# Environmental Product Declaration



In accordance with ISO 14025, EN 15804+A1 and EN 16810 for:

# iQ Natural homogeneous vinyl flooring - TARKETT

Programme: The International EPD® System

Programme operator: www.environdec.com
EPD International AB

EPD registration number: S-P-01508

Publication date: 2021-01-25
Validity date: 2026-01-25

Geographical scope: Europe







# **General information**

#### Information about the organization

Owner of the EPD: Tarkett France. Vincent MONTI, <a href="mailto:vincent.monti@tarkett.com">vincent.monti@tarkett.com</a>, Tarkett La Défense, 1 Terrasse Bellini 92400 Paris

<u>Description of the organisation:</u> ISO 9001, ISO 14001, ISO 50001, WCM manufacturing site Name and location of production site: Ronneby, Sweden

# About the company

With an international coverage and a wide range of products, Tarkett has over 130 years of experience in providing integrated solutions for floorings to professionals and end users.

Many of the most important architectural firms in the world and building professionals have chosen Tarkett for the value of its products and for its consultation and service abilities. Therefore, Tarkett floorings and sport surfaces are present in several prestigious architectural reference points. Tarkett offers integrated solutions for floorings, able to meet the particular needs of customers. Our wide range of designs, colors and models provides an infinite series of possibilities, contributing to create a positive environment and a better quality of life for people.

Tarkett operates with the utmost respect for the environment towards the realization of eco-friendly products.

Tarkett's commitment to the environment is woven throughout its business. Cradle-to-Cradle principles are, in fact, the basis of the design and production of every solution. Particularly, the lifecycle analysis is used to continuously improve the production process, and so the products until their use stage, disposal and recycling. The commitment to the environment is also proven by the accession to the Circular Economy 100 program, where Tarkett group, with a network of companies, is working to develop a circular economy model based on the reuse of materials and preservation of natural resources. The development of products that can be reused within internal production cycles, or external ones in case of other individuals, has been an integral part of the business strategy aimed at sustainability for many years. The WCM (World Class Manufacturing) management system has been developed in 2009, and it includes the environmental pillar aimed to the elimination of losses and to the growth of process efficiency.





#### **Product information**

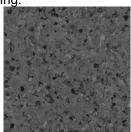
Products name: iQ Natural

<u>Product identification</u>: Homogeneous poly (vinyl chloride) floor covering (ISO 10581)

Product description: iQ Natural is the world's first homogeneous vinyl flooring made with bioattributed PVC, under the mass balance principles<sup>1</sup>. This high-performance vinyl floor offers extreme durability as well as superior wear, stain and abrasion resistance for all heavy-traffic areas. No need for polish or wax, a simple dry-buffing is enough to restore this floor's original appearance. Composed of a single compact layer of vinyl, homogeneous vinyl floors are glued to the sub-floor and welded for optimal durability and hygiene. The

service lifetime recommended by Tarkett is 30 years.

The following figure shows an example of iQ Natural flooring:



iQ Natural flooring

UN CPC code: APE/NAF - 2223Z

Geographical scope: Europe

#### Range of application

The product is classified in accordance with EN ISO 10874, EN 685 and in reference to the FCSS (Floor Covering Standard Symbols) to be installed in various areas of application, such as: healthcare, education, commercial, education. The area of use according to the ISO 10874 is very heavy (34) for commercial classification and heavy (43) for industrial classification.

According to European Classification ISO 10874 - EN 685





#### LCA information

#### Functional unit / declared unit:

1m² of floor covering with a reference service life (RSL) of 1 year for specified characteristics application and use areas according to ISO 10581 and EN ISO 10874.

#### Reference service life:

1 year

#### Time representativeness:

2019

#### Database(s) and LCA software used:

SimaPro 9.1 database Ecoinvent 3.6

<sup>1</sup>Inovyn | IBio-attributed PVC Biovyn





#### **Description of system boundaries:**

Cradle to grave

#### **System boundaries**

The system boundary is based on the EN 15804 description.

