



ENVIRONMENTAL PRODUCT DECLARATION

IN ACCORDANCE WITH EN 15804+A2 & ISO 14025

Reconditioned Orak carpet tiles without maintenance

ORAK



EPD HUB, HUB-3903

Published on 31.08.2025, last updated on 31.08.2025, valid until 30.08.2030

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.



Created with One Click LCA

Orak

GENERAL INFORMATION

MANUFACTURER

Manufacturer	ORAK
Address	15 AVENUE DE NORVEGE, 91140 VILLEBON-SUR-YVETTE, FRANCE
Contact details	contact@orak.fr
Website	www.orak.pro

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
Scope of the EPD	Cradle to gate with options, A4-A5, B2, and modules C1-C4, D
EPD author	Romane Preat, G-ON
EPD verification	Independent verification of this EPD and data, according to ISO 14025: ☐ Internal verification ☒ External verification
EPD verifier	Sarah Curpen, as an authorized verifier acting for EPD Hub Limited

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	Reconditioned Orak carpet tiles without maintenance
Place(s) of raw material origin	France
Place of production	Chanteloup-les-Vignes (78), France
Period for data	January 2024 – December 2024
Place(s) of installation and use	Global
Averaging in EPD	No grouping
Variation in GWP-fossil for A1-A3 (%)	Not applicable
GTIN (Global Trade Item Number)	-
NOBB (Norwegian Building Product Database)	-
A1-A3 Specific data (%)	96%

ENVIRONMENTAL DATA SUMMARY

Declared unit	1 m ² of reconditioned carpet tiles
Declared unit mass	4,09 kg
GWP-fossil, A1-A3 (kgCO ₂ e)	4,62E-01
GWP-total, A1-A3 (kgCO ₂ e)	-1,71E-01
Secondary material, inputs (%)	151
Secondary material, outputs (%)	0
Total energy use, A1-A3 (kWh)	-11
Net freshwater use, A1-A3 (m ³)	0

PRODUCT AND MANUFACTURER

ABOUT THE MANUFACTURER

Orak is the French specialist in carpet tile reconditioning, maintenance, and end-of-life valorization. We offer solutions to extend the lifespan of textile flooring by maintaining and reconditioning carpet tiles. We recondition over 45,000 m² of carpet tiles each year, and we valorize end-of-life tiles by transforming non-reusable ones, ensuring zero landfill. Our expertise ensures full traceability via a dedicated web app, providing an all-in-one solution that includes collection, cleaning, resale or recycling, and compliance with RE2020, BREEAM and LEED, supported by technical and environmental documentation. We transform carpet tiles into valuable economic and environmental assets, promoting a sustainable circular economy.

PRODUCT DESCRIPTION

The product consists of 1 m² of reconditioned carpet tiles, installed with PET corner connectors. While the exact composition of the carpet tiles is unknown, it is assumed to be similar to that of the UFTM collective FDES 'Tufted carpets with a 100% polyamide pile, removable lead tiles, and a total pile mass of less than 750 g/m²' (November 2017). Therefore, carpet tiles are composed of a tufted polyamide fiber use layer on a polyester or polypropylene fleece. The underlay is primarily composed of a latex or hot melt coating and a backing made of recycled polyvinyl chloride, polyurethane or ethylene-vinyl acetate.

The finished product is packaged in cardboard boxes on pallets, wrapped in plastic film, or in plastic pallet boxes.

Further information can be found at: www.orak.pro

PRODUCT RAW MATERIAL MAIN COMPOSITION

Raw material category	Amount, mass %	Material origin
Metals	0%	-
Minerals	0%	-
Fossil materials	100%	France
Bio-based materials	0%	-

BIOGENIC CARBON CONTENT

Product's biogenic carbon content at the factory gate

Biogenic carbon content in product, kg C	0 kg C
Biogenic carbon content in packaging, kg C	1,57E-01 kg C

FUNCTIONAL UNIT AND SERVICE LIFE

Declared unit	1 m ² of reconditioned carpet tiles
Mass per declared unit	4,09 kg
Functional unit	Covering 1 m ² of indoor floor area with reconditioned Orak carpet tiles, providing functional performance in terms of wear resistance, comfort, and aesthetic contribution over a reference service life of 10 years.
Reference service life	10

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	MNR	X	MNR	MNR	MNR	MNR	MNR	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.

