Environmental Product Declaration

In accordance with ISO 14025 and EN 15804:2012+A2:2019 for:

ID TIIT HIT from TARKETT

O Tarkett

Programme:

Programme operator: EPD registration number: Publication date: Valid until: The International EPD[®] System, <u>www.environdec.com</u> EPD International AB S-P-08634 2023-08-22 2028-08-22

An EPD should provide current information and may be updated if conditions change. The stated validity is therefore subject to the continued registration and publication at www.environdec.com







General information

Programme information

Programme:	The International EPD [®] System					
	EPD International AB					
Address	Box 210 60					
Address:	SE-100 31 Stockholm					
	Sweden					
Website:	www.environdec.com					
E-mail:	info@environdec.com					

CEN standard EN 15804 serves as the Core Product Category Rules (PCR)

Product category rules (PCR): PCR 2019:14 version 1.2 and c-PCR-004 Resilient textile and laminate floor coverings (EN 16810)

PCR review was conducted by: The Technical Committee of the International EPD® System lead by Claudia A Peña. A full list of members available on www.environdec.com. The review panel may be contacted via info@environdec.com.

Independent third-party verification of the declaration and data, according to ISO 14025:2006:

 \Box EPD process certification \boxtimes EPD verification

Third party verifier: Olivia Djiriguian from LCIE Bureau Veritas.

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 programmes 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.

This EPD is a specific EPD.



Company information

Owner of the EPD: Tarkett

<u>Contact:</u> Marcelo Martins Meira, <u>marcelo.martinsmeira@tarkett.com</u>, Tarkett La Défense, 1 Terrasse Bellini 92400 Paris

Description of the organisation:

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-related or management system-related certifications: ISO 9001, ISO 14001, ISO 50001, WCM manufacturing site.

Name and location of production site(s): Jaslo (Poland), Tuzla (Turkey)

Product information

<u>Product name:</u> ID Tilt HIT <u>Product identification:</u> Heterogeneous poly (vinyl chloride) floor coverings (EN 10582). <u>Product description:</u> ID Tilt HIT is a modular heterogeneous compact resilient floor covering developed by Tarkett. The service lifetime recommended by Tarkett is 25 years. <u>Geography:</u> European technology and process coverage. <u>UN CPC code:</u> APE/NAF - 2223Z

LCA information

<u>Functional unit / declared unit:</u> 1m² of floor covering with a reference service life (RSL) of 1 year for specified characteristics application and use areas according to ISO 10582 and EN ISO 10874. Reference service life: 25 years

Time representativeness: 2022.

Database(s) and LCA software used: Ecoinvent3.8, Simapro 9.1

Description of system boundaries: Cradle to grave and module D (A + B + C + D)

<u>Cut-off criteria</u> : The cut-off criteria used for this study follow the guidelines set out in the PCR which conform to the EN 15804-A2, as following:

- All inputs and outputs to a (unit) process are included in the calculation where the data is available.

- A maximum of 1% of the total mass per unit process may be omitted.



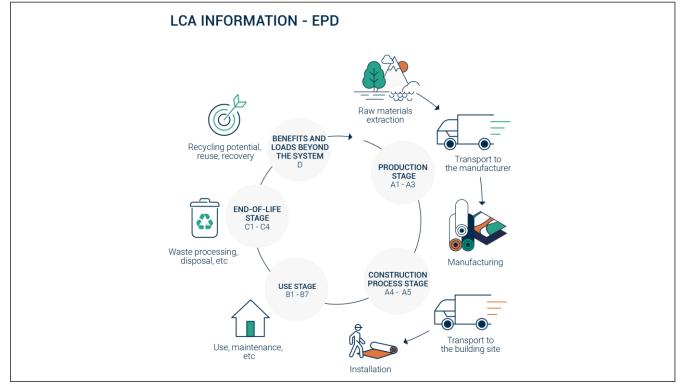
EPD[®]

- A maximum of 1% of the total renewable and non-renewable energy for a unit process may be omitted.

- A maximum of 5% of the total energy usage and mass per module may be omitted.

All input and output flows have been considered, including raw materials as per the product composition provided by the manufacturer and packaging of raw materials as well as the final product. Energy and water consumptions have also been considered at 100% according to the data provided.

System diagram:



<u>More information</u>: 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.

