ENVIRONMENTAL PRODUCT DECLARATION

as per ISO 14025 and EN 15804+A1

Owner of the Declaration Findeisen GmbH

Programme holder Institut Bauen und Umwelt e.V. (IBU)

Publisher Institut Bauen und Umwelt e.V. (IBU)

Declaration number EPD-FND-20200262-CCA1-EN

Valid to 16.11.2020

FINETT DIMENSION

needle felt floor covering with a use layer made of polyamide 6.10

FINDEISEN



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General Information

FINDEISEN FINETT DIMENSION needle felt floor covering with a use layer made of PA 6.10 Owner of the declaration Programme holder IBU - Institut Bauen und Umwelt e.V. Findeisen GmbH Panoramastr. 1 Bulacher Straße 53 10178 Berlin 76275 Ettlingen Germany Germany **Declaration number** Declared product / declared unit EPD-FND-20200262-CCA1-EN 1 m² needle felt floorcovering FINETT DIMENSION Scope: This declaration is based on the product category rules: The manufacturer declaration applies to the needle felt Floor coverings, 02/2018 floor covering FINETT DIMENSION. The product is produced in the Findeisen manufacturing site in (PCR checked and approved by the SVR) Ettlingen, Germany. The declaration is only valid in conjunction with a valid Issue date GUT-PRODIS license of the product. 16.11.2020 The owner of the declaration shall be liable for the Valid to underlying information and evidence; the IBU shall not 15.11.2025 be liable with respect to manufacturer information, life cycle assessment data and evidences. The EPD was created according to the specifications of EN 15804+A1. In the following, the standard will be simplified as EN 15804. Verification Ham Peter The standard EN 15804 serves as the core PCR Independent verification of the declaration and data according to ISO 14025:2010 Dipl. Ing. Hans Peters internally externally (chairman of Institut Bauen und Umwelt e.V.) Angela Schindle Dr. Alexander Röder Angela Schindler (Managing Director Institut Bauen und Umwelt e.V.)) (Independent verifier)

Product

Information about the enterprise

FINDEISEN is world leader with the main brand FINETT for needled floor coverings. FINETT floor coverings stand for reliability, quality as well as for a successful connection of tradition and innovation. The family-owned company was established in Ettlingen (Germany) in 1921. To this day, all FINETT products are fabricated exclusively in the Ettlingen factory and, therefore, 100 % Made in Germany. FINETT floor coverings are hard-wearing and durable. This is why FINETT needled floor coverings are especially used in public areas that are highly frequented.

Product description/Product definition

FINETT DIMENSION - needle felt floor covering with a use layer made of solution-dyed polyamide 6.10 and a base layer made of recycled torn fibres. The polyamide 6.10 fibres contain renewable raw materials. The recycled content out of total weight amounts to 41 %. For the placing on the market of the 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 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 product can be used in professional or private areas. The use class of the product can be taken from the manufacturer's technical information section.



Technical Data

The performance data listed in the DoP apply.

Name	Value	Unit
Type of manufacture	Needle felt textile floor	_
Type of manufacture	covering, type A3	_
	Rolls of 2 m width or	
Product Form	modules 50cm x 50cm or	-
	100cm x 25cm	
Material of the use	Solution dyed	
layer	polyamide 6.10	
Use layer weight	520	g/m²
Secondary backing	Finish	-
Total weight of the	max. 1470	a/m²
textile floor covering	111ax. 1470	g/III

Performance data of the product in accordance with the declaration of performance with respect to its essential characteristics according to *EN 14041*. 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 (www.nadelvlies.de).

Base materials/Ancillary materials

Name	Value	Unit
Polyamide 6.10	35.4	%
Polypropylene	3.2	%
Recycled mixed fibres	41.0	%
Ethylene vinyl acetate (EVA)	20.4	%

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.

This product contains substances listed in the *REACH* candidate list (27.06.2018) exceeding 0.1 percentage by mass: no

Reference service life

A calculation of the reference service life according to *ISO 15686* is not possible.

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 minimum service life of 10 years can be assumed, technical service life can be considerably longer.

LCA: Calculation rules

Declared Unit

Name	Value	Unit
Declared unit	1	m²
Conversion factor to 1 kg	0.6803	-
Mass reference	1.47	kg/m²

The declared unit refers to 1 m² produced textile floor covering. The output of module A5 'Assembly' is 1 m² installed textile floor covering.