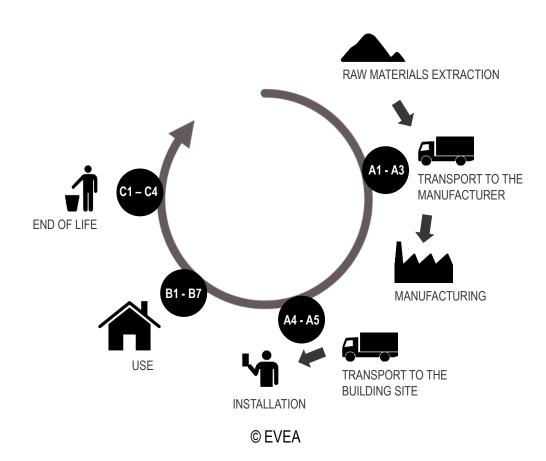
**Production stage:** A1 - A3: includes the provision of all raw materials, transport to the production site and energy consumption during the manufacturing of the product, packaging of final product, the different air emissions, as well as processing of waste generated by the factory.

**Construction stage**: A4 – A5: includes the transport from the factory to the final customer, the installation of the product, as well as all consumables and energy required and processing of waste generated during the installation.

**Use stage B1 – B7:** includes provision and transport of all materials, products and services related to the use phase of the product, as well as their related energy and water consumption, and the processing of any resulting waste.

**End of life stage C1 – C4:** includes provision and transport of all materials, products and services related to the end of life phase of the product, including energy and water consumption, as well as the end of life processing of the product.

**Benefits and loads beyond the system boundary D:** includes reuse, recovery and/or recycling potentials of the product or parts of the product.







#### Included/excluded life stages

	Produc	ction S	Stage	o Pro	tructi n cess ige				Use Sta	ge			E	nd-of-	Life Stag	е	Benefits and loads beyond system boundary
	Raw material supply (extraction, processing, recycled material)	Transport to manufacturer	Manufacturing	Transport to building site	Installation into building	Use / application	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	Deconstruction / demolition	Transport to EoL	Waste processing for reuse, recovery or recycling	Disposal	Reuse – Recovery – Recycling Potential
Modules	A1	A2	А3	A4	A5	B1	B2	В3	B4	B5	В6	B7	C1	C2	C3	C4	D
Accounted for:	Х	Х	Х	Х	Х	MND	Х	MND	MND	MND	MND	MND	Χ	Х	Х	Χ	Х

X Module included in the study MND: Module not declared

**Use stage:** Floor coverings do not contribute to modules B1 and B3 to B7 according to the standard EN 16810.

#### **Cut-off criteria**

The cut-off criteria shall be 1% of renewable and non-renewable primary energy usage and 1% of the total mass of that unit process. The total neglected input flows per module shall be a maximum of 5% of energy usage and mass.

For this study, all input and output flows have been considered at 100%, including raw materials as per the product composition provided by the manufacturer and packaging of raw materials as well as the final product.

#### LCA data

As a general rule, specific data derived from specific production processes or average data derived from specific production processes have been used as the first choice as a basis for calculating an EPD. To model the life cycle of the product in question, the software SimaPro 9.1, developed by PRé, has been used in conjunction with the LCA database ecoinvent v3.6.

#### **Data quality**

The objective of this evaluation is to evaluate the environmental impacts generated by the product floor covering iQ Natural throughout its entire life cycle. To this end, ISO 14040, ISO 14044 and EN 15804 have been met regarding the quality of data on different following criteria:

#### The time factor, the life cycle inventory data used come from:

 Data collected specifically for this study on Tarkett sites. Data sets are based on 1 year averaged data.





• In the absence of collected data, generic data from the ecoinvent V3.4 cut-off by classification database. This is regularly updated and is representative of current processes

#### **Technological Coverage**

- Tarkett technologies used for the manufacture methods of the product.
- European technology in the case of use of generic data.

#### **Geographical Coverage**

- Data come from production sites of Tarkett
- The generic data come from the ecoinvent database, representative of the European processes.

