ENVIRONMENTAL PRODUCT DECLARATION

IN ACCORDANCE WITH EN 15804+A2 & ISO 14025

Vitreon Steel Washbasins

EPD HUB, EPD number HUB-6699
Published on 18/06/2026
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Valid until 17/06/2031

Life Cycle Assessment study has been performed in accordance with the requirements of EN 15804, EPD Hub PCR version 1.2 (24 Mar 2025) and JRC characterization factors EF 3.1.

LAUFEN

GENERAL INFORMATION

MANUFACTURER

Manufacturer	LAUFEN
Address	Wahlenstrasse 46, 4242 Laufen CH
Contact details	info@es.laufen.com
Website	www.laufen.com

EPD STANDARDS, SCOPE AND VERIFICATION

Program operator	EPD Hub, hub@epdhub.com
Reference standard	EN 15804:2012+A2:2019/AC:2021 and ISO 14025
PCR	EPD Hub Core PCR Version 1.2, 24 Mar 2025
Sector	Construction product
Category of EPD	Third party verified EPD
Parent EPD number	-
Scope of the EPD	Cradle to gate with modules C1-C4, D
EPD author	Sílvia Guillem, Sustainability Department, Roca Group
EPD verification	Independent verification of this EPD and data, according to ISO 14025: ☐ Internal verification ☑ External verification
EPD verifier	Yazan Badour 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 EN 15804 and if they are not compared in a building context.

PRODUCT

Product name	Vitreon Steel Washbasins
Additional labels	-
Product reference	-
Place(s) of raw material origin	Belgium, Germany, Spain
Place of production	Goslar (Germany)
Place(s) of installation and use	Europe
Period for data	Calendar Year 2025
Averaging in EPD	Multiple products
Variation in GWP-fossil for A1-A3 (%)	-
GTIN (Global Trade Item Number)	-
NOBB (Norwegian Building Product Database)	-
A1-A3 Specific data (%)	78,4

ENVIRONMENTAL DATA SUMMARY

Declared unit	1 Kg Vitreon Steel Washbasin
Declared unit mass	1 kg
Mass of packaging	0,5 kg
GWP-fossil, A1-A3 (kgCO2e)	5,82
GWP-total, A1-A3 (kgCO2e)	5,85
Secondary material, inputs (%)	72,9
Total energy use, A1-A3 (kWh)	26,6
Net freshwater use, A1-A3 (m3)	0,04

PRODUCT AND MANUFACTURER

ABOUT THE MANUFACTURER

LAUFEN is dedicated to the production and sale of bathroom solutions that enrich people's everyday lives by creating unique spaces for wellbeing, personal care and health.

LAUFEN is the premium brand of Roca Group, a family-owned global enterprise driven by the Purpose of contributing to the well-being of society by delivering solutions that enhance everyday spaces, while caring for People and the Planet, and fostering Prosperity. Its commitment to sustainable development is deeply rooted in the organization—both as a strategic priority and through concrete actions. It is reflected in initiatives that translate this ambition into measurable improvements, ensuring that its day-to-day operations consistently contribute to a more positive and lasting impact.

Further information can be found at www.laufen.com and www.rocagroup.com

PRODUCT DESCRIPTION

This EPD covers vitreous enamelled steel washbasins intended for sanitary applications in residential and non-residential buildings. The products are primarily manufactured from cold-rolled steel coated with enamel frits, providing durability, chemical resistance and hygienic performance. Key technical characteristics, including dimensions, weight ranges and performance requirements, are defined according to applicable product standards and verified through relevant testing procedures. The products comply with applicable regulatory requirements, including the restriction of hazardous substances (RSL). Environmental impacts are calculated based on a representative average product reflecting total production volume in 2025.

