ENVIRONMENTAL PRODUCT DECLARATION

as per *ISO 14025* and *EN 15804+A2*

Owner of the Declaration	Milliken Industrials Ltd.
Programme holder	Institut Bauen und Umwelt e.V. (IBU)
Publisher	Institut Bauen und Umwelt e.V. (IBU)
Declaration number	EPD-MIL-20230039-CBA1-EN
Issue date	20/02/2023
Valid to	19/02/2028

Tufted carpet tiles

pile material polyamide 6 with 100% recycled content, maximum total pile weight 1010 g/m^2, print design, Comfort Lite®/Comfort Plus® recycled cushion back

Milliken

Institut Bauen und Umwelt e.V.

www.ibu-epd.com | https://epd-online.com

General Information

Milliken

Tufted carpet tiles
pile material PA 6 with 100% recycled content, max. total pile weight 1010 g/m², print design, Comfort Lite®/ Comfort Plus® recycled cushion back

Programme holder
IBU – Institut Bauen und Umwelt e.V.
Hegelplatz 1
10117 Berlin
Germany

Owner of the declaration
Milliken Industrials Ltd.
Beech Hill Plant, Gidlow Lane
Wigan WN6 8RN
United Kingdom

Declaration number
EPD-MIL-20230039-CBA1-EN

Declared product / declared unit
1 m² tufted carpet tiles having a pile material of polyamide 6 with 100% recycled content and a Comfort Lite® or Comfort Plus® recycled cushion back.

This declaration is based on the product category rules:
Floor coverings, 09.2022
(PCR checked and approved by the SVR)

Scope:
The manufacturer declaration applies to a group of products with a maximum total pile weight of 1010 g/m². LCA results for products of the same construction but with a maximum total pile weight of 400 g/m² can be taken from the corresponding tables of the annexe. Specific data for every product within the declared group of products in relation to its total pile weight can be calculated by using equation 1 given in the annexe (see annexe chapter: 'General Information on the annexe').

The carpet is manufactured at the Milliken production site in Wigan, United Kingdom.

The declaration is only valid in conjunction with a valid GUT-*PRODIS* license of the product.

Issue date
20/02/2023

Valid to
19/02/2028

The owner of the declaration shall be liable for the underlying information and evidence; the IBU shall not be liable with respect to manufacturer information, life cycle assessment data and evidences.

The EPD was created according to the specifications of *EN 15804+A2*. In the following, the standard will be simplified as *EN 15804*.

Verification

The standard *EN 15804* serves as the core PCR
Independent verification of the declaration and data according to *ISO 14025:2011*
☐ internally ☒ externally

Dipl. Ing. Hans Peters
(chairman of Institut Bauen und Umwelt e.V.)

Dr. Alexander Röder
(Managing Director Institut Bauen und Umwelt e.V.))

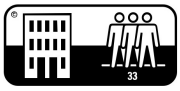
Angela Schindler
(Independent verifier)

Product

Product description/Product definition
Tufted carpet tiles having a pile material of polyamide 6 with 100% recycled content and a Comfort Lite® or Comfort Plus® recycled cushion back. The injection printing system Millitron® allows the creation of various designs.
The bitumen based heavy backing with recycled filler includes a glass fibre reinforcement and a 90% recycled polyurethane cushion and it is covered with a felt backing with recycled content.
The recycled content based on the total weight of the product amounts to 71%.
The declaration applies to a group of products with a maximum total pile weight of 1010 g/m².
The LCA results are calculated for products with the maximum total pile weight. LCA results for products with a maximum total pile weight of 400 g/m² can be taken from the corresponding tables of the annexe.

