Environmental Product Declaration

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

DESSO Carpet Tiles,

0% recycled PA6 + ProBase

from

TARKETT

Programme:	The International EPD® System, www.environdec.com
Programme operator:	EPD International AB
EPD registration number:	S-P-08639
Publication date:	2023-03-27
Valid until:	2028-03-27

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
Address:	EPD International AB Box 210 60 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 1.11 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: ☐ EPD process certification ☒ EPD verification
Third party verifier: Damien Prunel 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 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.

Company information

Owner of the EPD: Tarkett
Contact: Sandy Bentmim (sandy.bentmim@tarkett.com)
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, colours 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 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 14001, ISO 45001, WCM manufacturing site

Name and location of production site(s): Dendermonde (Belgium) and Waalwijk (Netherlands)

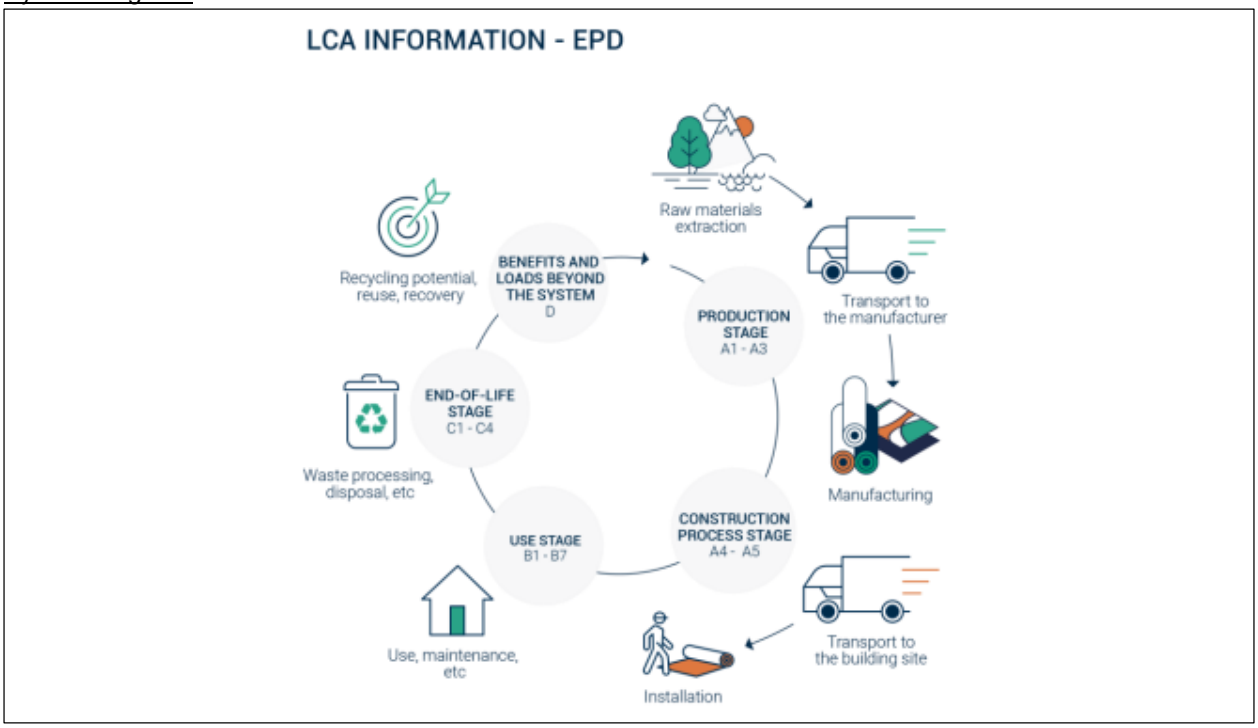
Product information

Product name: DESSO Carpet tiles, 0% recycled PA6 + ProBase
Product identification: Carpet tiles with a DESSO ProBase backing and solution dyed PA6 yarn
Product description: Loose-lay carpet tiles (EN 1307) with DESSO ProBase backing developed by Tarkett. The service lifetime recommended by Tarkett is 10 years
UN CPC code: 2223Z

LCA information

Functional unit / declared unit: 1m^2 of floor covering with a reference service life (RSL) of 1 year for specified characteristics application and use areas according to ISO 1307 and EN ISO 10874.
Reference service life: 1 year
Time representativeness: 2021
Database(s) and LCA software used: Ecoinvent 3.6, Simapro 9.1
Description of system boundaries: Cradle to grave and module D (A + B + C + D)

System diagram:



More information: The products are classified in accordance with EN ISO 10874, (previously EN 685) and in reference to the FCSS (Floor Covering Standard Symbols) to be used in all professional areas which require class 33 or less.