PRODUCT RAW MATERIAL MAIN COMPOSITION

Raw material category	Amount, mass %	Material origin
Metals	61,11	Europe
Minerals	30,56	Europe
Fossil materials	8,33	Europe
Bio-based materials	0	-

BIOGENIC CARBON CONTENT

Product's biogenic carbon content at the factory gate

Biogenic carbon content in product, kg C	0,002
Biogenic carbon content in packaging, kg C	0,000

FUNCTIONAL UNIT AND SERVICE LIFE

Declared unit	1 Kg Vitreon Steel Washbasins
Mass per declared unit	1 kg
Functional unit	-
Reference service life	-

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	ND	ND	ND	ND	ND	ND	ND	ND	ND	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

Not declared = ND.

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 manufacturing process begins with the transport and preparation of cold-rolled steel sheets and enamel frits. The steel is formed through pressing, followed by laser cutting, hole stamping and bending to achieve the required shape. Components are then welded and ground to obtain a smooth surface. The enamel coating is applied through a glazing process at high temperature, providing durability and chemical resistance. The process requires electricity and thermal energy. Finished products are inspected, packaged in protective materials such as cardboard and placed on wooden pallets for transport.

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.

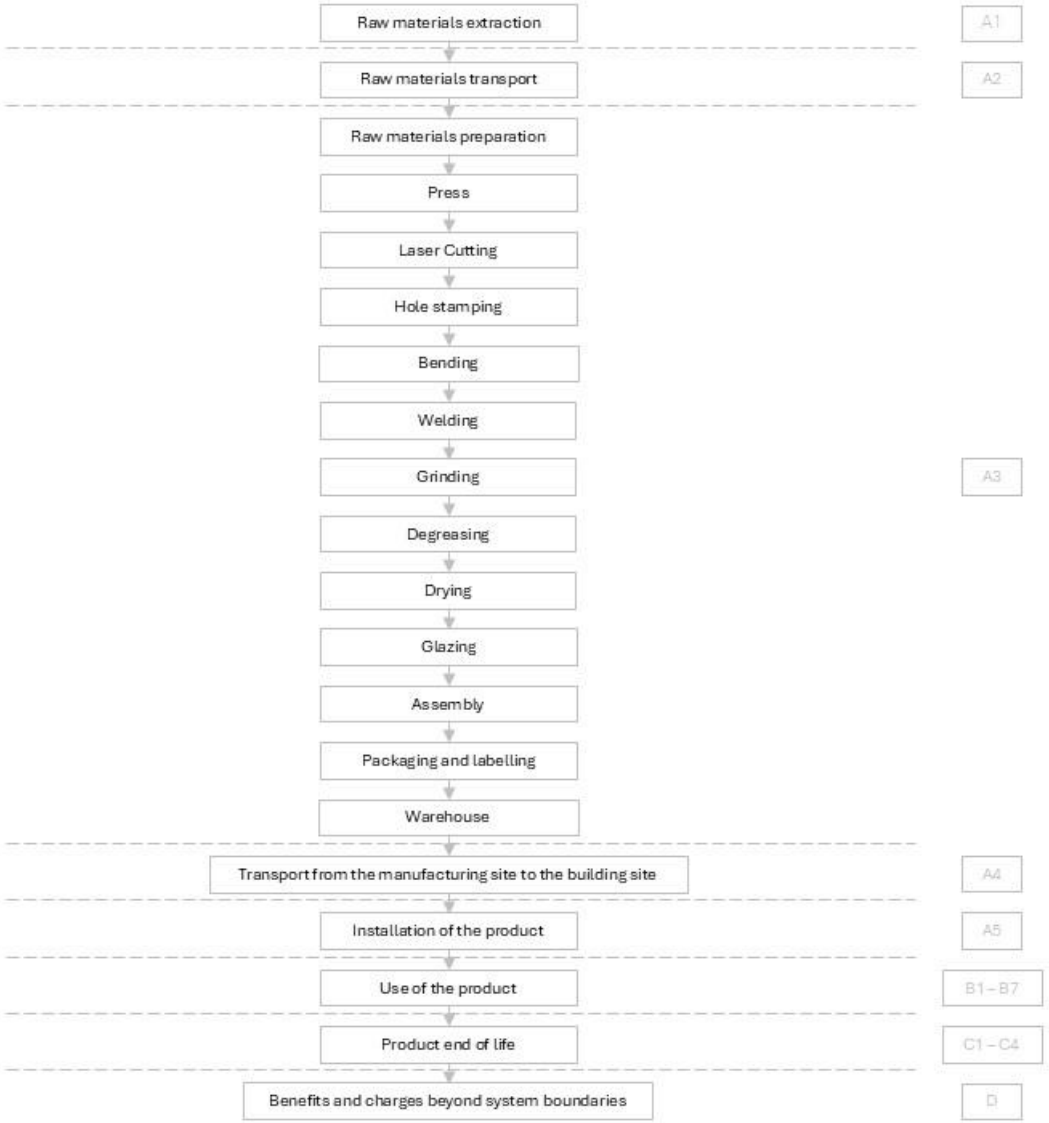
PRODUCT END OF LIFE (C1-C4, D)