Results for specific products with any other total pile weight can be calculated by using equation 1 given in the annexe (see annexe chapter: 'General Information on the annexe').
For the placing on the market of the specific product in the European Union/European Free Trade Association (EU/EFTA) (with the exception of Switzerland) *Regulation (EU) No. 305/2011* Construction Product Regulation (CPR) applies. The product needs a Declaration of Performance (DoP) taking into consideration *EN 14041:2018-05, Resilient, textile and laminate floor coverings - Essential characteristics*, and the CE-marking. The DoP of the product can be found on the manufacturer's technical information section. For the application and use of the product the respective national provisions apply.

Application
According to the use class as defined in *EN 1307* the products can be used in all professional area with heavy use which require class 33 or less.



Technical Data

Constructional data according to EN 1307

Name	Value	Unit
Product Form	Tiles or modules, several dimensions	-
Type of manufacture	Tufted carpet	-
Colouration	Injection print design	-
Yarn type	Polyamide 6 with 100% recycled content	-
Secondary backing	Comfort Lite®/Comfort Plus® recycled cushion back	-
Total pile weight	max. 1010	g/m²
Total carpet weight	max. 4800	g/m²

Performance data of the product in accordance with the declaration of performance with respect to its essential characteristics according to *EN 14041*: 2018-05, Resilient, textile and laminate floor coverings - Essential characteristics.

Additional product properties in accordance with *EN 1307* can be found on the Product Information System *PRODIS* using the *PRODIS* registration number of the product (www.pro-dis.info) or on the manufacturer's technical information section.

Base materials/Ancillary materials

Name	Value	Unit
Polyamide 6	21.0	%
Polyester	4.5	%
Polypropylene	1.1	%
Limestone	36.5	%
Bitumen	10.5	%
Aluminum hydroxide	8.6	%
Ethyl vinyl acetate	3.5	%
Glass fibre	0.9	%
Polyurethane	12.9	%
Additives	0.5	%

The specific product coverd by the EPD contains substances listed in the *ECHA candidate list* (26.07.2022) or other carcinogenic, mutagenic or reprotoxic (CMR) substances in categories 1A or 1B which are not on the candidate list exceeding 0.1 percentage by mass: no
The products are registered in the GUT-*PRODIS* Information System. The *PRODIS* system ensures the compliance with limitations of various chemicals and Volatile Organic Compound (VOC)-emissions and a ban on the use of all substances that are listed as 'Substances of Very High Concern' (SVHC) under *REACH*.

Reference service life
The service life of textile floor coverings strongly depends on the correct installation taking into account the declared use classification and the adherence to cleaning and maintenance instructions.
A calculation of the reference service life according to *ISO 15686* is not possible.
Alternatively, a reference service life of 10 years can be assumed, during which the functional and visual quality is guaranteed *(BNB, Nutzungsdauer von Bauteilen)*. The technical service life can be significantly longer.

LCA: Calculation rules

Declared Unit

Name	Value	Unit
Declared unit	1	m²
Grammage	4.8	kg/m²
Layer thickness (average value for the tiles)	0.011	m
Gross density (average value for the tiles)	440	kg/m³

The declared unit refers to 1 m² produced textile floor covering. The Output of module A5 'Assembly' is 1 m² installed textile floor covering.
The layer thickness of the specific product covered by the EPD can be found on the Product Information System *PRODIS* using the *PRODIS* registration number of the product (www.pro-dis.info) or on the manufacturer's technical information section.

System boundary

Type of EPD:
Cradle-to-gate with options, module C1-C4, module D, and additional modules A4, A5, B1, B2.

System boundaries of modules A, B, C, D:
Modules C3, C4 and D are indicated separately for three end-of-life scenarios:
1 - landfill disposal
2 - municipal waste incineration
3 - recovery in a cement plant

A1-A3 Production:
Energy supply and production of the basic material, processing of secondary material, auxiliary material, transport of the material to the manufacturing site, emissions, waste water treatment, packaging material and waste processing up to the landfill disposal of residual waste (except radioactive waste). Benefits for generated electricity and steam due to the incineration of production waste are aggregated.
Biogenic carbon that is stored in renewable material (packaging paper) is taken into account as well as the associated uptake of carbon dioxide from the air from which this biogenic carbon originates.