System boundary

Type of EPD: Cradle-to-grave

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:

3

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 (PA 6.10, paper) is taken into account as well as the associated carbon dioxide uptake from the air from which this biogenic

carbon comes. The same principle was used for recycled renewable material (waste paper).

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 floor covering 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 that is stored in renewable materials in the installation waste and in the packaging material is released as carbon dioxide emissions into the air at the end of life 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 - B7:

The modules are not relevant and therefore not declared.

C1 De-construction:

The floor covering is de-constructed manually and no additional environmental impact is caused.

C2 Transport:

Transport of the floor covering 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. The biogenic carbon that is stored in the renewable materials of the floor covering is released into the air as carbon dioxide emissions.

C3-3: Collection of the used floor covering, waste processing (granulating). 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. The biogenic carbon that is stored in the renewable materials of the floor covering is released into the air as carbon dioxide emissions.

C4-2: The floor covering waste leaves the system in module C3-2.

C4-3: The pre-processed floor covering 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 floor covering waste at the end-of-life, D-2: Benefits for generated energy due to incineration of floor covering 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 textile floor covering in a cement plant at the end-of-life, transport from the reprocessing plant to the cement kiln.

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* 2020, service pack 40. Remaining data gaps are covered by the *ecoinvent* 3.6 database.

LCA: Scenarios and additional technical information

The following information refer to the declared modules and are the basis for calculations or can be used for further calculations.

Transport to the construction site (A4)

Name	Value	Unit
Litres of fuel (truck, EURO 0-6 mix)	0.0034	l/100km
Transport distance	700	km
Capacity utilisation (including empty runs)	55	%

Installation in the building (A5)

Name	Value	Unit
Material loss	0.13	kg

Polyethylene packaging waste and installation waste are considered to be incinerated in a municipal waste incineration plant. Cardboard is going to be 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 m² floor covering used in commercial areas 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. The effects of Module B2 need to be calculated based on the useful life to obtain the overall

environmental impacts.

Name	Value	Unit
Maintenance cycle (wet cleaning)	0.9	1/year
Maintenance cycle (vacuum cleaning)	156	1/year
Water consumption (wet cleaning)	0.003	m ³
Cleaning agent (wet cleaning)	0.06	kg
Electricity consumption	0.326	kWh

Further information on cleaning and maintenance see www.nadelvlies.de

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% recycling 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%



petrol coke (9.0%) VDZ e.V.

Name	Value	Unit		
Collected as mixed construction	1.47	l.a		
waste (scenario 1 and 2)	1.47	kg		
Collected separately (scenario 3)	1.47	kg		
Landfilling (scenario 1)	1.47	kg		
Energy recovery (scenario 2)	1.47	kg		
Energy recovery (scenario 3)	1,47	kg		
Recycling (scenario 3)	0	kg		

Reuse, recovery and/or recycling potentials (D), relevant scenario information

Recovery or recycling potentials due to the three endof-life scenarios (module C) are indicated separately.

Recycling in the cement industry (scenario 3) The organic material of the textile floor covering is used as secondary fuel in a cement kiln. It mainly substitutes for lignite (64.5%), hard coal (26.5%) and



LCA: Results

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 un-declared modules:

Modules B3 - B7 are not relevant during the service life of the textile floor covering and are marked as 'not declared'.

Modules C1, C3/1, C4/2 and C4/3 cause no additional impact (see "LCA: Calculation rules") and are marked as 'not declared'. Module C2 represents the transport for scenarios 1, 2 and 3. Column D represents module D/A5. The *CML* characterisation factors version January 2016 are applied.

