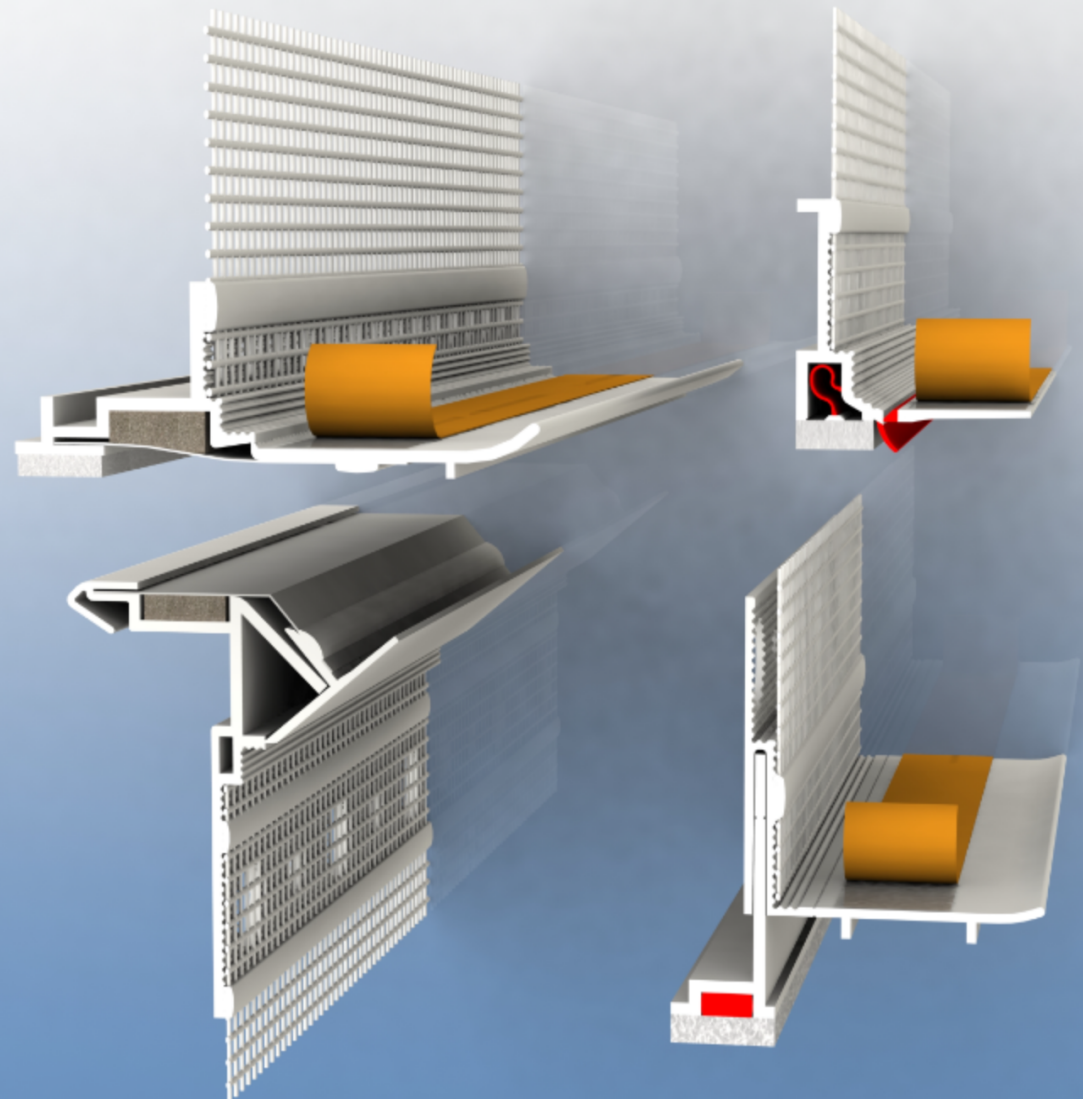


Environmental Product Declaration (EPD)
According to ISO 14025 and EN
15804+A2:2019