The reusable carpet tiles are initially selected by Orak and cleaned on site (A1) using water, detergent, and electricity for vacuuming. They are then

transported by lorry to the reconditioning workshop in Chanteloup-les-Vignes (78), France. Transport is carried out in reusable polypropylene pallet boxes, each with a capacity of 70 m² of carpet tiles. Based on Orak's operational experience, each pallet box can be reused at least 500 times.

At the reconditioning workshop (A3), a second quality control and sorting process is performed. The conveyor belt, powered by electricity from the French energy mix, is the main energy input for this step. Losses due to previous wear and tear are accounted for and are 100% recycled.

The LCA model applies a location-based approach.

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.

The transportation distance is defined according to the PCR. A sales-weighted average transport from the reconditioning workshop to a representative place of installation is used for A4. Vehicle capacity utilization volume factor is assumed to be 1 which means full load. In reality, it may vary but as role of transportation emissions in total results is small, the variety in load is assumed to be negligible. To be conservative, empty returns are included in this study as implemented through an average load factor in the Ecoinvent transport datapoints. Transportation does not cause losses as products are packaged properly. Disposal of the packaging and losses due to installation are accounted for in A5.

PRODUCT USE AND MAINTENANCE (B1-B7)

This EPD includes an average maintenance scenario for the product. This scenario was based on the UFTM collective FDES, which is representative of

an average cleaning scenario. Products used, their packaging, energy and water consumption for maintenance were considered.

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

PRODUCT END OF LIFE (C1-C4, D)

The product is assumed to be landfilled after the end of life. Distance to landfilled is assumed to be 50 km.

MANUFACTURING PROCESS

Stage	Input		Process	Output	D module
A1	Reconditioned carpet tiles		→	On-site supply and cleaning of used carpet tiles	
	Manufacture, transport, and end-of-life of detergent (including packaging)		→		
	Water for cleaning		→		
	Electricity for cleaning		→		
A2			→	Transport of carpet tiles to the reconditioning workshop	
A3	Electricity		→	Inspection and sorting of carpet tiles in the workshop	
	Packaging Materials			Carpet tile packaging	
A4			→	Transport of carpet tiles to the installation site	

Stage	Input		Process		Output	D module
A5	Carpet tile scraps	 →	On-site installation of carpet tiles	→	 Recycling of packaging waste	X
	Manufacture and transport of complementary products	 →		→	 Incineration of packaging waste	X
				→	 Landfilling of scraps and packaging waste	
B2	Manufacture, transport, and end-of-life of detergent and stain remover products (including packaging)	 →	Maintenance of carpet tiles	→	 Recycling of packaging waste	X
	Water for cleaning	 →		→	 Incineration of packaging waste	X
	Electricity for vacuum and wet cleaning	 →		→	 Landfilling of packaging waste	
C2		 →	Transport of carpet tiles to landfill			
C4			Burial of carpet tiles	→	 Burial of carpet tiles	

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 that is 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	No allocation
Ancillary materials	No allocation
Manufacturing energy and waste	No allocation

PRODUCT & MANUFACTURING SITES GROUPING

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

This EPD is product and factory specific.

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 and One Click LCA databases 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.