At the end of life, energy consumption and natural resources of the disassembling end-of-life product and the impacts of demolition process are assumed to be zero due to negligible consumption. Waste is transported to a treatment facility by lorry over an assumed average distance. No significant mass loss during the use phase is considered, therefore the end-of-life product is assumed to have the same weight as the declared product.

At the waste treatment plant, materials are sorted and processed. According to representative and commonly accepted European end-of-life scenarios, the steel component is largely recycled, with 95% directed to recycling processes and the remaining 5% disposed of via landfill; plastic components are distributed between recycling (23%), incineration with energy recovery (50%), and landfill disposal (27%); cardboard packaging is predominantly recycled (83%), with smaller fractions incinerated with energy recovery (8%) and landfilled (9%); and wood packaging is partly recycled (32%), with the remainder incinerated (30%) or landfilled (38%).

Benefits and loads beyond the system boundary include the substitution of primary materials through recycling, as well as energy recovery.

MANUFACTURING PROCESS



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. 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	No allocation
Ancillary materials	Physical Properties
Manufacturing energy and waste	Physical Properties

Primary data for raw and packaging materials are obtained from the Bill of Materials; therefore, no allocation is required. Primary data for ancillary materials, manufacturing energy use, and waste generation are based on measured annual consumption data and are allocated according to physical properties, specifically in proportion to annual production output.

PRODUCT & MANUFACTURING SITES GROUPING

Type of grouping	Multiple products
Grouping method	Based on a representative product
Variation in GWP-fossil for A1-A3, %	-

Primary data represents the manufacturing site of Goslar (Germany).

LCA SOFTWARE AND BIBLIOGRAPHY

This EPD has been created using One Click LCA EPD Generator for EPD Hub V3 and EPD Process Certification v3.2.5. The LCA and EPD have been prepared according to the reference standards and ISO 14040/14044. The EPD Generator uses Ecoinvent v3.10.1/3.11/3.12 and One Click LCA databases as sources of environmental data. Allocation used in Ecoinvent 3.10.1/3.11/3.12 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.