Profile Solution: ETIC- System Profiles FAP3D210 (product group 3)

Registration number:	EPD-Kiwa-EE-195189-EN
Issue date:	05-06-2025
Valid until:	05-06-2030
Declaration owner:	K-Uni Kunststoffproduktions- und Handels GmbH
Publisher:	Kiwa-Ecobility Experts
Programme operator:	Kiwa-Ecobility Experts
Status:	verified



1 General information

1.1 PRODUCT

Profile Solution: ETIC-System Profiles FAP3D210 (product group 3)

1.2 REGISTRATION NUMBER

EPD-Kiwa-EE-195189-EN

1.3 VALIDITY

Issue date: 05-06-2025

Valid until: 05-06-2030

1.4 PROGRAMME OPERATOR

Kiwa-Ecobility Experts
Wattstraße 11-13
13355 Berlin
DE



Raoul Mancke

(Head of programme operations, Kiwa-Ecobility Experts)



Dr. Ronny Stadie

(Verification body, Kiwa-Ecobility Experts)

1.5 OWNER OF THE DECLARATION

Manufacturer: K-Uni Kunststoffproduktions- und Handels GmbH

Address: Triglavstraße 16, A-9500 Villach, Austria

E-mail: office@k-uni.at

Website: <https://www.k-uni.at/>

Production location: FAM Immo d.o.o.

Address production location: Jertovec 202b, 49282 Konjscina, Croatia

1.6 VERIFICATION OF THE DECLARATION

The independent verification is in accordance with the ISO 14025:2011. The LCA is in compliance with ISO 14040:2006 and ISO 14044:2006. The EN 15804+A2:2019 serves as the core PCR.

☐ Internal ☒ External



Elisabeth Amat Guasch, Greenize

1.7 STATEMENTS

The owner of this EPD shall be liable for the underlying information and evidence. The programme operator Kiwa-Ecobility Experts shall not be liable with respect to manufacturer data, life cycle assessment data and evidence.

1.8 PRODUCT CATEGORY RULES

Kiwa-Ecobility Experts (Kiwa-EE) – General Product Category Rules (2022-02-14)

1.9 COMPARABILITY

In principle, a comparison or assessment of the environmental impacts of different products is only possible if they have been prepared in accordance with EN 15804+A2:2019. For the evaluation of the comparability, the following aspects have to be considered in particular: PCR used, functional or declared unit, geographical reference, the definition of the system boundary, declared modules, data selection (primary or secondary data, background database, data quality), scenarios used for use and disposal phases, and the life cycle inventory (data collection, calculation methods, allocations, validity period). PCRs

1 General information

and general program instructions of different EPD program operators may differ. Comparability needs to be evaluated. For further guidance, see EN 15804+A2:2019 and ISO 14025.

1.10 CALCULATION BASIS

LCA method R<THINK: Ecobility Experts | EN15804+A2

LCA software*: Simapro 9.6

Characterization method: R<THINK characterization method (see references for more details)

LCA database profiles: ecoinvent (for version see references)

Version database: v3.19 (20250306)

** Simapro is used for calculating the characterized results of the Environmental profiles within R<THINK.*

1.11 LCA BACKGROUND REPORT

This EPD is generated on the basis of the LCA background report 'Profile Solution: ETIC-System Profiles FAP3D210 (product group 3) ' with the calculation identifier ReTHiNK-95189.

2 Product

2.1 PRODUCT DESCRIPTION

This EPD represents a product group and is based on the representative product "FAP3D210".

The product (FAP3D210) is a self-adhesive plastic profile (PVC) with welded VWS fabric, integrated/compressed sealing tape, capable of absorbing three-dimensional movements. The profile is equipped with an impact-resistant sealing tape and a tear-off strip with self-adhesive tape for holding protective films for windows (doors) and frames.