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Parame PERI PERI PERI PENE PENE PENE PENE RSF	e floo eter E M T RE RM RT rene	Unit [MJ] 5 [MJ] 6 [MJ] 6 [MJ] 7 [MJ] 9 [MJ] 1	A1-A3 5.08E+1 1.14E+1 6.32E+1 9.20E+1 1.14E+2 6.99E-1 0.00E+0 0.00E+0 Use of re- rimary ending and portionary	A4 6.89E-2 0.00E+0 6.89E-2 1.23E+0 0.00E+0 0.00E+0 0.00E+0 0.00E+0 7.97E-5 enewable nergy res rimary en	5.83E+0 -2.13E-1 5.62E+0 1.06E+1 1.04E+1 6.29E-2 0.00E+0 0.00E+0 1.98E-1 primary 6 ources us	B1 0.00E- 0.	E	PF = 332 332 5E+0 DE+0 DE+0 DE+0 DE+0 DE+0 DE+0 DE+0 D	Abiotic de BE RE C2 3.73E-3 0.00E+0 3.73E-3 6.65E-2 0.00E+0 6.65E-2 0.00E+0 0.00E+0 4.32E-6 De evable c; PERT fuels; NI	C3/ 1.13E 1.37E 1.224E 1.05E 0.00E 7.32E primary = Total	potent RCE 2 2	C3/3 1.12E+1 1.11E+1 6.40E-2 2.15E+1 1.45E-1 0.00E+0 0.00E+0 7.41E-5 gy rescue of non	C4/1 1.07E 1.07E 1.07E 1.07E 1.07E 1.53E 0.00E 1.53E 0.00E 1.87E 0.00E 1.87E 0.00E 1.87E 0.00E 1.87E 0.00E 0.00E	1 -2.7 1 -2.7	71E-1 C 0E+0 C 71E-1 C 0E+0 C 71E-1 C 44E+0 C 0E+0 C 0E+0 C 0E+0 C 0E+0 C 0E+0 C raw ma nergy reaterials; mary en	D/1 0.00E+0 resources PENRM nergy res	D/2 -2.78E+0 0.00E+0 -2.78E+0 -1.27E+1 0.00E+0 -1.27E+1 0.00E+0 0.00E+0 0.00E+0	D/3 -1.60E-1 0.00E+0 -1.60E-1 -2.90E+1 0.00E+0 -2.90E+1 0.00E+0 1.12E+1 2.14E+1 -2.35E-3 Use of inon- M = Use	
PERIPERING PERIPERING PENIFORM PENIFORM RSF NRSI	E	Unit [MJ] § [MJ	A1-A3 5.08E+1 1.14E+1 5.22E+1 9.20E+1 2.15E+1 1.14E+2 6.00E+0 0.00E+0 0.00E+0 Use of rerimary elevation of the position of the	6.89E-2 0.00E+0 6.89E-2 1.23E+0 0.00E+0 1.23E+0 0.00E+0 0.00E+0 0.00E+0 7.97E-5 enewable nergy res rimary en nergy res rimary en nergy res	5.83E+0 -2.13E-1 5.62E+0 1.06E+1 1.04E+1 6.29E-2 0.00E+0 0.00E+0 1.98E-1 primary 6 ources us	B1 0.00E- 0.00E- 0.00E- 0.00E- 0.00E- 0.00E- 0.00E- 0.00E- 0.00E- unding nosed as ruding nosed as ruewable	E	PF = CRI 32 32 32 36E+0 DE+0 DE+0 DE+0 DE+0 DE+0 DE+0 DE+0 D	C2 3.73E-3 0.00E+0 3.73E-3 6.65E-2 0.00E+0 0.00E+0 0.00E+0 0.00E+0 4.32E-6 E-e primary 5; PENRT fuels; NI wa	C3/ 1.13E 1.37E 2.24E 1.05E 0.00E 0.00E 7.32E Frimary Total / energ F = Total RSF = Later	potent RCE 2 2	C3/3 1.12E+1 1.11E+1 6.40E-2 2.15E+1 1.45E-1 0.00E+0 0.00E+0 0.00E+0 frenew confirmed fron-re	C4/1	1 -2.7 1 -2.7	T1E-1 00E+0 00E+0 00E+0 00E+0 00E+0 00E+0 00E+0 commany remarks and regy remarks full forms of the commany full full forms of the commany full full full full full full full ful	D/1 0.00E+0	D/2 -2.78E+0 -2.78E+0 -2.78E+0 -2.78E+0 -1.27E+1 0.00E+0 -1.27E+1 0.00E+0 0.00E+0 0.00E+0 -3.22E-3 PERM = U ; PENRE I = Use of ources; S = Use of	D/3 -1.60E-1 0.00E+0 -1.60E-1 -2.90E+1 0.00E+0 -2.90E+1 0.00E+0 1.12E+1 2.14E+1 -2.35E-3 Use of inon- M = Use	