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 ₂ e	0,00E+00	1,04E-01	-2,75E-01	-1,71E-01	5,47E-01	4,69E-01	MND	1,22E+00	MND	MND	MND	MND	MND	0,00E+00	3,97E-02	0,00E+00	3,82E-01	-1,62E-01
GWP – fossil	kg CO ₂ e	0,00E+00	1,04E-01	3,57E-01	4,62E-01	5,46E-01	1,01E-01	MND	1,27E+00	MND	MND	MND	MND	MND	0,00E+00	3,96E-02	0,00E+00	3,82E-01	-1,64E-01
GWP – biogenic	kg CO ₂ e	0,00E+00	2,09E-05	-6,37E-01	-6,37E-01	1,94E-04	3,68E-01	MND	-8,93E-02	MND	MND	MND	MND	MND	0,00E+00	7,86E-06	0,00E+00	-2,59E-04	2,93E-03
GWP – LULUC	kg CO ₂ e	0,00E+00	3,72E-05	4,36E-03	4,40E-03	2,53E-04	1,89E-04	MND	4,15E-02	MND	MND	MND	MND	MND	0,00E+00	1,40E-05	0,00E+00	3,15E-05	-7,07E-04
Ozone depletion pot.	kg CFC-11e	0,00E+00	2,07E-09	6,56E-09	8,63E-09	1,07E-08	1,29E-07	MND	3,30E-08	MND	MND	MND	MND	MND	0,00E+00	7,89E-10	0,00E+00	1,19E-09	-4,16E-09
Acidification potential	mol H ⁺ e	0,00E+00	2,54E-04	1,46E-03	1,71E-03	1,97E-03	3,49E-04	MND	5,72E-03	MND	MND	MND	MND	MND	0,00E+00	1,24E-04	0,00E+00	3,47E-04	-8,53E-04
EP-freshwater ²⁾	kg Pe	0,00E+00	6,98E-06	1,26E-04	1,33E-04	5,68E-05	1,96E-05	MND	2,98E-04	MND	MND	MND	MND	MND	0,00E+00	2,63E-06	0,00E+00	5,13E-06	-7,27E-05
EP-marine	kg Ne	0,00E+00	7,20E-05	6,11E-04	6,82E-04	6,11E-04	4,31E-04	MND	1,53E-03	MND	MND	MND	MND	MND	0,00E+00	4,18E-05	0,00E+00	8,62E-03	-1,60E-04
EP-terrestrial	mol Ne	0,00E+00	7,80E-04	4,56E-03	5,34E-03	6,69E-03	9,46E-04	MND	1,15E-02	MND	MND	MND	MND	MND	0,00E+00	4,55E-04	0,00E+00	1,39E-03	-1,61E-03
POCP (“smog”) ³⁾	kg NMVOce	0,00E+00	4,12E-04	1,65E-03	2,06E-03	2,97E-03	4,03E-04	MND	5,04E-03	MND	MND	MND	MND	MND	0,00E+00	1,94E-04	0,00E+00	5,54E-04	-7,03E-04
ADP-minerals & metals ⁴⁾	kg Sbe	0,00E+00	3,45E-07	2,42E-06	2,77E-06	3,45E-06	5,45E-07	MND	1,99E-05	MND	MND	MND	MND	MND	0,00E+00	1,30E-07	0,00E+00	1,05E-07	-6,64E-07
ADP-fossil resources	MJ	0,00E+00	1,47E+00	4,85E+00	6,31E+00	7,68E+00	1,39E+00	MND	5,25E+01	MND	MND	MND	MND	MND	0,00E+00	5,57E-01	0,00E+00	1,03E+00	-3,50E+00
Water use ⁵⁾	m ³ e depr.	0,00E+00	7,26E-03	1,53E-01	1,61E-01	4,67E-02	2,20E-02	MND	1,17E+00	MND	MND	MND	MND	MND	0,00E+00	2,73E-03	0,00E+00	5,28E-03	-5,07E-02

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.