#### **Allocation**

The overall values for the factory's material and energy consumptions during a period of one year have been divided by the annual production of each product to supply a value per square meter of flooring produced. All factory data are measured in square meters, and it is assumed that the process consumptions are governed by area of flooring processed rather than mass.

#### Comparability

Basically, a comparison or an evaluation of EPD data is only possible if all the data sets to be compared were created according to /EN 15804/ and the building context, respectively the product-specific characteristics of performance, are taken into account.

#### **Content declaration**

#### **Product**

Following data are representative of iQ Natural.

Characteristics	Nominal Value	Unit	Standard
Product Thickness	2	mm	-
Product Weight	2.80	kg/m²	-
	≥ 0.3	-	EN 13893
Slip Resistance	R9	-	DIN 51130
	Low risk of slip	-	BS 7976-2
Dimension stability	≤ 0.40 %	-	ISO 23999 EN 434
Light fastness	≥ 7	-	EN ISO 105-B02





Materials / chemical substances	kg/m²	Substance concerned with REACH
Bio-attributed PVC	1.32E+00	1
Mineral Fillers	9.20E-01	1
Epoxidised soya bean oil	1.10E-01	1
Castor	3.6E-01	1
Stabilizer CaZn	3.00E-02	1
Titanium dioxide	3.00E-02	1
iQ PUR	3.00E-02	1

Bio-attributed PVC is made using bio-attributed ethylene, a renewable feedstock derived from biomass that does not compete with the food chain (supply chain certified by The Roundtable on Sustainable Biomaterials, RSB). It substitutes fossil feedstock, enabling a greenhouse gas saving of over 90% compared to conventionally produced PVC.

NB: The post-industrial and post-installation recycled content is 25.5% in average for iQ Natural.

#### **Product manufacturing**

#### **Production process**

The production of the homogeneous resilient flooring is divided into the following stages:

- Extrusion: Raw materials is blended and extruded to obtain a malleable material.
- Calendering: Rolls are then calendered to get the desired shape.
- Pressing: Rolls are cut at the desired characteristics.
- Packaging: The final product is placed into cardboard cases with discs and plastic hangers positioned at the ends. The cardboard cases are then wrapped in plastic film.

#### **Production waste**

Waste type	Amount	Unit
Non-hazardous waste to external incineration	1.57E-02	kg/m²
Post-manufacturing internal recycling	7.76E-01	kg/m²
Hazardous waste to external recycling	2.59E-03	kg/m²
Non-hazardous waste to external recycling	6.57E-02	kg/m²
Hazardous waste-water to external treatment	5.48E-04	kg/m²
Non-hazardous waste-water to external treatment	4.34E-04	kg/m²





NB: Post manufacturing recycling concerns the recycling of the losses inside the plant production. Therefore, there is no end-of-life impact on losses (except the recycling preparation).

#### Health, safety and environmental aspects during production

iQ Natural production site complies with the ISO 14001 Environmental Management System and the ISO 9001 Quality Management System.

#### **Packaging**

Туре	Unit	Quantity
Product Packaging Cardboard	kg/m <sup>2</sup> of product	6.34E-03
Product Packaging PEHD	kg/m <sup>2</sup> of product	8.04E-02
Product Packaging PELD	kg/m <sup>2</sup> of product	1.55E-02

#### **Delivery and installation**

#### **Delivery**

The average distribution distance between the factory and the installation site is 766 km. It has been calculated considering the average distance between European countries where Tarkett is selling the iQ Natural products and the factory plant in Ronneby (Sweden). The distribution is made by truck.

#### Installation

The product is glued on the subfloor, then the different parts of the flooring are welded together.

Description	Amount	Unit
Electricity consumption	3.35E-02	kWh/m²
Acrylic adhesive consumption	2.50E-01	kg/m²

#### Waste

During the installation approximately 10% of the flooring is lost as off-cuts. All flooring losses are sent to recycling.

#### **Packaging**

50 % of the packaging materials goes to incineration and 50 % goes to landfill.