Product Features:

Optimized protection for facade

Easy to apply

Three-Dimensional movement absorption

Classified according to Austrian guidelines

Classified according to German guidelines (VDPM)

Product group:

This product serves as a reference item within a broader category of products classified as product group 3 (PG3: see the following table).

FAP01	FAP3D208	FAP3D109	FAP3D209	APL3D03	BFP02	DFAP01
FAP02	FAP3D111	FAP3D113	FAP3D210	APL3D03L	BFP03	DFAP02
FAP03	FAP3D111L	FAP3D115	FAP3D16+	FGM01	BFP04	DFAP04
FAP23L	FAP3D112L	FAP3D10SF	FAP3D18+	FGM02	BFP05	DFAP05
FAP13L	FAP3D106	FAP3DS10SF	FAP3D19	FGM03	BFP06	DFP01
FAP14L	FAP3D106L	FAP 3D 203	FAP3D20	FGM04	BFP08	DFPMP01
FAP18	FAP3D107	FAP 3D 203+	RAP3D05	FGE01	DFC01	DFFM01
FAP41L	FAP3D107L	FAP3D204	RAPD3D06	FGE02	DFC02	DFFR01
FAP3D03	FAP3D108	FAP3D206	RAP3D08	AKP02	DFG01	
FAP3D14L	FAP3D108L	FAP3D208		AKP01	DFG02	

Composition of FAP3D210 (reference product) is available in the following table:

Materials	Weight (%)
PVC base profile	68.4
Mesh	10.4
Tape	11.3
Other additives (foil, adhesive)	9.9

2.2 APPLICATION (INTENDED USE OF THE PRODUCT)

Products designed for plaster systems, and as plastering profiles for both interior and exterior plaster applications, as well as for clinker brick installations.

2.3 REFERENCE SERVICE LIFE

RSL PRODUCT

As the entire life cycle of the product is not considered within the scope of this study, specifying the reference service life (RSL) is voluntary. According to information from the manufacturer, referencing BBSR tables on www.nachhaltigesbauen.de, the RSL of the product is 20–30 years.

USED RSL (YR) IN THIS LCA CALCULATION:

30

2.4 TECHNICAL DATA

The technical data stated here is relevant for the use of the declared product.

Criterion	Value/ Description
Refrence product	FAP3D210
Strip Length	2.6 m
Fabric Fastening	Welded
Profile Material	Polyvinyl Chloride (PVC)

2 Product

2.5 SUBSTANCES OF VERY HIGH CONCERN

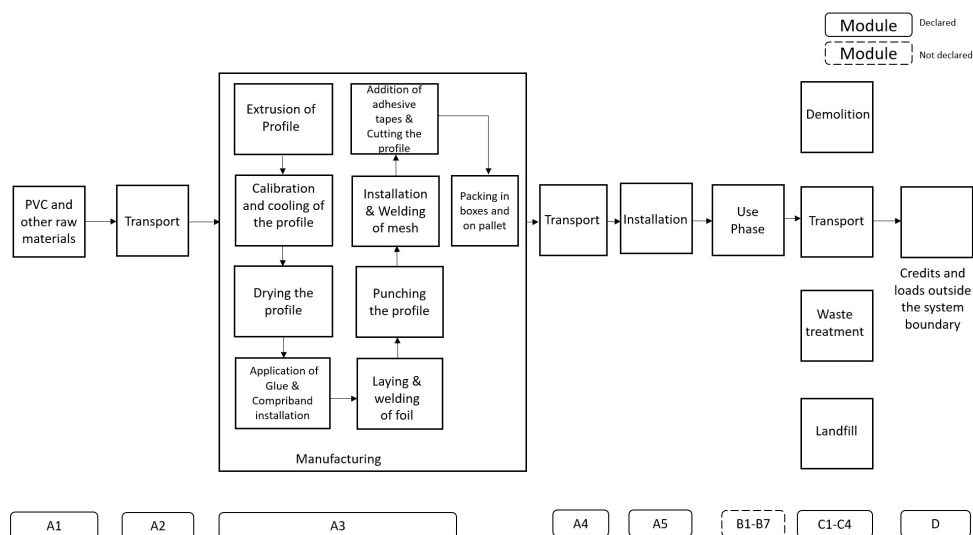
No substance presents in the product with a contribution of more than 0.1 % of the total weight is present on the "List of Potentially Hazardous Substances" (SVHC) that are candidates for authorisation under REACH legislation.