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

	Product stage			Construction process stage		Use stage							End of life stage				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**	**B5**	**B6**	**B7**	**C1**	**C2**	**C3**	**C4**	**D**
Modules declared	X	X	X	X	X	ND	X	ND	ND	ND	ND	ND	X	X	X	X	X
Geography	European technology and process coverage																European
Specific data used	-	100%	100%	100%	100%	-	-	-	-	-	-	-	-	-	100% for cement industry		100% for cement industry
Variation – products	<24%			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Variation – sites	Not relevant			-	-	-	-	-	-	-	-	-	-	-	-	-	-

Content information

Characteristics	Product Thickness [mm]	Product Weight [kg/m²]	Dimensional stability [%]
Yarn range: 400-499	5.5 – 7.0	3.913	≤ 0.2
Yarn range: 500-599		4.013	
Yarn range: 600-699		4.113	

Chemical composition for above mentioned products is presented in the following table:

Product components	Weight [%]			Post-consumer material, weight-%	Renewable material, weight-%
	400-499	500-599	600-699		
Non-woven (PET/PP)	4	4	4	0	0
Yarn PA6	13	15	17	0	0
SBR-compound	5	5	4	0	0
Aluminium trihydrate	9	8	8	0	0
Primary chalk	54	53	52	0	0
Glass scrim	1	1	1	0	0
ProBase	14	14	14	0	0
Packaging materials	**Weight, kg**			**Weight-% (versus the product)**	
Cardboard box	0.109			3	
Wooden pallet	0.100			2	

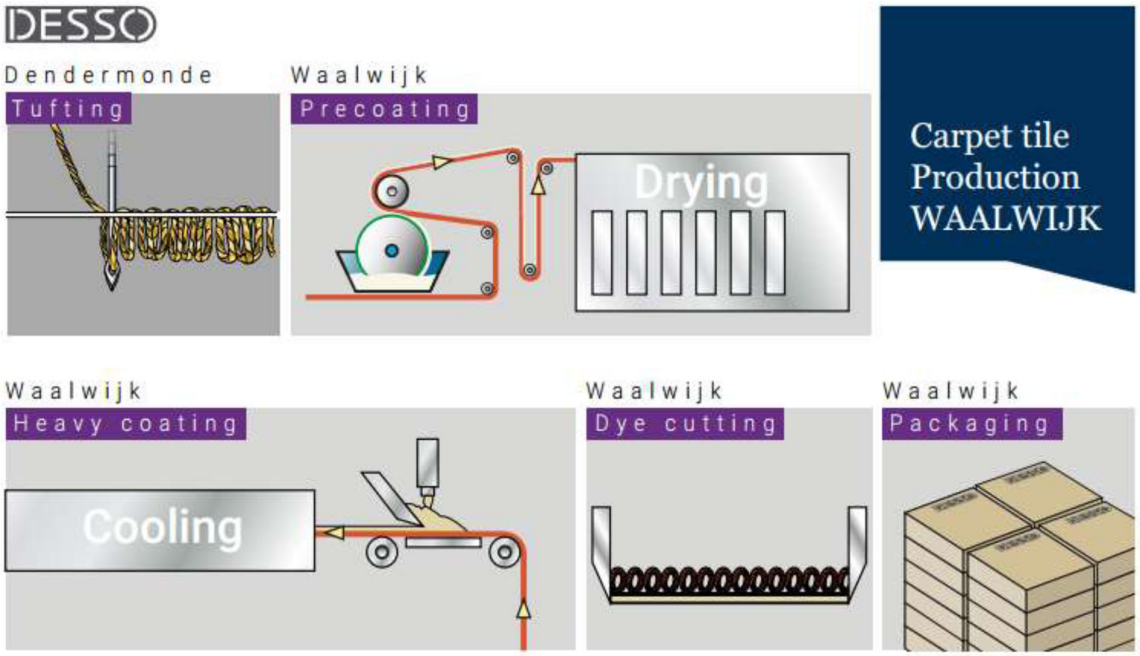
Material Health

DESSO Carpet Tiles with 0% recycled PA6 yarn and ProBase backing are C2C-Bronze certified. Raw materials are assessed against 'Material Health' criteria as defined by the C2C product certification standard v3.1 and the C2C Material Health Assessment methodology (see www.c2ccertified.org).