A4 Transport:
Transport of the packed textile floor covering from factory gate to the place of installation.

A5 Installation:
Installation of the textile floor covering, processing of installation waste and packaging waste up to the landfill disposal of residual waste (except radioactive waste), the production of the amount of carpet that occurs as installation waste including its transport to the place of installation.
Generated electricity and steam due to the incineration of waste are listed in the result table as exported energy.
Biogenic carbon stored in renewable materials in packaging paper is released into the air as carbon dioxide emissions at the end of the life cycle in module A5.
Preparation of the floor and auxiliary materials (adhesives, fixing agents, PET connectors) are beyond the system boundaries and not taken into account.

B1 Use:
Indoor emissions during the use stage. After the first year, no product-related Volatile Organic Compound (VOC) emissions are relevant due to known VOC decay curves of the product.

B2 Maintenance:
Cleaning of the textile floor covering for a period of 1 year:
Vacuum cleaning – electricity supply
Wet cleaning – electricity, water consumption, production of the cleaning agent, waste water treatment.
The declared values in this module have to be multiplied by the assumed service life of the floor covering in the building in question.

B3 - B5:
The modules are not relevant within the assumed reference service life of 10 years.

B6 - B7:
No energy and water input are required for the operation of the carpet in the use stage. The modules are not relevant and not declared.

C1 De-construction:
The floor covering is de-constructed manually and no additional environmental impact is caused.

C2 Transport:
Transport of the carpet waste to a landfill, to the municipal waste incineration plant (MWI) or to the waste collection facility for recycling.

C3 Waste processing:
C3-1: Landfill disposal needs no waste processing.
C3-2: Impact from waste incineration (plant with R1>0.6), generated electricity and steam are listed in the result table as exported energy.
C3-3: Collection of the carpet waste for recovery in the cement industry, waste processing (granulating), transport to the cement plant, emissions from the incineration. The biogenic carbon that is stored in the renewable materials of the floor covering is released into the air as carbon dioxide emissions.

C4 Disposal:
C4-1: Impact from landfill disposal,
C4-2: The carpet waste leaves the system in module C3-2,
C4-3: The pre-processed carpet waste leaves the system in module C3-3.

D Recycling potential:
Calculated benefits result from materials exclusive secondary materials (net materials).
D-A5: Benefits for generated energy due to incineration of packaging and installation waste (incineration plant with R1 > 0.6),
D-1: Benefits for generated energy due to landfill disposal of carpet waste at the end of life,
D-2: Benefits for generated energy due to incineration of carpet waste at the end-of-life (incineration plant with R1 > 0.6),
D-3: Benefits for saved fossil energy and saved inorganic material due to recovery of the carpet in a cement plant.

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.

Background data are taken from the *GaBi database*, 2022-2.

LCA: Scenarios and additional technical information

Characteristic product properties
Information on biogenic carbon
The following information refer to the declared modules and are the basis for calculations or can be used for further calculations. The indicated values refer to the declared functional unit of all products with a max. total pile weight of 1010 g/m^2.

Information on describing the biogenic Carbon Content at factory gate

Name	Value	Unit
Biogenic carbon content in accompanying packaging at factory gate	0.086	kg C

1 kg biogenic Carbon is equivalent to 44/12 kg of CO_2

Transport to the construction site (A4)

Name	Value	Unit
Litres of fuel (truck, EURO 0-6 mix)	0.0113	l/100km
Transport distance	700	km
Capacity utilisation (including empty runs)	55	%

Installation in the building (A5)

Name	Value	Unit
Material loss	0.144	kg

Polyethylene packaging waste and installation waste are considered to be incinerated in a municipal waste incineration plant. Cardboard packaging waste is recycled.
Preparation of the floor and auxiliaries (adhesives, fixing agents, PET connectors etc.) are not taken into account.