#### **Use Stage**

#### Reference Service Life (RSL)

For this product, the stated RSL is 1 year. It should be noted, however, that the service life of a Homogeneous polyvinylchloride floor covering may vary depending on the amount and nature of floor traffic and the type and frequency of maintenance. The manufacturer has provided this service life on the basis of his experience of flooring manufacture and supply. This RSL is applicable as long as the product use complies with that defined by ISO 14041 and ISO10874 in accordance with the product's classification. The service lifetime recommended by Tarkett is 30 years.

#### Cleaning and maintenance

Cleaning regime is based on traditional cleaning protocol integrating manual and mechanical operations. Depending on premises considered, these consumptions may vary. The considered regime fits high traffic areas. The maintenance scenario is:

Common maintenance : 4 times a weekPeriodic maintenance : twice a year

Description	Amount	Unit
Electricity consumption	1.13E-01	kWh/year/m²
Water consumption	5.14E+00	L/year/m <sup>2</sup>
Detergent consumption	7.00E-02	L/year/m <sup>2</sup>

#### Prevention of structural damage

To avoid excessive wear, usage should be restricted to the stated areas of application as outlined by the norm ISO 10874.





#### **End of Life**

3 distinct End-of-Life scenarios have been modeled for iQ Natural. Tarkett recommend using the ReStart program at End-of-Use to recycle the product. However, to showcase the value of Tarkett's recycling activities, environmental impacts of two alternative scenarios have been calculated.

#### 1/ Recycling.

100% of the iQ Natural can be recycled at its end of use stage, thanks to the ReStart® program, enabling Tarkett to collect installation losses and post-use flooring from construction sites to recycle it and/or reuse it as high quality raw material back in Tarkett plants. Tarkett has developed a new technology that cleans, shreds and recycles previously unusable post-consumer vinyl. Thus, iQ Natural is recycled back at the Ronneby plant, and the transport between construction site and recycling facility is 766 km by truck. Environmental impacts of recycling are presented in module **C/1**.

#### 2/ Incineration with energy recovery

Incineration with energy recovery is a rising waste management method in many of the countries in wich iQ natural is sold. While Tarkett wishes to recycle 100% of sold iQ Natural, incineration with energy recovery is an alternative option if recycling is impossible. Environmental impacts of incineration with energy recovery are presented in module **C/2**.

#### 3/ Landfilling

Landfilling waste is still a proheminent waste management scenario. This option is however not recommanded by Tarkett. Environmental impacts of landfilling are presented in module **C/3**.

#### Benefits and loads beyond system boundary

#### 1/ Recycling.

The benefit is due to the recycling post-use flooring that allows avoiding the emissions of virgin materials. iQ Natural can be 100% recycled at post-installation and post-consumer stage. Benefits from avoided raw material production and avoided transport are calculated in module **D/1**.

#### 2/ Incineration with energy recovery

Benefits from installation offcuts recycling and incineration energy recovery are calculated in D/2.

#### 3/ Landfilling

Benefits accounted in this scenario exclusively come from installation offcuts recycling and are presented in D/3