ADDITIONAL (OPTIONAL) 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
Particulate matter	Incidence	0,00E+00	7,86E-09	2,55E-08	3,34E-08	4,90E-08	5,53E-09	MND	7,25E-08	MND	MND	MND	MND	MND	0,00E+00	3,12E-09	0,00E+00	7,49E-09	-7,51E-09
Ionizing radiation ⁶⁾	kBq	0,00E+00	1,88E-03	3,97E-02	4,16E-02	1,67E-02	5,57E-03	MND	1,64E+00	MND	MND	MND	MND	MND	0,00E+00	7,10E-04	0,00E+00	1,10E-03	-3,47E-02
Ecotoxicity (freshwater)	CTUe	0,00E+00	1,94E-01	2,67E+00	2,86E+00	1,06E+00	8,49E-01	MND	7,12E+00	MND	MND	MND	MND	MND	0,00E+00	7,31E-02	0,00E+00	1,42E+01	-3,57E-01
Human toxicity, cancer	CTUh	0,00E+00	1,76E-11	6,15E-10	6,33E-10	4,33E-10	4,99E-11	MND	7,35E-10	MND	MND	MND	MND	MND	0,00E+00	6,76E-12	0,00E+00	4,56E-11	-3,74E-11
Human tox. non-cancer	CTUh	0,00E+00	9,25E-10	4,90E-09	5,82E-09	4,83E-09	1,40E-09	MND	3,53E-08	MND	MND	MND	MND	MND	0,00E+00	3,50E-10	0,00E+00	9,21E-09	-1,28E-09
SQP ⁷⁾	-	0,00E+00	8,81E-01	4,14E+01	4,23E+01	3,73E+00	1,72E+00	MND	1,72E+01	MND	MND	MND	MND	MND	0,00E+00	3,31E-01	0,00E+00	2,38E+00	-3,29E+00

6) EN 15804+A2 disclaimer for Ionizing radiation, human health. 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 the soil, from radon and from some construction materials is also not measured by this indicator; 7) SQP = Land use related impacts/soil quality.

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	0,00E+00	2,56E-02	2,41E+00	2,44E+00	2,05E-01	-5,35E+00	MND	5,92E+00	MND	MND	MND	MND	MND	0,00E+00	9,63E-03	0,00E+00	1,71E-02	-6,69E-01
Renew. PER as material	MJ	0,00E+00	0,00E+00	5,04E+00	5,04E+00	0,00E+00	-5,04E+00	MND	0,00E+00	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	3,50E-01
Total use of renew. PER	MJ	0,00E+00	2,56E-02	7,45E+00	7,48E+00	2,05E-01	-1,04E+01	MND	5,92E+00	MND	MND	MND	MND	MND	0,00E+00	9,63E-03	0,00E+00	1,71E-02	-3,19E-01
Non-re. PER as energy	MJ	0,00E+00	1,47E+00	-4,38E+01	-4,23E+01	7,68E+00	-5,28E+00	MND	4,44E+01	MND	MND	MND	MND	MND	0,00E+00	5,57E-01	0,00E+00	-1,48E+02	-3,50E+00
Non-re. PER as material	MJ	6,27E+00	0,00E+00	4,11E-01	6,68E+00	0,00E+00	-1,93E-01	MND	0,00E+00	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	-6,46E+00	9,92E-01
Total use of non-re. PER	MJ	6,27E+00	1,47E+00	-4,33E+01	-3,56E+01	7,68E+00	-5,47E+00	MND	4,44E+01	MND	MND	MND	MND	MND	0,00E+00	5,57E-01	0,00E+00	-1,54E+02	-2,51E+00
Secondary materials	kg	6,17E+00	6,78E-04	1,10E-01	6,28E+00	4,05E-03	1,89E-01	MND	1,09E-02	MND	MND	MND	MND	MND	0,00E+00	2,55E-04	0,00E+00	-4,09E+00	3,02E-02
Renew. secondary fuels	MJ	0,00E+00	8,56E-06	1,40E-01	1,40E-01	4,01E-05	4,19E-03	MND	1,77E-02	MND	MND	MND	MND	MND	0,00E+00	3,22E-06	0,00E+00	6,93E-06	1,07E-03
Non-ren. secondary fuels	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	MND	0,00E+00	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Use of net fresh water	m ³	0,00E+00	1,99E-04	3,30E-03	3,50E-03	1,25E-03	-5,22E-04	MND	2,78E-02	MND	MND	MND	MND	MND	0,00E+00	7,50E-05	0,00E+00	-1,52E-02	-1,70E-03

