-1,09E-02	0,00E+00									
Total use of non-re. PER	MJ	2,52E+00	4,74E+00	-1,20E-01	7,14E+00	5,00E-01	9,80E+00	0,00E+00	6,52E-03	0,00E+00	4,36E-01	0,00E+00	0,00E+00	0,00E+00	4,28E-02	8,25E-02	0,00E+00	2,37E-01	0,00E+00
Secondary materials	kg	7,68E-04	2,06E-03	6,13E-02	6,41E-02	2,13E-04	3,89E-03	0,00E+00	2,43E-05	0,00E+00	1,85E-04	0,00E+00	0,00E+00	0,00E+00	5,70E-06	3,51E-05	0,00E+00	9,06E-05	0,00E+00
Renew. secondary fuels	MJ	9,43E-06	2,14E-05	1,11E-02	1,11E-02	2,70E-06	5,63E-04	0,00E+00	3,69E-08	0,00E+00	2,35E-06	0,00E+00	0,00E+00	0,00E+00	1,82E-08	4,46E-07	0,00E+00	1,69E-06	0,00E+00
Non-ren. secondary fuels	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	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Use of net fresh water	m <sup>3</sup>	2,25E-02	6,28E-04	2,50E-03	2,56E-02	7,52E-05	4,13E-03	0,00E+00	1,05E-03	0,00E+00	6,44E-05	0,00E+00	0,00E+00	0,00E+00	2,43E-05	1,24E-05	0,00E+00	-3,69E-03	0,00E+00

1) PER = Primary energy resources.

### END OF LIFE – WASTE

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Hazardous waste	kg	3,30E-02	7,65E-03	9,04E-03	4,96E-02	8,43E-04	4,03E-03	0,00E+00	3,90E-05	0,00E+00	7,38E-04	0,00E+00	0,00E+00	0,00E+00	1,37E-04	1,39E-04	0,00E+00	4,88E-04	0,00E+00
Non-hazardous waste	kg	5,82E-01	1,35E-01	3,84E-01	1,10E+00	1,56E-02	2,27E-01	0,00E+00	1,15E-02	0,00E+00	1,37E-02	0,00E+00	0,00E+00	0,00E+00	1,16E-02	2,57E-03	0,00E+00	4,96E+00	0,00E+00
Radioactive waste	kg	2,79E-06	9,09E-07	1,07E-06	4,77E-06	1,06E-07	4,23E-07	0,00E+00	5,53E-09	0,00E+00	9,28E-08	0,00E+00	0,00E+00	0,00E+00	1,17E-07	1,75E-08	0,00E+00	5,30E-08	0,00E+00

### END OF LIFE – OUTPUT FLOWS

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Components for re-use	kg	0,00E+00																	
Materials for recycling	kg	0,00E+00																	
Materials for energy rec	kg	0,00E+00																	
Exported energy	MJ	0,00E+00																	

### ENVIRONMENTAL IMPACTS – EN 15804+A1, CML / ISO 21930

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Global Warming Pot.	kg CO <sub>2</sub> e	2,30E-01	3,32E-01	1,51E-01	7,13E-01	3,30E-02	8,78E-02	0,00E+00	4,92E-04	0,00E+00	2,98E-02	0,00E+00	0,00E+00	0,00E+00	2,72E-03	5,45E-03	0,00E+00	1,13E-02	0,00E+00
Ozone depletion Pot.	kg CFC <sub>-11</sub> e	2,37E-09	4,04E-09	1,59E-09	8,00E-09	4,27E-10	1,03E-09	0,00E+00	5,33E-12	0,00E+00	3,54E-10	0,00E+00	0,00E+00	0,00E+00	1,41E-11	7,04E-11	0,00E+00	2,26E-10	0,00E+00
Acidification	kg SO <sub>2</sub> e	1,66E-03	2,44E-03	6,62E-04	4,76E-03	6,74E-05	4,07E-04	0,00E+00	1,66E-06	0,00E+00	7,81E-05	0,00E+00	0,00E+00	0,00E+00	4,76E-06	1,11E-05	0,00E+00	9,68E-05	0,00E+00
Eutrophication	kg PO <sub>4</sub> <sup>3</sup> e	8,00E-04	3,46E-04	1,04E-03	2,19E-03	1,61E-05	1,53E-04	0,00E+00	3,59E-07	0,00E+00	1,90E-05	0,00E+00	0,00E+00	0,00E+00	1,39E-06	2,66E-06	0,00E+00	2,66E-05	0,00E+00
POCP (“smog”)	kg C <sub>2</sub> H <sub>4</sub> e	1,04E-04	1,46E-04	7,13E-05	3,22E-04	6,41E-06	3,01E-05	0,00E+00	1,48E-07	0,00E+00	6,96E-06	0,00E+00	0,00E+00	0,00E+00	3,27E-07	1,06E-06	0,00E+00	6,40E-06	0,00E+00
ADP-elements	kg Sbe	1,00E-06	7,83E-07	6,95E-07	2,48E-06	9,37E-08	3,21E-07	0,00E+00	3,17E-09	0,00E+00	8,16E-08	0,00E+00	0,00E+00	0,00E+00	4,18E-09	1,55E-08	0,00E+00	2,49E-08	0,00E+00
ADP-fossil	MJ	2,34E+00	4,68E+00	1,66E+00	8,68E+00	4,93E-01	1,17E+00	0,00E+00	6,24E-03	0,00E+00	4,30E-01	0,00E+00	0,00E+00	0,00E+00	3,47E-02	8,14E-02	0,00E+00	2,44E-01	0,00E+00