Product manufacturing

Production process

The production of carpet tiles is presented in the following figure:



Renewable energy

Our carpet tiles are produced with energy from 100% renewable sources. The electricity is coming from renewable sources with Guarantees of Origin.

Production waste

Waste type	DESSO Carpet Tiles, 0% recycled PA6 + ProBase
Non-hazardous waste to incineration in the cement industry [kg/m²]	2.23E-01
Non-hazardous wastewater to external treatment [kg/m²]	2.04E-02

Delivery and installation

Delivery

The average distribution distance between the factories and the installation site is presented in the following table. The distribution is made by truck.

	DESSO Carpet Tiles, 0% recycled PA6 + ProBase
Average distance of delivery [km]	7.00E+02

Installation
Carpet flooring do not use any electric tools for their installation. If a cut is necessary, it could be done with a manual tool.

Waste
During the installation approximately 3% of the flooring is lost as off-cuts. All flooring losses are sent to incineration.

Packaging
50% of the packaging materials goes to incineration and 50% goes to landfill except for wooden pallet which are recycled.

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 carpet flooring 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 ISO 10874 in accordance with the product's classification. The service lifetime recommended by Tarkett is 10 years.

Cleaning and maintenance
The maintenance step concerns the cleaning of the floor. Tarkett has provided the recommended maintenance routine for the product throughout the reference life. Water, detergent and electricity consumption of the cleaning machine are considered in the LCA study:

- Common maintenance: 2 times / week
- Periodical maintenance: 2 times / year

Description	Amount	Unit
Electricity consumption	4.42E-01	kWh/year/m²
Water consumption	5.70E-02	L/year/m²
Detergent consumption	3.00E-03	L/year/m²

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

Waste processing
For the purpose of this LCA, it has been assumed that 100% of the product is sent to the cement industry for recycling of chalk and ATH (raw material of cement).

Transport
The distance of transport, by truck, between installation sites and cement industry:

	DESSO Carpet Tiles, 0% recycled PA6 + ProBase
Transport distance to cement industry [km]	2.50E+02

Environmental impacts of this process are presented in module C.

Resource recovery

Benefits accounted in this scenario are presented in module D.

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Environmental Information

Potential environmental impact

Results per functional or declared unit - yarn weight 400-499 g/m2 (End of Life -> Cement Industry)															
Indicator	**Unit**	**A1-A3**	**A4**	**A5**	**B1**	**B2**	**B3**	**B4**	**B5**	**B6**	**B7**	**C1**	**C2**	**C3**	**D**
GWP-total	kg CO2 eq	6.82E+00	1.16E-01	4.74E-01	0.00E+00	1.78E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.16E-02	4.98E+00	-5.18E-01
GWP-fossil	kg CO2 eq	6.75E+00	1.16E-01	3.63E-01	0.00E+00	1.76E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.15E-02	4.98E+00	-5.17E-01
GWP-biogenic	kg CO2 eq	5.83E-02	4.64E-05	1.10E-01	0.00E+00	1.11E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.66E-05	4.14E-04	-4.85E-04
GWP- Luluc	kg CO2 eq	9.25E-03	4.57E-05	2.86E-04	0.00E+00	6.50E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.63E-05	8.03E-05	-3.16E-04
AP	kg CFC11 eq	1.77E-06	2.68E-08	5.57E-08	0.00E+00	8.90E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.62E-09	8.34E-09	-3.74E-08
ODP	mol H+ eq	2.19E-02	4.65E-04	7.49E-04	0.00E+00	9.55E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.69E-04	8.81E-04	-4.16E-03
EP-freshwater	kg P eq	9.28E-04	7.49E-06	2.98E-05	0.00E+00	1.74E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.68E-06	3.20E-05	-2.15E-04
EP-marine	kg N eq	4.80E-03	1.39E-04	2.77E-04	0.00E+00	1.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.08E-05	4.49E-04	-6.38E-04
EP-terrestrial	mol N eq	4.67E-02	1.52E-03	1.74E-03	0.00E+00	1.46E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.55E-04	3.83E-03	-6.95E-03
POCP	kg NMVOC eq	1.67E-02	4.66E-04	6.21E-04	0.00E+00	3.96E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.70E-04	9.36E-04	-2.01E-03
ADP-minerals&metals*	kg Sb eq	2.68E-05	4.05E-07	8.52E-07	0.00E+00	4.49E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.45E-07	2.87E-07	-2.77E-06
ADP-fossil*	MJ	1.53E+02	1.75E+00	4.79E+00	0.00E+00	3.83E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.29E-01	1.10E+00	-5.15E+00
WDP	m3 depriv.	7.91E-01	5.10E-03	3.21E-02	0.00E+00	4.44E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.82E-03	1.61E-01	-7.93E-02
Acronyms	GWP-fossil = Global Warming Potential fossil fuels; GWP-biogenic = Global Warming Potential biogenic; GWP-luluc = Global Warming Potential land 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														