CORE ENVIRONMENTAL IMPACT INDICATORS – EN 15804+A2, EF 3.1

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
GWP – total[1)]	kg CO_2e	9,96E-01	1,63E-01	4,69E+00	5,85E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	4,91E-02	3,86E-01	1,70E-01	-4,23E+00
GWP – fossil	kg CO_2e	9,85E-01	1,63E-01	4,67E+00	5,82E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	4,91E-02	1,44E-01	4,67E-03	-4,24E+00
GWP – biogenic	kg CO_2e	9,58E-03	3,40E-05	6,91E-03	1,65E-02	ND	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,03E-05	2,42E-01	1,65E-01	1,14E-02
GWP – LULUC	kg CO_2e	1,06E-03	7,27E-05	9,97E-03	1,11E-02	ND	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	2,13E-05	4,21E-05	1,64E-06	-4,16E-03
Ozone depletion pot.	kg $CFC\text{-}_{11}$e	1,90E-06	2,37E-09	2,07E-07	2,11E-06	ND	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	7,16E-10	3,91E-10	5,41E-11	-3,08E-08
Acidification potential	mol H^+e	5,50E-03	5,66E-04	5,17E-03	1,12E-02	ND	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,63E-04	3,09E-04	1,73E-05	-2,37E-02
EP-freshwater[2)]	kg Pe	4,55E-04	1,72E-05	2,41E-04	7,13E-04	ND	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	3,76E-06	1,59E-05	1,29E-06	-1,30E-03
EP-marine	kg Ne	1,01E-03	1,87E-04	1,95E-03	3,15E-03	ND	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	5,29E-05	8,59E-05	8,74E-05	-4,23E-03
EP-terrestrial	mol Ne	1,04E-02	2,02E-03	1,85E-02	3,10E-02	ND	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	5,76E-04	8,85E-04	6,52E-05	-4,51E-02
POCP ("smog")[3)]	kg NMVOCe	3,28E-03	8,30E-04	8,83E-03	1,29E-02	ND	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	2,30E-04	2,57E-04	3,15E-05	-1,46E-02
ADP-minerals & metals[4)]	kg Sbe	6,50E-05	4,65E-07	3,44E-06	6,89E-05	ND	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,60E-07	1,46E-06	4,64E-09	-1,08E-04
ADP-fossil resources	MJ	1,67E+01	2,33E+00	7,60E+01	9,50E+01	ND	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	6,89E-01	3,90E-01	4,73E-02	-4,73E+01
Water use[5)]	m^3e depr.	4,75E-01	1,34E-02	9,96E-01	1,48E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	3,22E-03	1,30E-02	2,87E-04	-1,23E+00

1) GWP = Global Warming Potential; 2) EP = Eutrophication potential. Required characterisation method and data are in kg P-eq. Multiply by 3,07 to get PO4e; 3) POCP = Photochemical ozone formation; 4) ADP = Abiotic depletion potential; 5) 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 experience with the indicator.

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[8)]	MJ	1,33E+00	3,24E-02	2,02E+00	3,39E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	9,69E-03	-5,39E+00	-2,18E+00	-1,05E+01
Renew. PER as material	MJ	4,45E-03	0,00E+00	0,00E+00	4,45E-03	ND	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	-3,25E-03	-1,20E-03	1,64E-01
Total use of renew. PER	MJ	1,34E+00	3,24E-02	2,02E+00	3,39E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	9,69E-03	-5,39E+00	-2,18E+00	-1,03E+01
Non-re. PER as energy	MJ	1,43E+01	2,33E+00	7,57E+01	9,24E+01	ND	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	6,89E-01	-2,04E+00	-8,14E-01	-4,75E+01
Non-re. PER as material	MJ	2,39E+00	0,00E+00	0,00E+00	2,39E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	-1,75E+00	-6,46E-01	8,50E-01
Total use of non-re. PER	MJ	1,67E+01	2,33E+00	7,57E+01	9,47E+01	ND	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	6,89E-01	-3,79E+00	-1,46E+00	-4,66E+01
Secondary materials	kg	7,29E-01	9,78E-04	2,46E-01	9,76E-01	ND	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	3,10E-04	5,69E-04	1,60E-05	5,05E-01
Renew. secondary fuels	MJ	1,62E-04	1,27E-05	1,62E-01	1,63E-01	ND	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	3,94E-06	1,65E-05	2,97E-07	-1,12E-03
Non-ren. secondary fuels	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Use of net fresh water	m^3	1,72E-02	3,35E-04	2,30E-02	4,06E-02	ND	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	9,17E-05	2,29E-04	-5,56E-04	-3,75E-02