# **Environmental performance in case of recycling**

# Potential environmental impact

Potential (	environ	mental in	npact										М	ND: Module	not declar	ed
		Product stage	Constructi	on stage			Us	e stage				(	C/1 End of life	stage - Recyclin	g	Benefits and loads
PARAMETER	UNIT	Total Production	Transport	Installa- tion	Use	Maintenance	Repair	Replac ement	Refur bish ment	Operati onal energy use	Operati onal water use	De- construc tion	Transport	Waste processing	Disposal	Reuse - Recovery - Recycle
		A1-A3	A4	A5	B1	B2	В3	В4	В5	В6	В7	C1/1	C2/1	C3/1	C4/1	D/1
Global Warming Potential	kg CO2 eq	2,24E+00	3,65E-01	1,06E+00	MND	2,30E-01	MND	MND	MND	MND	MND	0,00E+0 0	3,85E-01	5,95E-01	0,00E+00	-1,79E+00
Ozone Depletion	kg CFC- 11 eq	2,57E-06	6,69E-08	3,33E-07	MND	1,85E-08	MND	MND	MND	MND	MND	0,00E+0 0	7,06E-08	1,49E-09	0,00E+00	-2,35E-06
Acidification of soil and water	kg SO2 eq.	1,97E-02	1,16E-03	9,20E-03	MND	9,13E-04	MND	MND	MND	MND	MND	0,00E+0 0	1,24E-03	9,85E-05	0,00E+00	-1,84E-02
Eutrophication	kg PO4 - eq	7,89E-03	2,66E-04	2,35E-03	MND	8,56E-04	MND	MND	MND	MND	MND	0,00E+0 0	2,85E-04	6,91E-05	0,00E+00	-7,75E-03
Photochemical ozone creation	kg ethylene	1,90E-03	1,89E-04	8,93E-04	MND	1,42E-04	MND	MND	MND	MND	MND	0,00E+0 0	2,01E-04	7,62E-06	0,00E+00	-1,65E-03
Depletion of abiotic resources -elements	kg antimony	6,02E-04	1,00E-05	7,40E-05	MND	5,26E-06	MND	MND	MND	MND	MND	0,00E+0 0	1,05E-05	1,58E-08	0,00E+00	-5,96E-04
Depletion of abiotic resources -fossil	MJ. net CV	6,07E+01	5,45E+00	1,59E+01	MND	1,39E+00	MND	MND	MND	MND	MND	0,00E+0 0	5,75E+00	1,25E-01	0,00E+00	-5,57E+01





# Use of resources in case of recycling

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		Product stage	Constructi	ion stage			Us	e stage					C/1 End	of life stage		Benefits and loads
PARAMETER	UNIT	Total Production	Transport	Installa- tion	Use	Maintenance	Repair	Replac ement	Refur bish ment	Operati onal energy use	Operati onal water use	De- construc tion	Transport	Waste processing	Disposal	Reuse - Recovery - Recycle
		A1-A3	<b>A</b> 4	<b>A</b> 5	B1	B2	ВЗ	B4	В5	В6	В7	C1/1	C2/1	C3/1	C4/1	D/1
Renewable primary energy excl. RM	MJ. net CV	1,98E+01	7,88E-02	3,82E+00	MND	8,91E-01	MND	MND	MND	MND	MND	0,00E+0 0	8,29E-02	4,24E-03	0,00E+0 0	-8,03E+00
Renewable primary energy used as RM	MJ. net CV	4,05E+00	0,00E+00	1,70E+00	MND	7,29E-01	MND	MND	MND	MND	MND	0,00E+0 0	0,00E+00	0,00E+00	0,00E+0 0	-3,96E+00
Total renewable primary energy	MJ. net CV	5,34E+01	7,88E-02	8,47E+00	MND	1,62E+00	MND	MND	MND	MND	MND	0,00E+0 0	8,29E-02	4,24E-03	0,00E+0 0	-4,15E+01
Non renewable primary energy excl. RM	MJ. net CV	4,60E+01	5,57E+00	7,39E+00	MND	2,13E+00	MND	MND	MND	MND	MND	0,00E+0 0	5,87E+00	1,29E-01	0,00E+0 0	-1,71E+01
Non renewable primary energy used as RM	MJ. net CV	5,40E+01	0,00E+00	1,45E+01	MND	0,00E+00	MND	MND	MND	MND	MND	0,00E+0 0	0,00E+00	0,00E+00	0,00E+0 0	-4,99E+01
Total non renewable primary energy	MJ. net CV	1,00E+02	5,57E+00	2,19E+01	MND	2,13E+00	MND	MND	MND	MND	MND	0,00E+0 0	5,87E+00	1,29E-01	0,00E+0 0	-6,70E+01
Use of secondary material	kg	1,04E+00	0,00E+00	1,04E-01	MND	0,00E+00	MND	MND	MND	MND	MND	0,00E+0 0	0,00E+00	0,00E+00	0,00E+0 0	-1,04E+00
Use of renewable secondary fuels	MJ. net CV	6,71E+00	0,00E+00	6,71E-01	MND	0,00E+00	MND	MND	MND	MND	MND	0,00E+0 0	0,00E+00	0,00E+00	0,00E+0 0	-6,71E+00
Use of non renewable secondary fuels	MJ. net	0,00E+00	0,00E+00	0,00E+00	MND	0,00E+00	MND	MND	MND	MND	MND	0,00E+0 0	0,00E+00	0,00E+00	0,00E+0 0	0,00E+00
Net use of fresh water	m3	1,64E-01	4,27E-04	2,83E-02	MND	5,14E-03	MND	MND	MND	MND	MND	0,00E+0 0	4,49E-04	8,57E-04	0,00E+0 0	-1,16E-01