Results per functional or declared unit - yarn weight 500-599 g/m2 (End of Life -> Cement Industry)															
Indicator	**Unit**	**A1-A3**	**A4**	**A5**	**B1**	**B2**	**B3**	**B4**	**B5**	**B6**	**B7**	**C1**	**C2**	**C3**	**D**
GWP-total	kg CO2 eq	7.63E+00	1.16E-01	5.05E-01	0.00E+00	1.78E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.16E-02	5.22E+00	-5.22E-01
GWP-fossil	kg CO2 eq	7.55E+00	1.16E-01	3.95E-01	0.00E+00	1.76E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.15E-02	5.22E+00	-5.21E-01
GWP-biogenic	kg CO2 eq	6.08E-02	4.64E-05	1.10E-01	0.00E+00	1.11E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.66E-05	4.38E-04	-4.96E-04
GWP- Luluc	kg CO2 eq	1.06E-02	4.57E-05	3.25E-04	0.00E+00	6.50E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.63E-05	8.37E-05	-3.21E-04
AP	kg CFC11 eq	1.77E-06	2.68E-08	5.57E-08	0.00E+00	8.90E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.62E-09	8.89E-09	-3.75E-08
ODP	mol H+ eq	2.33E-02	4.65E-04	7.94E-04	0.00E+00	9.55E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.69E-04	9.39E-04	-4.19E-03
EP-freshwater	kg P eq	9.28E-04	7.49E-06	2.98E-05	0.00E+00	1.74E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.68E-06	3.33E-05	-2.18E-04
EP-marine	kg N eq	5.24E-03	1.39E-04	2.91E-04	0.00E+00	1.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.08E-05	4.80E-04	-6.42E-04
EP-terrestrial	mol N eq	5.07E-02	1.52E-03	1.86E-03	0.00E+00	1.46E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.55E-04	4.10E-03	-6.99E-03
POCP	kg NMVOC eq	1.80E-02	4.66E-04	6.64E-04	0.00E+00	3.96E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.70E-04	1.00E-03	-2.02E-03
ADP-minerals&metals*	kg Sb eq	2.71E-05	4.05E-07	8.60E-07	0.00E+00	4.49E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.45E-07	3.05E-07	-2.77E-06
ADP-fossil*	MJ	1.68E+02	1.75E+00	5.25E+00	0.00E+00	3.83E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.29E-01	1.16E+00	-5.21E+00
WDP	m3 depriv.	8.05E-01	5.10E-03	3.28E-02	0.00E+00	4.44E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.82E-03	1.72E-01	-7.98E-02
Acronyms	GWP-fossil = Global Warming Potential fossil fuels; GWP-biogenic = Global Warming Potential biogenic; GWP-luluc = Global Warming Potential land 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														