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	0,00E+00	2,12E-03	3,56E-02	3,77E-02	1,41E-02	4,99E-03	MND	7,47E-02	MND	MND	MND	MND	MND	0,00E+00	7,99E-04	0,00E+00	1,85E-03	-9,64E-03
Non-hazardous waste	kg	0,00E+00	4,48E-02	1,23E+00	1,28E+00	3,31E-01	1,56E+00	MND	4,54E+01	MND	MND	MND	MND	MND	0,00E+00	1,69E-02	0,00E+00	2,04E+01	-7,83E-01
Radioactive waste	kg	0,00E+00	4,68E-07	1,05E-05	1,10E-05	4,23E-06	1,41E-06	MND	4,70E-04	MND	MND	MND	MND	MND	0,00E+00	1,76E-07	0,00E+00	2,70E-07	-8,90E-06

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	1,43E-03	1,43E-03	0,00E+00	4,29E-05	MND	0,00E+00	MND	MND	MND	MND	MND	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	0,00E+00	1,17E-01	MND	0,00E+00	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Materials for energy rec	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	MND	0,00E+00	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Exported energy	MJ	0,00E+00	0,00E+00	3,45E-03	3,45E-03	0,00E+00	5,50E-01	MND	5,87E-01	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Exported energy – Electricity	MJ	0,00E+00	0,00E+00	1,42E-03	1,42E-03	0,00E+00	2,33E-01	MND	2,48E-01	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Exported energy –	MJ	0,00E+00	0,00E+00	2,03E-03	2,03E-03	0,00E+00	3,18E-01	MND	3,39E-01	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	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 ₂ e	0,00E+00	1,04E-01	4,22E-01	5,26E-01	5,43E-01	1,18E-01	MND	1,30E+00	MND	MND	MND	MND	MND	0,00E+00	3,94E-02	0,00E+00	3,66E-01	-1,63E-01
Ozone depletion Pot.	kg CFC ₁₁ e	0,00E+00	1,65E-09	5,36E-09	7,01E-09	8,55E-09	8,64E-08	MND	2,72E-08	MND	MND	MND	MND	MND	0,00E+00	6,28E-10	0,00E+00	9,54E-10	-3,38E-09
Acidification	kg SO ₂ e	0,00E+00	1,99E-04	1,11E-03	1,31E-03	1,51E-03	2,77E-04	MND	4,66E-03	MND	MND	MND	MND	MND	0,00E+00	9,42E-05	0,00E+00	2,57E-04	-7,09E-04
Eutrophication	kg PO ₄ ³ e	0,00E+00	5,05E-05	3,81E-03	3,86E-03	3,86E-04	3,10E-04	MND	3,92E-03	MND	MND	MND	MND	MND	0,00E+00	2,40E-05	0,00E+00	4,34E-04	-1,80E-04
POCP (“smog”)	kg C ₂ H ₄ e	0,00E+00	2,02E-05	1,48E-04	1,69E-04	1,97E-04	3,18E-05	MND	4,25E-04	MND	MND	MND	MND	MND	0,00E+00	8,98E-06	0,00E+00	7,38E-05	-5,65E-05
ADP-elements	kg Sbe	0,00E+00	3,37E-07	2,40E-06	2,73E-06	3,41E-06	5,38E-07	MND	1,96E-05	MND	MND	MND	MND	MND	0,00E+00	1,27E-07	0,00E+00	1,02E-07	-6,52E-07
ADP-fossil	MJ	0,00E+00	1,43E+00	4,12E+00	5,56E+00	7,40E+00	1,29E+00	MND	1,97E+01	MND	MND	MND	MND	MND	0,00E+00	5,45E-01	0,00E+00	1,01E+00	-2,88E+00