Product	Domestic Classification	Commercial Classification	Industrial Classification
ID Tilt HIT	-	34	43
		Very heavy	Heavy Industrial
		commercial use	





Modules declared, geographical scope, share of specific data (in GWP-GHG indicator) and data variation:

	-	duct age		nstruct cess st		Use stage End of life stage							ge	Resource recovery stage			
	Raw material supply	Transport	Manufacturing	Transport	Construction installation	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-construction demolition	Transport	Waste processing	Disposal	Reuse-Recovery-Recycling- potential
Module	A1	A2	A3	A4	A5	B1	B2	B3	B4	В5	B6	B7	C1	C2	C3	C4	D
Modules declared	х	х	х	х	Х	х	х	х	Х	х	х	Х	х	х	х	х	х
Geography					Europ	bean te	chnolog	gy and	proces	s cover	age						European
Specific data used	-	50%	100%	100%	100%	-	-	-	-	-	-	-	-	-	-	-	-
Variation – products	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Variation – sites	-	-	-	Europear for Ta	n average arkett							-					

EPD[®]

Content information

The components for ID Tilt HIT are detailed here:

ID Tilt HIT											
Product components	Weight, kg/m²	Post-consumer material, weight-%	Renewable material, weight-%								
PVC Suspension	3.89E+00	0%	0%								
Plasticizers	1.08E+00	0%	0%								
Epoxidised soya bean oil	2.49E-01	0%	83%								
Mineral fillers	4.56E+00	0%	0%								
Stabilizer CaZn	5.00E-02	0%	0%								
Pigments	9.00E-03	0%	0%								
Surface Treatment	5.00E-02	0%	0%								
Impact modifiers	2.00E-02	0%	0%								
Glass reinforcement	8.00E-02	0%	0%								
TOTAL	1.0E+01	0%	2%								
Packaging materials	Weight, kg/m²	Weight-% (versus the proc	duct)								
Product Packaging Cardboard	3.00E-02	0.3	%								
TOTAL	3.00E-02	0.3	%								

EPD

Product manufacturing

Production process

Production waste

Waste type	Amount	Unit
Non-hazardous waste to external treatment	8.20E-01	kg/m²
Hazardous waste to external treatment	5.00E-02	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). Post-manufacturing recycled content is 20%.

Health, safety and environmental aspects during production

ID Tilt HIT production site complies with the ISO 14001 Environmental Management System and the ISO 9001 Quality Management System.

Delivery and installation

Delivery

The average distribution distance between the factory and the installation site is 2160 km. It has been calculated considering the average distance between European countries where Tarkett is selling the ID Tilt HIT products and the factory plant in Jaslo (Poland). The distribution is made by truck.

Installation

The slabs of ID Tilt HIT are interlocked and therefore require no auxiliaries for installation.

Waste

During the installation approximately 3% 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 Heteregenous 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 25 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 week
- Periodic maintenance : once a week

Description	Amount	Unit
Electricity consumption	2.89E-01	kWh/year/m ²
Water consumption	7.06E+00	L/year/m ²
Detergent consumption	6.88E-02	L/year/m ²

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

Environmental impacts of landfilling are presented in module C.

Benefits and loads beyond system boundary

Benefits accounted in this scenario exclusively come from installation offcuts recycling .





Results





Environmental Information

Potential environmental impact

Acronyms

Results per functional or declared unit - iD Tilt HIT																
Indicator	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1/1	C2/1	C3/1	C4/1	D/1
GWP-total	kg CO ₂ eq.	2,63E+01	3,55E+00	1,09E+00	0,00E+00	2,54E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,14E-01	0,00E+00	1,47E+00	-4,72E-01
GWP-fossil	kg CO ₂ eq.	2,56E+01	3,54E+00	9,94E-01	0,00E+00	2,47E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,14E-01	0,00E+00	8,09E-01	-4,37E-01
GWP- biogenic	kg CO ₂ eq.	-5,85E-01	1,42E-03	5,64E-02	0,00E+00	1,42E-03	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	8,55E-05	0,00E+00	6,60E-01	-8,45E-04
GWP- Luluc	kg CO ₂ eq.	1,28E+00	1,40E-03	3,85E-02	0,00E+00	5,73E-03	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	8,40E-05	0,00E+00	2,08E-05	-3,37E-02
ODP	kg CFC 11 eq.	6,27E-06	8,22E-07	2,38E-07	0,00E+00	1,58E-08	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	4,95E-08	0,00E+00	3,07E-08	-1,46E-07
AP	mol H⁺ eq.	1,22E-01	1,42E-02	4,60E-03	0,00E+00	1,44E-03	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	8,68E-04	0,00E+00	7,34E-04	-1,99E-03
EP-freshwater	kg P eq	1,09E-02	2,29E-04	3,53E-04	0,00E+00	2,00E-04	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,38E-05	0,00E+00	6,65E-06	-1,45E-04
EP-freshwater	kg PO4 eq	3,34E-02	7,04E-04	1,08E-03	0,00E+00	6,15E-04	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	4,23E-05	0,00E+00	2,04E-05	-4,44E-04
EP-marine	kg N eq.	2,71E-02	4,25E-03	1,13E-03	0,00E+00	4,06E-04	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,61E-04	0,00E+00	3,88E-03	-4,67E-04
EP-terrestrial	mol N eq.	2,43E-01	4,64E-02	1,03E-02	0,00E+00	2,65E-03	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,86E-03	0,00E+00	2,96E-03	-3,86E-03
РОСР	kg NMVOC eq.	8,56E-02	1,43E-02	3,49E-03	0,00E+00	6,66E-04	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	8,75E-04	0,00E+00	1,02E-03	-1,56E-03
ADP-minerals&metals*	kg Sb eq.	3,20E-04	1,24E-05	1,04E-05	0,00E+00	1,37E-06	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	7,45E-07	0,00E+00	2,79E-07	-8,11E-06
ADP-fossil*	MJ	4,79E+02	5,37E+01	1,79E+01	0,00E+00	5,26E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	3,24E+00	0,00E+00	2,21E+00	-9,91E+00
WDP	m³	2,19E+01	1,56E-01	6,71E-01	0,00E+00	1,35E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	9,38E-03	0,00E+00	1,03E-02	-5,32E-01