Results per functional or declared unit - yarn weight 600-699 g/m2 (End of Life -> Cement Industry)															
Indicator	**Unit**	**A1-A3**	**A4**	**A5**	**B1**	**B2**	**B3**	**B4**	**B5**	**B6**	**B7**	**C1**	**C2**	**C3**	**D**
GWP-total	kg CO2 eq	8.43E+00	1.16E-01	5.52E-01	0.00E+00	1.78E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.16E-02	5.46E+00	-5.26E-01
GWP-fossil	kg CO2 eq	8.35E+00	1.16E-01	4.53E-01	0.00E+00	1.76E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.15E-02	5.46E+00	-5.25E-01
GWP-biogenic	kg CO2 eq	6.33E-02	4.64E-05	1.07E-01	0.00E+00	1.11E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.66E-05	4.61E-04	-5.08E-04
GWP- Luluc	kg CO2 eq	1.19E-02	4.57E-05	5.65E-04	0.00E+00	6.50E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.63E-05	8.70E-05	-3.25E-04
AP	kg CFC11 eq	1.77E-06	2.68E-08	5.57E-08	0.00E+00	8.90E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.62E-09	9.44E-09	-3.77E-08
ODP	mol H+ eq	2.48E-02	4.65E-04	8.61E-04	0.00E+00	9.55E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.69E-04	9.97E-04	-4.22E-03
EP-freshwater	kg P eq	9.28E-04	7.49E-06	7.44E-05	0.00E+00	1.74E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.68E-06	3.45E-05	-2.20E-04
EP-marine	kg N eq	5.68E-03	1.39E-04	4.87E-04	0.00E+00	1.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.08E-05	5.12E-04	-6.46E-04
EP-terrestrial	mol N eq	5.47E-02	1.52E-03	1.15E-03	0.00E+00	1.46E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.55E-04	4.37E-03	-7.03E-03
POCP	kg NMVOC eq	1.94E-02	4.66E-04	7.29E-04	0.00E+00	3.96E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.70E-04	1.07E-03	-2.04E-03
ADP-minerals&metals*	kg Sb eq	2.73E-05	4.05E-07	8.71E-07	0.00E+00	4.49E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.45E-07	3.24E-07	-2.78E-06
ADP-fossil*	MJ	1.84E+02	1.75E+00	6.05E+00	0.00E+00	3.83E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.29E-01	1.21E+00	-5.27E+00
WDP	m3 depriv.	8.18E-01	5.10E-03	3.10E-02	0.00E+00	4.44E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.82E-03	1.84E-01	-8.03E-02
Acronyms	GWP-fossil = Global Warming Potential fossil fuels; GWP-biogenic = Global Warming Potential biogenic; GWP-luluc = Global Warming Potential land 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														

** Disclaimer: The results of this environmental impact indicator shall be used with care as the uncertainties of these results are high or as there is limited experience with the indicator.*

Use of resources

Results per functional or declared unit - yarn weight 400-499 g/m2 (End of Life -> Cement Industry)															
Indicator	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	D
PERE	MJ, net CV	2.34E+01	2.48E-02	2.29E+00	0.00E+00	6.56E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.85E-03	1.08E-01	-2.57E-01
PERM	MJ, net CV	3.61E+00	0.00E+00	-1.47E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PERT	MJ, net CV	2.70E+01	2.48E-02	8.16E-01	0.00E+00	6.56E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.85E-03	1.08E-01	-2.57E-01
PENRE	MJ, net CV	1.38E+02	1.75E+00	4.34E+00	0.00E+00	3.75E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.28E-01	1.09E+00	-5.15E+00
PENRM	MJ, net CV	1.46E+01	0.00E+00	4.38E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PENRT	MJ, net CV	1.53E+02	1.75E+00	4.77E+00	0.00E+00	3.75E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.28E-01	1.09E+00	-5.14E+00
SM	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
RSF	MJ, net CV	7.09E-25	0.00E+00	2.13E-26	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NRSF	MJ, net CV	8.36E-24	0.00E+00	2.51E-25	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
FW	m3	2.79E-02	6.65E-05	1.07E-03	0.00E+00	3.12E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.38E-05	5.07E-03	5.38E-04
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														

Results per functional or declared unit - yarn weight 500-599 g/m2 (End of Life -> Cement Industry)															
Indicator	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	D
PERE	MJ, net CV	2.69E+01	2.48E-02	2.39E+00	0.00E+00	6.56E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.85E-03	1.12E-01	-2.64E-01
PERM	MJ, net CV	3.60E+00	0.00E+00	-1.47E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PERT	MJ, net CV	3.05E+01	2.48E-02	9.22E-01	0.00E+00	6.56E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.85E-03	1.12E-01	-2.64E-01
PENRE	MJ, net CV	1.53E+02	1.75E+00	4.80E+00	0.00E+00	3.75E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.28E-01	1.15E+00	-5.20E+00
PENRM	MJ, net CV	1.46E+01	0.00E+00	4.38E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PENRT	MJ, net CV	1.68E+02	1.75E+00	5.24E+00	0.00E+00	3.75E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.28E-01	1.15E+00	-5.20E+00
SM	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
RSF	MJ, net CV	8.50E-25	0.00E+00	2.55E-26	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NRSF	MJ, net CV	1.00E-23	0.00E+00	3.01E-25	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
FW	m3	2.94E-02	6.65E-05	1.13E-03	0.00E+00	3.12E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.38E-05	5.42E-03	5.07E-04
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														