### ENVIRONMENTAL IMPACTS – ISO 21930

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Radioactive waste, high	kg	8,68E-07	2,67E-07	4,63E-07	1,60E-06	3,12E-08	1,33E-07	0,00E+00	2,80E-09	0,00E+00	2,72E-08	0,00E+00	0,00E+00	0,00E+00	2,31E-08	5,14E-09	0,00E+00	1,56E-08	0,00E+00
Radioactive waste, int/low	kg	1,92E-06	6,42E-07	6,05E-07	3,17E-06	7,52E-08	2,90E-07	0,00E+00	2,73E-09	0,00E+00	6,56E-08	0,00E+00	0,00E+00	0,00E+00	9,44E-08	1,24E-08	0,00E+00	3,74E-08	0,00E+00

## SCENARIO DOCUMENTATION

### DATA SOURCES

#### Manufacturing energy scenario documentation

1. Electricity - SOLAR - California Independent System Operator, United States, LCA Commons, 0.0075 kgCO<sub>2</sub>e/MJ
2. Electricity - WIND - California Independent System Operator, United States, LCA Commons, 0.0184 kgCO<sub>2</sub>e/MJ

#### Transport scenario documentation - A4 (Transport resources)

1. Transport, freight, lorry >32 metric ton, EURO6, 400 km

#### Transport scenario documentation A4

Scenario parameter	Value
Capacity utilization (including empty return) %	50
Bulk density of transported products	0,00E+00
Volume capacity utilization factor	1

#### Installation scenario documentation - A5 (Installation resources)

1. Market for bentonite, Ecoinvent, 0.2 kg
2. Interior/Exterior primer, GaBi, 0.1 kg

#### Installation scenario documentation - A5 (Installation waste)

1. Treatment of waste aluminium, sanitary landfill, Ecoinvent, 0.0264 kg
2. Treatment of inert waste, inert material landfill, Ecoinvent, 0.069024 kg
3. Treatment of inert waste, inert material landfill, Ecoinvent, 0.03485 kg

#### Use stages scenario documentation - B2 (Maintenance data source)

1. Market for tap water, Ecoinvent, 1.04 kg
2. ekoa cleaning detergent, Ecoinvent, 0.104 kg

#### Use stages scenario documentation - B2 Maintenance

Scenario information	Value
Maintenance process / Description or source where description can be found	Regular weekly surface cleaning with mild detergent diluted in water. No replacement or refurbishment required.
Maintenance cycle / Number per RSL or year <i>(Not applicable if only B2 is declared)</i>	52 per year × 20 years = 1,040 cycles per RSL.

#### Use stages scenario documentation - B4 (Replacement data source)

1. ekoa Product Generic, 0.697 kg

#### Use stages scenario documentation - B4 Replacement

Scenario information	Value
Replacement cycle / Number per RSL or year	Replacement of installed ekoa product at end of RSL with identical product (1 per 20 years)

#### Use stages scenario documentation - C1-C4 (Data source)

1. Treatment of inert waste, sanitary landfill, Ecoinvent, 0.997 kg
2. Market for electricity, medium voltage, Ecoinvent, 0.00697 kWh

Scenario information	Value
Scenario assumptions e.g. transportation	Average transport to landfill modeled at 50 km, diesel truck (Euro 6). No reuse, recycling, or energy recovery is assumed. Entire installed assembly—including product, adhesive, and primer—is treated as inert waste for final disposal.

## THIRD-PARTY VERIFICATION STATEMENT

EPD Hub declares that this EPD is verified in accordance with ISO 14025 by an independent, third-party verifier. The project report on the Life Cycle Assessment and the report(s) on features of environmental relevance are filed at EPD Hub. EPD Hub PCR and ECO Platform verification checklist are used.

EPD Hub is not able to identify any unjustified deviations from the PCR and ISO 21930 in the Environmental Product Declaration and its project report.

EPD Hub maintains its independence as a third-party body; it was not involved in the execution of the LCA or in the development of the declaration and has no conflicts of interest regarding this verification.

The company-specific data and upstream and downstream data have been examined as regards plausibility and consistency. The publisher is responsible for ensuring the factual integrity and legal compliance of this declaration.

The software used in creation of this LCA and EPD is verified by EPD Hub to conform to the procedural and methodological requirements outlined in ISO 14025:2010, ISO 14040/14044, and EPD Hub Core Product Category Rules and General Program Instructions.

### Verified tools

Tool verifier: Magaly Gonzalez Vazquez

Tool verification validity: 27 March 2025 - 26 March 2028

Sergio Ballen Zamora as an authorized verifier for EPD Hub Limited  
26.11.2025