PERIPERING PERIPERING PENIFORM PENIFORM RSF NRSI	e floor E E M T T T RE RR RR RR rene rene of s	Unit [MJ] [MJ] [MJ] [MJ] [MJ] [MJ] [MJ] [MJ] [MJ] [MJ]	A1-A3 5.08E+1 1.14E+1 5.22E+1 9.20E+1 2.15E+1 1.14E+2 6.00E+0 0.00E+0 0.00E+0 Use of rerimary elevation of the position of the	6.89E-2 0.00E+0 6.89E-2 1.23E+0 0.00E+0 1.23E+0 0.00E+0 0.00E+0 0.00E+0 7.97E-5 enewable nergy res rimary en nergy res rimary en nergy res	5.83E+0 -2.13E-1 5.62E+0 1.06E+1 -1.47E-1 1.04E+1 6.29E-2 0.00E+0 0.00E+0 1.98E-1 primary e ources us ergy exclusiources us Use of re	B1 0.00E- 0.00E- 0.00E- 0.00E- 0.00E- 0.00E- 0.00E- 0.00E- 0.00E- unding nosed as ruding nosed as ruewable	E 1.16 0.00 1.16 1.16 1.16 1.16 1.16 1.16	PF = CRI 32 32 32 36E+0 DE+0 DE+0 DE+0 DE+0 DE+0 DE+0 DE+0 D	C2 3.73E-3 0.00E+0 3.73E-3 6.65E-2 0.00E+0 0.00E+0 0.00E+0 0.00E+0 4.32E-6 E-e primary 5; PENRT fuels; NI wa	C3/ 1.13E 1.37E 2.24E 1.05E 0.00E 0.00E 7.32E Frimary Total / energ F = Total RSF = Later	potent RCE 2 2 2+1 1 2+1 -1 2+1 -1 2+1 -1 3+1 1 3+	C3/3 1.12E+1 1.11E+1 6.40E-2 2.15E+1 1.45E-1 0.00E+0 0.00E+0 0.00E+0 frenew confirmed fron-re	C4/1	rding 1 -2.7. 10 0.00 11 -2.7. 10 0.00 11 -2.7. 10 0.00 10 0.	T1E-1 00E+0 00E+0 00E+0 00E+0 00E+0 00E+0 00E+0 commany remarks and regy remarks full forms of the commany full full forms of the commany full full full full full full full ful	D/1 0.00E+0	D/2 -2.78E+0 -2.78E+0 -2.78E+0 -2.78E+0 -1.27E+1 0.00E+0 -1.27E+1 0.00E+0 0.00E+0 0.00E+0 -3.22E-3 PERM = U ; PENRE I = Use of ources; S = Use of	D/3 -1.60E-1 0.00E+0 -1.60E-1 -2.90E+1 0.00E+0 -2.90E+1 0.00E+0 1.12E+1 2.14E+1 -2.35E-3 Use of -1 Use	
PERIOR PENE PENE PENE PENE PENE PENE PENE PEN	e floor E M T T RE RM RT rene ren of s	Unit [MJ] 5 [MJ] 6 [MJ] 7 [MJ] 7 [MJ] 7 [MJ] 9 [MJ] 10 [MJ	A1-A3 5.08E+1 1.14E+1 5.08E+1 1.14E+1 9.20E+1 9.20E+1 1.14E+2 6.99E-1 0.00E+0 0.00E+0 Use of rerimary elewable purimary	A4 6.89E-2 0.00E+0 6.89E-2 1.23E+0 0.00E+0 1.23E+0 0.00E+0 0.00E+0 0.00E+0 ry.97E-5 enewable nergy res rimary en nergy res rimary en nergy res rimary en nergy res rimary en 13; RSF =	A5 5.83E+0 -2.13E-1 5.62E+0 1.06E+1 1.04E+1 6.29E-2 0.00E+0 0.00E+0 1.98E-1 primary 6 ources us ergy exclusiources us Use of re STE C. A5	B1 0.00E-0.0	E	PF = 32 32 32 3E+0 DE+0 5E+0 DE+0 DE+0 DE+0 DE+0 DE+0 SE+0 SE+0 SE+0 SE+0 SE+0 SE+0 SE+0 S	Abiotic de BE RE C2 3.73E-3 0.00E+C 3.73E-3 0.00E+C 6.65E-2 0.00E+C 0.00E+C 0.00E+C 0.00E+C 0.00E+C 4.32E-6 newable c; PERT ce primary ce pri	C3/ 1.13E 1.13E 1.13E 1.13E 1.22E 1.22E 1.05E 0.00E 1.00E 1	Potent P	C3/3 1.12E+1 1.11E+1 6.40E-2 2.15E+1 1.45E-1 0.00E+0 0.00E+0 0.00E+0 7.41E-5 gy resc of renew ources e of non f non-re OWS C3/3	C4/1 1.07E 0.00E 1.53E 0.00E 1.53E 0.00E 1.53E 0.00E 1.53E 0.00E 1.87E 0.00E 1.87E 0.00E 1.87E 0.00E 0.00E	rding	to EN 71E-1 0 0E+0 0 71E-1 0 0E+0 0	D/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 1.00E+0	D/2 -2.78E+0 0.00E+0 -2.78E+0 -1.27E+1 0.00E+0 -1.27E+1 0.00E+0 0.00E+0 -3.22E-3 PERM = U s; PENRE 1 = Use of ources; S = Use of 4+A1: D/2 -5.07E-9	D/3 -1.60E-1 0.00E+0 -1.60E-1 0.00E+0 0.00E+0 -2.90E+1 0.00E+0 1.12E+1 2.14E+1 2.13E-3 Jse of = Use of non- M = Use net fresh D/3 2.06E-9	