Maintenance (B2)
The values for cleaning refer to 1 m^2 floor covering per year.
Depending on the application based on *ISO 10874*, the technical service life recommended by the manufacturer and the anticipated strain on the floor by customers, the case-specific useful life can be established. Based on this useful life the effects of module B2 need to be calculated in order to obtain the overall environmental impacts.

Name	Value	Unit
Maintenance cycle (vacuum cleaning)	208	Number /year
Maintenance cycle (wet cleaning)	1,5	Number /year
Water consumption (wet cleaning)	0.004	m^3
Cleaning agent (wet cleaning)	0.09	kg
Electricity consumption	0.314	kWh

For further information on cleaning and maintenance see www.millikencarpet.com

Service life

Name	Value	Unit
Life Span (according to BBSR)	10	a
Declared product properties (at the gate) and finishes	Corresponds to the specifications of EN 1307	-
An assumed quality of work, when installed in accordance with the manufacturer's instructions	Conforms to the manufacturer's instructions	-
Usage conditions, e.g. frequency of use, mechanical exposure	Use in areas defined by the use class according to EN 1307	-
Maintenance e.g. required frequency, type and quality and replacement of components	According to the manufacturers instructions	-

End of Life (C1-C4)
Three different end-of-life scenarios are declared and the results are indicated separately in module C.
Each scenario is calculated as a 100% scenario.
Scenario 1: 100 % landfill disposal
Scenario 2: 100 % municipal waste incineration (MWI) with R1>0.6
Scenario 3: 100 % recovery in the cement industry

If combinations of these scenarios have to be calculated this should be done according to the following scheme:
EOL-impact = x % impact (Scenario 1)
+ y % impact (Scenario 2)
+ z % impact (Scenario 3)
with x % + y % + z % = 100 %

Name	Value	Unit
Collected as mixed construction waste (scenarios 1 and 2)	4.8	kg
Collected separately (scenario 3)	4.8	kg
Landfilling (scenario 1)	4.8	kg
Energy recovery (scenario 2)	4.8	kg
Energy recovery (scenario 3)	2.59	kg
Recycling (scenario 3)	2.21	kg

Reuse, recovery and/or recycling potentials (D), relevant scenario information
Recovery or recycling potentials due to the three end-of-life scenarios (module C) are indicated separately.

Recycling in the cement industry (scenario 3)
The organic material of the carpet is used as an alternative fuel in a cement kiln. It mainly substitutes for lignite (68.8 %), hard coal (23.6 %) and petrol coke (7.6 %). The inorganic material is substantially integrated into the cement clinker and substitutes for original material input. *VDZ e.V.*

LCA: Results

The LCA results refer to all declared products with a maximum total pile weight of 1010 g/m². LCA results for products with a maximum total pile weight of 400 g/m² can be taken from the corresponding tables of the annexe. Results for specific products with any other total pile weight can be calculated by using equation 1 given in the annexe (see annexe chapter: 'General Information on the annexe').
The declared result figures in module B2 have to be multiplied by the assumed service life (in years) of the floor covering in the building under consideration.
Information on non-relevant modules:
Modules B3 - B7 are not relevant during the service life of the carpet.
Modules C3/1, C4/2 and C4/3 cause no additional impact (see chapter "LCA: Calculation rules" in this document).
Module C2 represents the transport for scenarios 1, 2 and 3. The values in column D result from module A5.