MND: Module not declared





Waste production and output flows in case of recycling

Waste pro	oducti	ion and oเ	itput flow	s in case	e of re	ecycling							M	IND: Module	e not decla	red
		Product stage	Construc	tion stage				Use stage					C/1 - End o	of life stage		Benefits and loads
PARAMETER	UNIT	Total Production	Transport	Installa- tion	Use	Maintenan ce	Repa ir	Replac ement	refurbis hment	Operati onal energy use	Operati onal water use	De- constructi on	Transport	Waste processing	Disposal	Reuse - Recovery - Recycle
		A1-A3	A4	<b>A</b> 5	B1	B2	В3	B4	В5	В6	В7	C1/1	C2/1	C3/1	C4/1	D/1
Hazardous waste disposed	kg	1,27E-01	3,59E-03	1,08E-01	MND	1,32E-02	MND	MND	MND	MND	MND	3,78E-03	1,33E-02	0,00E+00	-1,08E-01	3,78E-03
Non hazardous waste disposed	kg	8,60E-01	2,94E-01	6,06E-01	MND	5,63E-02	MND	MND	MND	MND	MND	3,09E-01	3,39E-03	0,00E+00	-7,24E-01	3,09E-01
Radioactive waste disposed	kg	4,61E-04	3,80E-05	8,79E-05	MND	1,10E-05	MND	MND	MND	MND	MND	4,00E-05	3,38E-07	0,00E+00	-3,77E-05	4,00E-05
Components for re- use	kg	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
Materials for recycling	kg	8,97E-02	0,00E+00	2,89E-01	MND	0,00E+00	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	2,60E+00	-2,40E-02	0,00E+00
Materials for energy recovery	kg	7,26E-04	0,00E+00	7,26E-05	MND	0,00E+00	MND	MND	MND	MND	MND	0,00E+00	2,50E-01	0,00E+00	-7,26E-04	0,00E+00
Exported energy (electricity)	MJ	0,00E+00	0,00E+00	0,00E+00	MND	0,00E+00	MND	MND	MND	MND	MND	0,00E+00	2,36E+00	0,00E+00	0,00E+00	0,00E+00
Exported energy	MJ	0,00E+00	0,00E+00	0,00E+00	MND	0,00E+00	MND	MND	MND	MND	MND	0,00E+00	2,36E+00	0,00E+00	0,00E+00	0,00E+00

MND: Module not declared





# Additional environmental performances in case of incineration with energy recovery

# Potential environmental impact

			C/2 End of life stage - Incineration								
PARAMETER	UNIT	De-construction	Transport	Waste processing	Disposal	Reuse - Recovery - Recycle					
		C1/2	C2/2	C3/2	C4/2	D/2					
Global Warming Potential	kg CO2 eq	0,00E+00	1,51E-02	3,65E+00	3,39E-03	-2,42E+00					
Ozone Depletion	kg CFC-11 eq	0,00E+00	2,77E-09	1,84E-07	1,14E-09	-5,03E-07					
Acidification of soil and water	kg SO2 eq.	0,00E+00	4,84E-05	3,68E-03	2,49E-05	-9,70E-03					
Eutrophication	kg PO4 eq	0,00E+00	1,12E-05	1,74E-03	5,44E-06	-6,20E-03					
Photochemical ozone creation	kg ethylene	0,00E+00	7,85E-06	4,23E-04	3,92E-06	-7,23E-04					
Depletion of abiotic resources - elements	kg antimony	0,00E+00	4,13E-07	3,15E-05	3,18E-08	-6,47E-05					
Depletion of abiotic resources - fossil	MJ. net CV	0,00E+00	2,25E-01	8,69E+00	9,61E-02	-3,44E+01					