2.6 DESCRIPTION PRODUCTION PROCESS

The manufacturing operations are carried out at FAM Immo d.o.o., located at Jertovec 202b, 49282, Konjsčina, Croatia.

Below is a summary of the manufacturing process:

- Extruding the profile
- Calibrating and cooling
- Adding components
- Profile cutting
- Packaging



2.7 CONSTRUCTION DESCRIPTION

It is assumed that the products are installed manually.

3 Calculation rules

3.1 DECLARED UNIT

1 m of FAP3D210

The declared unit for this Life Cycle Assessment (LCA) calculation is one meter (1 m) of the building connection systems: FAP3D210 (product group 3). This choice aligns with the manufacturer's practice of selling the products by length. Selecting meters as the declared unit ensures consistency and relevance for accurately assessing the environmental impact of these systems.

Reference unit: meter (m¹)

3.2 CONVERSION FACTORS

Description	Value	Unit
Reference unit	1	m ¹
Weight per reference unit	0.201	kg
Conversion factor to 1 kg	4.981643	m ¹

3.3 SCOPE OF DECLARATION AND SYSTEM BOUNDARIES

This is a Cradle to gate with options, modules C1-C4 and module D EPD. The life cycle stages included are as shown below:

(X = module included, ND = module not declared)

A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
X	X	X	X	X	ND	ND	ND	ND	ND	ND	ND	X	X	X	X	X

The modules of the EN 15804 contain the following:

Module A1 = Raw material supply	Module B5 = Refurbishment
Module A2 = Transport	Module B6 = Operational energy use
Module A3 = Manufacturing	Module B7 = Operational water use
Module A4 = Transport	Module C1 = De-construction / Demolition
Module A5 = Construction - Installation process	Module C2 = Transport
Module B1 = Use	Module C3 = Waste Processing
Module B2 = Maintenance	Module C4 = Disposal
Module B3 = Repair	Module D = Benefits and loads beyond the product system boundaries
Module B4 = Replacement	

3.4 REPRESENTATIVENESS

This EPD is representative for Profile Solution: ETIC-System Profiles FAP3D210 (product group 3) , a product of K-Uni Kunststoffproduktions- und Handels GmbH . The results of this EPD are representative for European Union.

3.5 CUT-OFF CRITERIA

Product stage (A1-A3)

3 Calculation rules

All input flows (e.g. raw materials, transportation, energy use, packaging, etc.) and output flows (e.g. production waste) are considered in this LCA. The total neglected input flows do therefore not exceed the limit of 5% of energy use and mass.

Construction process stage (A4-A5)

All input flows (e.g. transportation to the construction site, additional raw material use for construction, installation energy (use) of energy use for assembly, etc.) and output flows (e.g. construction waste, packaging waste, etc.) are considered in this LCA. The total neglected input flows do therefore not exceed the limit of 5% of energy use and mass.

End of life stage (C1-C4)

All input flows (e.g. energy use for demolition or disassembly, transport to waste processing, etc.) and output flows (e.g. end-of-life waste processing of the product, etc.) are considered in this LCA. The total neglected input flows do therefore not exceed the limit of 5% of energy use and mass.

Benefits and loads beyond the system boundary (Module D)

All benefits and loads beyond the system boundary resulting from reusable products, recyclable materials and/or useful energy carriers leaving the product system are considered in this LCA.