8) 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	3,28E-01	1,38E-02	4,64E-02	3,88E-01	ND	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,18E-03	4,75E-03	8,87E-05	-4,07E+00
Non-hazardous waste	kg	1,19E+01	2,71E-01	1,26E+00	1,34E+01	ND	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	2,23E-02	2,40E-01	7,59E-01	-8,98E+00
Radioactive waste	kg	3,22E-05	4,71E-07	1,66E-05	4,93E-05	ND	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,45E-07	7,71E-07	1,49E-08	-5,13E-05

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	0,00E+00	0,00E+00	0,00E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Materials for recycling	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	1,16E+00	0,00E+00	0,00E+00
Materials for energy rec	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Exported energy	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	1,06E+00	0,00E+00	0,00E+00
Exported energy – Electricity	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	4,46E-01	0,00E+00	0,00E+00
Exported energy – Heat	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	6,11E-01	0,00E+00	0,00E+00

ENVIRONMENTAL IMPACTS – EN 15804+A1, CML

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_2e	9,80E-01	1,62E-01	4,67E+00	5,81E+00	ND	0,00E+00	ND	ND	ND	ND	ND	ND	ND	0,00E+00	4,88E-02	1,45E-01	3,16E-02	-4,22E+00
Ozone depletion Pot.	kg CFC_{-11}e	1,63E-06	1,89E-09	1,68E-07	1,80E-06	ND	0,00E+00	ND	ND	ND	ND	ND	ND	ND	0,00E+00	5,72E-10	3,22E-10	4,32E-11	-2,59E-08
Acidification	kg SO_2e	4,56E-03	4,32E-04	3,89E-03	8,88E-03	ND	0,00E+00	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,24E-04	2,44E-04	1,29E-05	-1,97E-02
Eutrophication	kg PO_4^3e	2,35E-03	1,16E-04	4,66E-03	7,12E-03	ND	0,00E+00	ND	ND	ND	ND	ND	ND	ND	0,00E+00	3,04E-05	4,46E-05	3,66E-05	-2,71E-03
POCP (“smog”)	kg C_2H_4e	2,91E-04	3,77E-05	4,90E-04	8,18E-04	ND	0,00E+00	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,12E-05	1,63E-05	7,18E-06	-1,20E-03
ADP-elements	kg Sbe	6,34E-05	4,53E-07	2,76E-06	6,66E-05	ND	0,00E+00	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,57E-07	1,46E-06	4,51E-09	-1,08E-04
ADP-fossil	MJ	1,49E+01	2,30E+00	7,48E+01	9,20E+01	ND	0,00E+00	ND	ND	ND	ND	ND	ND	ND	0,00E+00	6,80E-01	3,38E-01	4,64E-02	-4,41E+01

SCENARIO DOCUMENTATION

DATA SOURCES

Manufacturing energy scenario documentation

1. Electricity, medium voltage, European attribute mix, Rest-of-Europe, Ecoinvent, 0.0011 kgCO2e/kWh
2. Heat production, natural gas, at industrial furnace >100kW. Ecoinvent, 0.0754 kgCO2e/MJ

End of life (C1-C4) - Scenario documentation

Scenario information	Value
Collection process: collected separately (kg)	-
Collection process: Mixed waste (kg)	-
Recovery: re-use (kg)	0
Recovery: recycling (kg)	1,16
Recovery: energy recovery (kg)	0,14
Disposal (kg)	0,20
Scenario assumptions e.g. transportation (mode, km) & other	Materials are distributed into recycling, incineration or landfill depending on their type. Transport distances to waste treatment facilities are material-dependent: stainless steel sent for recycling is assumed at 250 km and landfill at 50 km; paper/cardboard and wood packaging are transported 50 km to all treatment routes (recycling, incineration and landfill); and plastic packaging is transported 250 km to recycling, 150 km to incineration, and 50 km to landfill.

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 EN 15804+A2 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, EN 15804+A2, 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

Yazan Badour as an authorized verifier for EPD Hub Limited 18.06.2026