# Use of resources in case of incineration with energy recovery

			C/2 - End of life st	tage - Incineration		Benefits and loads
PARAMETER	UNIT	De- construction	Transport	Waste processing	Disposal	Reuse - Recovery - Recycle
		C1/2	C2/2	C3/2	C4/2	D/2
Renewable primary energy excl.	MJ. net CV	0,00E+00	3,25E-03	8,40E-01	7,86E-04	-6,40E+00
Renewable primary energy used as RM	MJ. net CV	0,00E+00	0,00E+00	0,00E+00	0,00E+00	-3,96E-01
Total renewable primary energy	MJ. net CV	0,00E+00	3,25E-03	9,25E+00	7,86E-04	-9,75E+00
Non renewable primary energy excl. RM	MJ. net CV	0,00E+00	2,30E-01	1,29E-01	9,72E-02	-4,57E+01
Non renewable primary energy used as RM	MJ. net CV	0,00E+00	0,00E+00	9,25E+00	0,00E+00	-4,99E+00
Total non renewable primary energy	MJ. net CV	0,00E+00	2,30E-01	6,74E+01	9,72E-02	-5,07E+01
Use of secondary material	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	-1,04E-01
Use of renewable secondary fuels	MJ. net CV	0,00E+00	0,00E+00	0,00E+00	0,00E+00	-6,71E-01
Use of non renewable secondary fuels	MJ. net CV	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Net use of fresh water	m3	0,00E+00	1,76E-05	2,60E-01	1,01E-04	-3,68E-02





# Waste production and output flows in case of incineration with energy recovery

			Benefits and loads			
PARAMETER	UNIT	De-construction	De-construction Transport Waste processing		Disposal	Reuse - Recovery - Recycle
		C1/2	C2/2	C3/2	C4/2	D/2
Hazardous waste disposed	kg	0,00E+00	1,48E-04	1,62E+00	5,73E-05	-4,48E-02
Non hazardous waste disposed	kg	0,00E+00	1,21E-02	2,55E+01	6,60E-01	-5,14E-01
Radioactive waste disposed	kg	0,00E+00	1,57E-06	4,49E-05	6,38E-07	-2,44E-04
Components for re-use	kg	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	-2,40E-03
Materials for energy recovery	kg	0,00E+00	0,00E+00	3,05E+00	0,00E+00	-7,26E-05
Exported energy (electricity)	MJ	0,00E+00	0,00E+00	1,49E+01	0,00E+00	0,00E+00
Exported energy (steam)	MJ	0,00E+00	0,00E+00	1,49E+01	0,00E+00	0,00E+00





# Additional environmental performances in case of landfilling

# Potential environmental impact

			Benefits and loads			
PARAMETER	UNIT	De-construction Transport		Waste processing	Disposal	Reuse - Recovery - Recycle
		C1/3	C2/3	C3/3	C4/3	D/3
Global Warming Potential	kg CO2 eq	0,00E+00	1,51E-02	0,00E+00	1,94E-01	-2,42E-01
Ozone Depletion	kg CFC-11 eq	0,00E+00	2,77E-09	0,00E+00	7,65E-09	-5,03E-08
Acidification of soil and water	kg SO2 eq.	0,00E+00	4,84E-05	0,00E+00	1,72E-04	-9,70E-04
Eutrophication	kg PO4 eq	0,00E+00	1,12E-05	0,00E+00	9,18E-03	-6,20E-04
Photochemical ozone creation	kg ethylene	0,00E+00	7,85E-06	0,00E+00	5,92E-05	-7,23E-05
Depletion of abiotic resources - elements	kg antimony	0,00E+00	4,13E-07	0,00E+00	2,27E-07	-6,47E-06
Depletion of abiotic resources - fossil	MJ. net CV	0,00E+00	2,25E-01	0,00E+00	6,61E-01	-3,44E+00