Results per functional or declared unit - yarn weight 600-699 g/m2 (End of Life -> Cement Industry)															
Indicator	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	D
PERE	MJ, net CV	3.05E+01	2.48E-02	2.50E+00	0.00E+00	6.56E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.85E-03	1.16E-01	-2.71E-01
PERM	MJ, net CV	3.60E+00	0.00E+00	-1.47E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PERT	MJ, net CV	3.41E+01	2.48E-02	1.03E+00	0.00E+00	6.56E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.85E-03	1.16E-01	-2.71E-01
PENRE	MJ, net CV	1.69E+02	1.75E+00	5.26E+00	0.00E+00	3.75E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.28E-01	1.20E+00	-5.26E+00
PENRM	MJ, net CV	1.46E+01	0.00E+00	4.37E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PENRT	MJ, net CV	1.83E+02	1.75E+00	5.70E+00	0.00E+00	3.75E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.28E-01	1.20E+00	-5.25E+00
SM	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
RSF	MJ, net CV	9.90E-25	0.00E+00	2.97E-26	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NRSF	MJ, net CV	1.17E-23	0.00E+00	3.50E-25	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
FW	m3	3.09E-02	6.65E-05	1.18E-03	0.00E+00	3.12E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.38E-05	5.77E-03	4.76E-04
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

Results per functional or declared unit - yarn weight 400-499 g/m2 (End of Life -> Cement Industry)															
Indicator	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	D
Hazardous waste disposed	kg	3.67E-01	1.27E-03	1.49E-02	0.00E+00	3.85E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.54E-04	7.92E-02	-2.32E-01
Non-hazardous waste disposed	kg	1.01E+00	1.01E-01	1.70E-01	0.00E+00	5.01E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.59E-02	3.83E-02	-3.71E-01
Radioactive waste disposed	kg	9.64E-04	1.19E-05	3.01E-05	0.00E+00	2.72E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.25E-06	4.90E-06	-1.28E-05
Components for re-use	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Material for recycling	kg	2.04E-01	0.00E+00	1.06E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.62E+00
Materials for energy recovery	kg	8.35E-02	0.00E+00	1.20E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.39E+00	0.00E+00
Exported energy, electricity	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.89E-01
Exported energy, thermal	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.89E-01

Results per functional or declared unit - yarn weight 500-599 g/m2 (End of Life -> Cement Industry)															
Indicator	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	D
Hazardous waste disposed	kg	3.66E-01	1.27E-03	1.51E-02	0.00E+00	3.85E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.54E-04	8.49E-02	-2.33E-01
Non-hazardous waste disposed	kg	1.02E+00	1.01E-01	1.71E-01	0.00E+00	5.01E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.59E-02	4.08E-02	-3.74E-01
Radioactive waste disposed	kg	1.09E-03	1.19E-05	3.40E-05	0.00E+00	2.72E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.25E-06	5.09E-06	-1.31E-05
Components for re-use	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Material for recycling	kg	2.14E-01	0.00E+00	1.06E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.62E+00
Materials for energy recovery	kg	8.34E-02	0.00E+00	1.23E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.49E+00	0.00E+00
Exported energy, electricity	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.16E-01
Exported energy, thermal	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.16E-01

Results per functional or declared unit - yarn weight 600-699 g/m2 (End of Life -> Cement Industry)															
Indicator	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	D
Hazardous waste disposed	kg	3.66E-01	1.27E-03	1.52E-02	0.00E+00	3.85E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.54E-04	9.06E-02	-2.33E-01
Non-hazardous waste disposed	kg	1.03E+00	1.01E-01	1.71E-01	0.00E+00	5.01E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.59E-02	4.33E-02	-3.76E-01
Radioactive waste disposed	kg	1.22E-03	1.19E-05	3.79E-05	0.00E+00	2.72E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.25E-06	5.28E-06	-1.34E-05
Components for re-use	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Material for recycling	kg	2.24E-01	0.00E+00	1.07E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.62E+00
Materials for energy recovery	kg	8.32E-02	0.00E+00	1.26E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.59E+00	0.00E+00
Exported energy, electricity	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.43E-01
Exported energy, thermal	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.43E-01

Information on biogenic carbon content

Results per functional or declared unit				
BIOGENIC CARBON CONTENT	**Unit**	**QUANTITY**		
		400-499	**500-599**	**600-699**
Biogenic carbon content in product	kg C	4.61E-03	5.28E-03	5.95E-03
Biogenic carbon content in packaging	kg C	1.09E-03		

Note: 1 kg biogenic carbon is equivalent to 44/12 kg CO_2.

References

General Programme Instructions of the International EPD® System. Version 3.01.
PCR 2019:14. Version 1.11 c-PCR-004 Resilient, textile and laminate floor coverings (EN 16810).

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