DESCRIPTION OF THE SYSTEM BOUNDARY (X = INCLUDED IN LCA; ND = MODULE OR INDICATOR NOT DECLARED; MNR = MODULE NOT RELEVANT)

PRODUCT STAGE			CONSTRUCTION PROCESS STAGE		USE STAGE							END OF LIFE STAGE				BENEFITS AND LOADS BEYOND THE SYSTEM BOUNDARIES
Raw material supply	Transport	Manufacturing	Transport from the gate to the site	Assembly	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-construction demolition	Transport	Waste processing	Disposal	Reuse-Recovery-Recycling-potential
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
X	X	X	X	X	X	X	MNR	MNR	MNR	ND	ND	X	X	X	X	X

RESULTS OF THE LCA - ENVIRONMENTAL IMPACT according to EN 15804+A2: 1 m² floor covering

Core Indicator	Unit	A1-A3	A4	A5	B1	B2	C1	C2	C3/2	C3/3	C4/1	D	D/1	D/2	D/3
GWP-total	[kg CO_2-Eq.]	5.71E+0	2.97E-1	6.88E-1	0.00E+0	5.49E-1	0.00E+0	1.63E-2	6.08E+0	6.15E+0	3.37E-1	-2.02E-2	0.00E+0	-4.24E-1	-3.17E-1
GWP-fossil	[kg CO_2-Eq.]	5.99E+0	2.92E-1	3.87E-1	0.00E+0	3.48E-1	0.00E+0	1.60E-2	6.08E+0	6.15E+0	3.37E-1	-2.01E-2	0.00E+0	-4.22E-1	-3.16E-1
GWP-biogenic	[kg CO_2-Eq.]	-3.29E-1	3.78E-3	2.99E-1	0.00E+0	4.16E-3	0.00E+0	2.07E-4	7.77E-4	1.52E-3	-5.53E-8	-1.02E-4	0.00E+0	-2.13E-3	-5.90E-4
GWP-luluc	[kg CO_2-Eq.]	4.73E-2	1.65E-3	1.48E-3	0.00E+0	1.96E-1	0.00E+0	9.06E-5	2.32E-4	4.64E-4	1.66E-4	-2.18E-6	0.00E+0	-4.55E-5	-1.59E-4
ODP	[kg CFC11-Eq.]	1.23E-8	1.78E-14	3.70E-10	0.00E+0	3.42E-8	0.00E+0	9.73E-16	5.18E-13	8.81E-13	4.57E-13	-1.34E-13	0.00E+0	-2.79E-12	-3.47E-13
AP	[mol H^+-Eq.]	1.78E-2	1.76E-3	7.68E-4	0.00E+0	8.32E-4	0.00E+0	9.67E-5	5.84E-3	6.14E-3	1.01E-3	-2.62E-5	0.00E+0	-5.48E-4	-1.30E-3
EP-freshwater	[kg P-Eq.]	7.78E-5	8.84E-7	2.39E-6	0.00E+0	5.19E-6	0.00E+0	4.85E-8	8.48E-7	1.04E-6	6.35E-5	-2.72E-8	0.00E+0	-5.67E-7	-3.48E-7
EP-marine	[kg N-Eq.]	6.22E-3	8.66E-4	3.01E-4	0.00E+0	1.97E-4	0.00E+0	4.75E-5	2.86E-3	2.99E-3	2.23E-4	-7.12E-6	0.00E+0	-1.49E-4	-3.80E-4
EP-terrestrial	[mol N-Eq.]	5.67E-2	9.59E-3	2.98E-3	0.00E+0	2.83E-3	0.00E+0	5.26E-4	3.20E-2	3.34E-2	2.45E-3	-7.63E-5	0.00E+0	-1.60E-3	-4.16E-3
POCP	[kg NMVOC-Eq.]	1.55E-2	1.64E-3	7.41E-4	4.18E-4	9.83E-4	0.00E+0	8.98E-5	7.34E-3	7.59E-3	7.18E-4	-2.00E-5	0.00E+0	-4.19E-4	-1.12E-3
ADPE	[kg Sb-Eq.]	3.12E-6	2.48E-8	9.54E-8	0.00E+0	2.30E-7	0.00E+0	1.36E-9	2.84E-8	3.85E-8	2.36E-8	-3.00E-9	0.00E+0	-6.26E-8	-3.11E-8
ADPF	[MJ]	1.20E+2	3.96E+0	3.83E+0	0.00E+0	5.90E+0	0.00E+0	2.17E-1	3.39E+0	4.38E+0	4.83E+0	-3.41E-1	0.00E+0	-7.17E+0	-3.18E+1
WDP	[m^3 world-Eq deprived]	4.21E+0	2.65E-3	1.52E-1	0.00E+0	9.99E-2	0.00E+0	1.45E-4	8.02E-1	8.08E-1	-3.61E-3	-2.09E-3	0.00E+0	-4.34E-2	-4.40E-2