ADDITIONAL INDICATOR – GWP-GHG

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
GWP-GHG ⁹⁾	kg CO ₂ e	0,00E+00	1,04E-01	3,62E-01	4,66E-01	5,47E-01	1,01E-01	MND	1,31E+00	MND	MND	MND	MND	MND	0,00E+00	3,97E-02	0,00E+00	3,82E-01	-1,64E-01

9) This indicator includes all greenhouse gases excluding biogenic carbon dioxide uptake and emissions and biogenic carbon stored in the product. In addition, the characterisation factors for the flows – CH₄ fossil, CH₄ biogenic and Dinitrogen monoxide – were updated. This indicator is identical to the GWP-total of EN 15804:2012+A2:2019 except that the characterisation factor for biogenic CO₂ is set to zero.

SCENARIO DOCUMENTATION

Transport scenario documentation - A2

Transport from production place to manufacturing plant (A2)	Market for transport, freight, lorry 16-32 metric tonne, EURO5
Distance (km)	30
Capacity utilization (including empty return) %	100%
Fuel/Energy consumption	Diesel
Data source	Ecoinvent 3.10.1

Manufacturing energy scenario documentation – A3

Scenario parameter	Value
National electricity grid	Market for electricity, low voltage, France
Data source	Ecoinvent 3.10.1
GWP total [kg CO2 - eq/kWh]	0,0873

Transport scenario documentation - A4

Transport from manufacturing plant to assembly/user (A4)	Market for transport, freight, lorry 16-32 metric tonne, EURO5	Market group for transport, freight, light commercial vehicle
Distance (km)	251	37
Capacity utilization (including empty return) %	100%	100%
Fuel/Energy consumption	Diesel	Diesel
Data source	Ecoinvent 3.10.1	Ecoinvent 3.10.1

Installation scenario documentation A5

Scenario information	Value
Ancillary materials for installation (specified by material) / kg or other units as appropriate	0,008 of PET connectors
Water use / m ³	-
Other resource use / kg	-
Quantitative description of energy type (regional mix) and consumption during the installation process / kWh or MJ	-
Waste materials on the building site before waste processing, generated by the product's installation (specified by type) / kg	-
Output materials (specified by type) as result of waste processing at the building site e.g. collection for recycling, for energy recovery, disposal (specified by route) / kg	-
Direct emissions to ambient air, soil and water / kg	-

Use stage scenario documentation - B2 Maintenance

Scenario parameter	Unit	Value
Description of scenario	-	Dry cleaning by vacuum and wet cleaning by injection-extraction.
Frequency of scenario	year	Regular dry cleaning (vacuuming): 208 cycles per year Wet cleaning: 1.5 cycles per year
Products for maintenance	Kg/m ² /year	Detergent: 9,00E-2 kWh/m ² /cycle
Net freshwater use	M3/m ² /year	4,00E-3 m3/m ² /year
Electricity consumption for maintenance	kWh/m ² /year	3,14E-01 kWh/m ² /year

Scenario information	Value
	using the data «Market for transport, freight, lorry 16-32 metric ton, EURO6».

End of life scenario documentation

Scenario information	Value
Collection process – kg collected separately	-
Collection process – kg collected with mixed waste	-
Recovery process – kg for re-use	0
Recovery process – kg for recycling	0
Recovery process – kg for energy recovery	0
Disposal (total) – kg for final deposition	4,1
Scenario assumptions e.g. transportation	According to the NF EN 15804+A2/CN, a distance of 50 km is applied for transport of non-hazardous waste. This distance was applied to all waste treatment scenarios,

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 15802+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

Sarah Curpen, as an authorized verifier acting for EPD Hub Limited

31.08.2025