PERIPORAL PERIPORAL PERIPORAL PENER	e floor E M T T T RE RE RM rene rene of s JLTS textil	Unit [MJ] 5 [MJ] 7 [MJ] 9 [MJ] 9 [MJ] 1 [MJ] 1 [MJ] 1 [MJ] 1 [MJ] 2 [MJ] 2 [MJ] 3 [MJ] 4 [MJ] 6 [MJ] 6 [MJ] 6 [MJ] 7 [MJ] 7 [MJ] 8 [MJ] 1	A1-A3 5.08E+1 1.14E+1 5.08E+1 1.14E+1 9.20E+1 1.14E+2 6.99E-1 1.00E+0 0.00E+0	A4 6.89E-2 0.00E+0 6.89E-2 1.23E+0 0.00E+0 1.23E+0 0.00E+0 0.00E+0 7.97E-5 enewable energy res rimary en nergy res rimary en 1.23E-0 1	A5 5.83E+0 -2.13E-1 5.62E+0 1.06E+1 1.04E+1 6.29E-2 0.00E+0 0.00E+0 1.98E-1 primary 6 ources us Use of re STE C/ A5 1.76E-8 1.42E-2	B1 0.00E-	E	PF = 32 32 3E+0 3E+0 5E+0 5E+0 5E+0 5E+0 5E+0 5E+0 5E+0 5	Abiotic de BE RE C2 3.73E-3 0.00E+C 3.73E-3 0.00E+C 6.65E-2 0.00E+C	C3/ 1.13E 1.13E 1.13E 1.224E 1.05E 0.00E 0.00E 7.32E primary = Total / energ F = Total RSF = U atter TPUT	potent RCE 2 2 2 2 2 2 2 2 2 2 2 2 2	C3/3 1.12E+1 1.11E+1 6.40E-2 2.15E+1 1.45E-1 0.00E+0 0.00E+0 7.41E-5 79y rescue of non-rescue of non	C4/1 1.07E 1.53E 0.00E 1.55E 1.46E	rding -1 -2.7 -0 0.0 -1 -2.7 -0 1.2 -0 1.2 -0 1.2 -0 0.0 -0 0.0 -0 0.0 -5 -3.3 smary e raw m. ble primary e raw m. -0 -5.7 -0 -5.7 -0 -5.7	T1E-1 0 0E+0 0 0	D/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 1.00E+0	D/2 -2.78E+0 0.00E+0 -2.78E+0 -1.27E+1 0.00E+0 -1.27E+1 0.00E+0 0.00E+0 -3.22E-3 -3.22E-3 -2 ERM = U -3.22E-3 -4.4A1: -5.07E-9 -5.88E-3	D/3 -1.60E-1 0.00E+0 -1.60E-1 -1.60E-1 0.00E+0 -2.90E+1 0.00E+0 1.12E+1 2.14E+1 -2.35E-3 Jse of ron- M = Use net fresh D/3 2.06E-9 -6.34E-4	
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thermal energy



Information on the biogenic carbon content:

The textile floor covering contains renewable material with stored biogenic carbon in the PA 6.10 fibres. The share of renewable material is calculated as 67% of the PA 6.10. During the growth phase of plants carbon dioxide (CO₂) is absorbed and transformed into stored biogenic carbon.

This amount of CO_2 uptake is taken into account in module A1-A3 as a negative value that reduces the total amount of the GWP. At the end-of-life the same amount of CO_2 is released into the air as emissions. These CO_2 emissions increase the amount of the GWP in the three scenarios landfill disposal, municipal incineration and recovery in the cement industry. Regarding the CO_2 balance recycled renewable materials are treated in the same way as non-recycled renewable materials.

Biogenic carbon content per m² textile floor covering: 0.23 kg C Corresponding carbon dioxide uptake/emissions: 0.83 kg CO₂

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