GWP-fossil = Global Warming Potential fossil fuels; GWP-biogenic = Global Warming Potential biogenic; GWP-luluc = Global Warming Potential and use and land use change; ODP = Depletion potential of the stratospheric ozone layer; AP = Acidification potential, Accumulated Exceedance; EP-freshwater = Eutrophication potential, fraction of nutrients reaching freshwater end compartment; EP-marine = Eutrophication potential, fraction of nutrients reaching marine end compartment; EP-terrestrial = Eutrophication potential, Accumulated Exceedance; POCP = Formation potential of tropospheric ozone; ADP-minerals&metals = Abiotic depletion potential for non-fossil resources; ADP-fossil = Abiotic depletion for fossil resources potential; WDP = Water (user) deprivation potential, deprivation-weighted water consumption



Environmental Information

Potential environmental impact

	Results per functional or declared unit - iD Tilt HIT															
Indicator	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1/1	C2/1	C3/1	C4/1	D/1
PERE	MJ	6,92E+01	7,59E-01	2,17E+00	0,00E+00	1,08E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	4,56E-02	0,00E+00	9,63E-02	-7,78E-01
PERM	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	9,90E-02	0,00E+00									
PERT	MJ	6,92E+01	7,59E-01	2,17E+00	0,00E+00	1,08E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	4,56E-02	0,00E+00	9,63E-02	-7,78E-01
PENRE	MJ	4,80E+02	5,37E+01	1,79E+01	0,00E+00	5,19E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	3,23E+00	0,00E+00	2,21E+00	-9,93E+00
PENRM	MJ.	0,00E+00	0,00E+00	0,00E+00	0,00E+00	5,56E-01	0,00E+00									
PENRT	MJ	4,80E+02	5,37E+01	1,79E+01	0,00E+00	5,18E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	3,23E+00	0,00E+00	2,21E+00	-9,93E+00
SM	kg	1,98E+00	0,00E+00	5,94E-02	0,00E+00	2,14E-01										
RSF	MJ	0,00E+00														
NRSF	MJ	0,00E+00														
FW	m³	3,47E-01	2,04E-03	1,08E-02	0,00E+00	5,38E-03	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,22E-04	0,00E+00	2,68E-03	-7,66E-03

Acronyms PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials; PENRT = Total use of non-renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Use of net fresh water





Waste production and output flows

Waste production

	Results per functional or declared unit - iD Tilt HIT															
Indicator	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1/1	C2/1	C3/1	C4/1	D/1
Hazardous waste disposed	kg	1,04E+00	3,89E-02	3,45E-02	0,00E+00	7,60E-03	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,34E-03	0,00E+00	2,55E-03	-1,64E-02
Non-hazardous waste disposed	kg	1,07E+01	3,08E+00	5,39E-01	0,00E+00	8,86E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,85E-01	0,00E+00	9,92E+00	-1,82E-01
Radioactive waste disposed	kg	1,14E-03	3,63E-04	5,81E-05	0,00E+00	3,04E-05	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,19E-05	0,00E+00	1,43E-05	-2,26E-05

Output flows

	Results per functional or declared unit - iD Tilt HIT															
Indicator	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1/1	C2/1	C3/1	C4/1	D/1
Components for re- use	kg	0,00E+00														
Material for recycling	kg	0,00E+00														
Materials for energy recovery	kg	0,00E+00														
Exported energy, electricity	MJ	0,00E+00														
Exported energy, thermal	MJ	0,00E+00														

Additional indicator

	Results per functional or declared unit - iD Tilt HIT															
Indicator	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1/1	C2/1	C3/1	C4/1	D/1
GWP- fossil	GWP- fossil kg CO ₂ eq. 2,68E+01 3,55E+00 1,03E+00 0,00E+00															

¹ GWP-GHG is the sum of GWP-Fossil and GWP-LULUC indicators

Information on biogenic carbon content

Results per functional or declared unit										
BIOGENIC CARBON CONTENT	Unit	QUANTITY								
Biogenic carbon content in product	kg C	0.179								
Biogenic carbon content in packaging kg C <0.012										

Note: 1 kg biogenic carbon is equivalent to 44/12 kg CO₂.

References

General Programme Instructions of the International EPD® System. Version 3.01.

PCR 2019:14. Version 1.2 and c-PCR-004 Resilient textile and laminate floor coverings (EN 16810)