Excluded processes

Following processes has not been taken into account in this life cycle analysis:
The manufacture of equipment used in production, buildings or any other capital goods;
The transportation of personnel to the production plant;
The transportation of personnel within the production plant;
Research and development activities;

3.6 ALLOCATION

Allocations were avoided as far as possible.
No by-products or co-products are produced during the manufacture of the analysed product.
The energy requirements of production were allocated to the individual products on the

basis of energy consumption measurements.
Specific information on the allocations within the background data can be found in the documentation of the Ecoinvent datasets.

3.7 DATA COLLECTION & REFERENCE PERIOD

All primary data were collected by K-UNI Kunststoffproduktions- und Handels GmbH for the reference period from May 2023 to May 2024.

3.8 ESTIMATES AND ASSUMPTIONS

- A payload factor of 50 percent was used for all truck transports, which corresponds to a full delivery and an empty return trip. A dataset for a non-specific truck was used.
- The demolition process for end-of-life products is assumed to be done manually.
- According to the manufacturer, the waste scenario for this LCA includes 100% landfill.
- It is assumed that the products are installed manually.

3.9 DATA QUALITY

All primary data were collected by K-UNI Kunststoffproduktions- und Handels GmbH for the reference period from May 2023 to May 2024.

For the data that the manufacturer does not influence, generic data were used. Secondary data were sourced from the regularly updated Ecoinvent database (version 3.6), aligned with EN 15804 standards to ensure background data not exceeding 10 years.

The ReTHiNK EPD web application was used to model the life cycle for the production and disposal of the declared product systems. To ensure that the results are comparable, consistent background data from the international database Ecoinvent were used in the LCA (e.g., data records on energy, transport, auxiliary materials, and supplies). Almost all consistent datasets contained in the Ecoinvent database are documented and can be viewed online.

The scenarios included are currently in use and are representative of one of the most likely alternatives.

According to the criteria of the "UN Environmental Global Guidance on LCA database development" mentioned in EN 15804+A2, the data quality for all three representativeness categories (geographical, technical and time) can be described as good.

3 Calculation rules

3.10 POWER MIX

In general, a market-based approach was used for the electricity consumption in production (A3). Since no purchased electricity mix could be provided, the national

residual grid mix of Croatia was utilized. This mix has a total Global Warming Potential (GWP) of 0.63 kg CO₂ eq. per kWh.

4 Scenarios and additional technical information

4.1 TRANSPORT TO CONSTRUCTION SITE (A4)

For the transport from production place to assembly/user, the following scenario is assumed for module A4 of this EPD.

	Value and unit
Vehicle type used for transport	(ei3.6) Lorry (Truck), unspecified (default) market group for (GLO)
Fuel type and consumption of vehicle	not available
Distance	150 km
Capacity utilisation (including empty returns)	50 % (loaded up and return empty)
Bulk density of transported products	inapplicable
Volume capacity utilisation factor	1

4.2 ASSEMBLY (A5)

The following information describes the scenarios for flows entering the system and flows leaving the system at module A5.

FLOWS ENTERING THE SYSTEM

There are no significant environment impacts as a result of materials or energy used in the construction stage (A5).

FLOWS LEAVING THE SYSTEM

The following output flows leaving the system at module A5 are assumed.

Description	Value	Unit
Output materials as result of loss during construction	0	%
Output materials as result of waste processing of materials used for installation/assembly at the building site	0.000	kg
Output materials as result of waste processing of used packaging	0.025	kg

4.3 DE-CONSTRUCTION, DEMOLITION (C1)

No inputs are needed for the product at the de-construction / demolition phase

4.4 TRANSPORT END-OF-LIFE (C2)

The following distances and transport conveyance are assumed for transportation during end of life for the different types of waste processing.

4 Scenarios and additional technical information

Waste Scenario	Transport conveyance	Not removed (stays in work) [km]	Landfill [km]	Incineration [km]	Recycling [km]	Re-use [km]
K-uni waste scenario (100 % landfilling)	(ei3.6) Lorry (Truck), unspecified (default) market group for (GLO)	0	100	0	0	0

The transport conveyance(s) used in the scenario(s) for transport during end of life has the following characteristics.