# Use of resources in case of landfilling

			Benefits and loads			
PARAMETER	UNIT	De- construction	Transport	Waste processing	Disposal	Reuse - Recovery - Recycle
		C1/3	C2/3	C3/3	C4/3	D/3
Renewable primary energy excl.	MJ. net CV	0,00E+00	3,25E-03	0,00E+00	2,70E-02	-6,40E-01
Renewable primary energy used as RM	MJ. net CV	0,00E+00	0,00E+00	0,00E+00	0,00E+00	-3,96E-02
Total renewable primary energy	MJ. net CV	0,00E+00	3,25E-03	0,00E+00	2,70E-02	-9,75E-01
Non renewable primary energy excl. RM	MJ. net CV	0,00E+00	2,30E-01	0,00E+00	6,92E-01	-4,57E+00
Non renewable primary energy used as RM	MJ. net CV	0,00E+00	0,00E+00	0,00E+00	0,00E+00	-4,99E-01
Total non renewable primary energy	MJ. net CV	0,00E+00	2,30E-01	0,00E+00	6,92E-01	-5,07E+00
Use of secondary material	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	-1,04E-02
Use of renewable secondary fuels	MJ. net CV	0,00E+00	0,00E+00	0,00E+00	0,00E+00	-6,71E-02
Use of non renewable secondary fuels	MJ. net CV	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Net use of fresh water	m3	0,00E+00	1,76E-05	0,00E+00	8,29E-04	-3,68E-03





# Waste production and output flows in case of landfilling

-						
			Benefits and loads			
PARAMETER	UNIT	De-construction	Transport	Waste processing	Disposal	Reuse - Recovery - Recycle
		C1/2	C2/2	C3/2	C4/2	D/2
Hazardous waste disposed	kg	0,00E+00	1,48E-04	0,00E+00	6,87E-04	-4,48E-03
Non hazardous waste disposed	kg	0,00E+00	1,21E-02	0,00E+00	3,06E+00	-5,14E-02
Radioactive waste disposed	kg	0,00E+00	1,57E-06	0,00E+00	4,52E-06	-2,44E-05
Components for re-use	kg	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	-2,40E-04
Materials for energy recovery	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	-7,26E-06
Exported energy (electricity)	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Exported energy (steam)	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00





# Programme-related information and verification

The EPD owner has the sole ownership, liability, and responsibility for the flooring EPD. EPDs within the same product category but from different programmes may not be comparable. EPDs of floor products may not be comparable if they do not comply with EN 15804 and 16810.

	The International EPD® System
Programme:	EPD International AB Box 210 60 SE-100 31 Stockholm Sweden
	www.environdec.com info@environdec.com
EPD registration number:	S-P-01508
Published:	2021-01-25
Valid until:	2026-01-25
Product Category Rules:	PCR 2012:01 version 2.3 and Sub-PCR-F Resilient textile and laminate floor coverings (EN 16810)
Product group classification:	UN CPC APE/NAF - 2223Z
Reference year for data:	2019
Geographical scope:	Europe

CEN standard EN 15804 and EN 16810 serve as the Core Product Category Rules (PCR)					
Product category rules (PCR): PCR 2012:01 version 2.3 and Sub-PCR-F Resilient textile and laminate floor coverings (EN 16810)					
Independent third-party verification of the declaration and data. according to ISO 14025:2010:					
☐ EPD process certification ■ EPD verification					
Third party verifier: Damien PRUNEL. BUREAU VERITAS LCIE					
Procedure for follow-up of data during EPD validity involves third party verifier:					
⊠ Yes □ No					

The EPD owner 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. For further information about comparability, see EN 15804 and ISO 14025.





# References

General Programme Instructions of the International EPD® System. Version 3.0.

PCR 2012:01 version 2.3 and Sub-PCR-F Resilient textile and laminate floor coverings (EN 16810)

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