Caption	GWP = Global warming potential; ODP = Depletion potential of the stratospheric ozone layer; AP = Acidification potential of land and water; EP = Eutrophication potential; POCP = Formation potential of tropospheric ozone photochemical oxidants; ADPE = Abiotic depletion potential for non-fossil resources; ADPF = Abiotic depletion potential for fossil resources; WDP = Water (user) deprivation potential

RESULTS OF THE LCA - INDICATORS TO DESCRIBE RESOURCE USE according to EN 15804+A2: 1 m² floor covering

Indicator	Unit	A1-A3	A4	A5	B1	B2	C1	C2	C3/2	C3/3	C4/1	D	D/1	D/2	D/3
PERE	[MJ]	8.78E+1	2.25E-1	3.23E+0	0.00E+0	3.69E+0	0.00E+0	1.23E-2	5.66E-1	8.44E-1	3.97E-1	-9.24E-2	0.00E+0	-1.92E+0	-4.83E-1
PERM	[MJ]	5.52E-1	0.00E+0	-5.52E-1	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
PERT	[MJ]	8.83E+1	2.25E-1	2.67E+0	0.00E+0	3.69E+0	0.00E+0	1.23E-2	5.66E-1	8.44E-1	3.97E-1	-9.24E-2	0.00E+0	-1.92E+0	-4.83E-1
PENRE	[MJ]	8.58E+1	3.97E+0	4.05E+0	0.00E+0	5.90E+0	0.00E+0	2.18E-1	3.75E+1	3.84E+1	4.83E+0	-3.41E-1	0.00E+0	-7.17E+0	-3.18E+1
PENRM	[MJ]	3.43E+1	0.00E+0	-2.15E-1	0.00E+0	0.00E+0	0.00E+0	-3.41E+1	-3.41E+1	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
PENRT	[MJ]	1.20E+2	3.97E+0	3.84E+0	0.00E+0	5.90E+0	0.00E+0	2.18E-1	3.39E+0	4.38E+0	4.83E+0	-3.41E-1	0.00E+0	-7.17E+0	-3.18E+1
SM	[kg]	1.85E+0	0.00E+0	5.55E-2	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	3.20E-1
RSF	[MJ]	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
NRSF	[MJ]	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
FW	[m^3]	1.21E-1	2.54E-4	4.25E-3	0.00E+0	3.34E-3	0.00E+0	1.40E-5	1.90E-2	1.92E-2	5.65E-5	-8.83E-5	0.00E+0	-1.84E-3	-3.10E-3

Caption	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 OF THE LCA – WASTE CATEGORIES AND OUTPUT FLOWS according to EN 15804+A2:

1 m² floor covering

Indicator	Unit	A1-A3	A4	A5	B1	B2	C1	C2	C3/2	C3/3	C4/1	D	D/1	D/2	D/3
HWD	[kg]	2.83E-3	1.90E-11	8.49E-5	0.00E+0	4.19E-5	0.00E+0	1.04E-12	5.09E-10	5.50E-10	7.45E-10	-4.63E-11	0.00E+0	-9.78E-10	-3.15E-10
NHWD	[kg]	6.66E-1	5.69E-4	5.42E-2	0.00E+0	7.30E-3	0.00E+0	3.12E-5	1.14E+0	1.14E+0	4.78E+0	-1.71E-4	0.00E+0	-3.58E-3	-1.97E-1
RWD	[kg]	1.57E-3	4.89E-6	5.11E-5	0.00E+0	3.76E-4	0.00E+0	2.68E-7	1.23E-4	1.95E-4	5.93E-5	-2.65E-5	0.00E+0	-5.52E-4	-1.08E-4
CRU	[kg]	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
MFR	[kg]	0.00E+0	0.00E+0	1.97E-1	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	1.30E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
MER	[kg]	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
EEE	[MJ]	0.00E+0	0.00E+0	2.86E-1	0.00E+0	0.00E+0	0.00E+0	0.00E+0	8.41E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
EET	[MJ]	0.00E+0	0.00E+0	5.26E-1	0.00E+0	0.00E+0	0.00E+0	0.00E+0	1.55E+1	8.32E+1	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0

Caption	HWD = Hazardous waste disposed; NHWD = Non-hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy

RESULTS OF THE LCA – additional impact categories according to EN 15804+A2-optional: 1 m² floor covering

Indicator	Unit	A1-A3	A4	A5	B1	B2	C1	C2	C3/2	C3/3	C4/1	D	D/1	D/2	D/3
PM	[Disease Incidence]	1.52E-7	1.02E-8	5.66E-9	0.00E+0	6.84E-8	0.00E+0	5.59E-10	2.52E-8	2.70E-8	9.69E-9	-2.17E-10	0.00E+0	0.00E+0	-1.83E-8
IRP	[kBq U235-Eq.]	2.42E-1	7.16E-4	7.87E-3	0.00E+0	6.78E-2	0.00E+0	3.93E-5	1.88E-2	3.10E-2	8.76E-3	-4.49E-3	0.00E+0	0.00E+0	-1.36E-2
ETP-fw	[CTUe]	5.69E+1	2.75E+0	1.85E+0	3.60E-3	2.69E+0	0.00E+0	1.51E-1	1.65E+0	2.22E+0	4.72E+0	-7.39E-2	0.00E+0	0.00E+0	-5.97E+0
HTP-c	[CTUh]	2.68E-9	5.56E-11	8.48E-11	0.00E+0	6.21E-10	0.00E+0	3.05E-12	8.30E-11	9.63E-11	2.12E-10	-3.43E-12	0.00E+0	0.00E+0	-8.86E-11
HTP-nc	[CTUh]	8.05E-8	3.30E-9	2.69E-9	2.60E-11	9.46E-9	0.00E+0	1.81E-10	5.52E-9	6.17E-9	1.78E-8	-1.32E-10	0.00E+0	0.00E+0	-5.76E-9
SQP	[-]	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Caption	PM = Potential incidence of disease due to PM emissions; IR = Potential Human exposure efficiency relative to U235; ETP-fw = Potential comparative Toxic Unit for ecosystems; HTP-c = Potential comparative Toxic Unit for humans (cancerogenic); HTP-nc = Potential comparative Toxic Unit for humans (not cancerogenic); SQP = Potential soil quality index

The SQP indicator is not given due to considerable uncertainties in the calculation.
The result figures given in module B2 refer to a period of 1 year because a reference service life is not declared. They have to be multiplied by the assumed service life (in years) of the floor covering in the building under consideration.

Disclaimer 1 – for the indicator “Potential Human exposure efficiency relative to U235”.
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 or 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.

Disclaimer 2 – for the indicators “abiotic depletion potential for non-fossil resources”, “abiotic depletion potential for fossil resources”, “water (user) deprivation potential, deprivation-weighted water consumption”, “potential comparative toxic unit for ecosystems”, “potential comparative toxic unit for humans – cancerogenic”, “Potential comparative toxic unit for humans - not cancerogenic”, “potential soil quality index”.
The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high as there is limited experienced with the indicator.

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