	Value and unit
Vehicle type used for transport	(ei3.6) Lorry (Truck), unspecified (default) market group for (GLO)
Fuel type and consumption of vehicle	not available
Capacity utilisation (including empty returns)	50 % (loaded up and return empty)
Bulk density of transported products	inapplicable
Volume capacity utilisation factor	1

4.5 END OF LIFE (C3, C4)

The scenario(s) assumed for end of life of the product are given in the following tables.
First the assumed percentages per type of waste processing are displayed, followed by the assumed amounts.

Waste Scenario	Region	Not removed (stays in work) [%]	Landfill [%]	Incineration [%]	Recycling [%]	Re-use [%]
K-uni waste scenario (100 % landfilling)	NL	0	100	0	0	0

Waste Scenario	Not removed (stays in work) [kg]	Landfill [kg]	Incineration [kg]	Recycling [kg]	Re-use [kg]
K-uni waste scenario (100 % landfilling)	0.000	0.201	0.000	0.000	0.000
Total	0.000	0.201	0.000	0.000	0.000

4.6 BENEFITS AND LOADS BEYOND THE SYSTEM BOUNDARY (D)

The presented Benefits and loads beyond the system boundary in this EPD are based on the following calculated Net output flows in kilograms and Energy recovery displayed in MJ Lower Heating Value.

4 Scenarios and additional technical information

Waste Scenario	Net output flow [kg]	Energy recovery [MJ]
K-uni waste scenario (100 % landfilling)	-0.048	0.000
Total	-0.048	0.000

5 Results

For the impact assessment long-term emissions (>100 years) are not considered. The results of the impact assessment are only relative statements that do not make any statements about end-points of the impact categories, exceedance of threshold values, safety margins or risks. The following tables show the results of the indicators of the impact assessment, of the use of resources as well as of waste and other output flows.

5.1 ENVIRONMENTAL IMPACT INDICATORS PER METER

CORE ENVIRONMENTAL IMPACT INDICATORS EN 15804+A2

Abbr.	Unit	A1	A2	A3	A1-A3	A4	A5	C1	C2	C3	C4	D
GWP-total	kg CO ₂ eq.	3.93E-1	1.42E-2	2.23E-1	6.30E-1	4.58E-3	4.71E-2	0.00E+0	2.71E-3	0.00E+0	1.69E-2	-2.38E-2
GWP-f	kg CO ₂ eq.	3.91E-1	1.42E-2	2.38E-1	6.43E-1	4.57E-3	3.12E-2	0.00E+0	2.71E-3	0.00E+0	1.69E-2	-2.37E-2
GWP-b	kg CO ₂ eq.	1.99E-3	6.28E-6	-1.55E-2	-1.35E-2	1.84E-6	1.60E-2	0.00E+0	1.09E-6	0.00E+0	1.76E-5	-2.06E-5
GWP-luluc	kg CO ₂ eq.	2.29E-4	5.91E-6	1.24E-4	3.59E-4	1.68E-6	3.35E-6	0.00E+0	9.94E-7	0.00E+0	1.02E-6	-8.93E-6
ODP	kg CFC 11 eq.	1.13E-7	3.07E-9	7.23E-9	1.23E-7	1.01E-9	1.19E-9	0.00E+0	5.98E-10	0.00E+0	6.57E-10	-4.51E-9
AP	mol H ⁺ eq.	1.91E-3	5.77E-5	9.25E-4	2.90E-3	2.65E-5	2.20E-5	0.00E+0	1.57E-5	0.00E+0	1.87E-5	-4.43E-5
EP-fw	kg P eq.	1.74E-5	1.38E-7	9.10E-6	2.67E-5	4.61E-8	1.20E-7	0.00E+0	2.73E-8	0.00E+0	3.72E-8	-2.24E-7
EP-m	kg N eq.	3.65E-4	1.61E-5	1.82E-4	5.63E-4	9.36E-6	6.62E-6	0.00E+0	5.54E-6	0.00E+0	1.03E-5	-1.10E-5
EP-T	mol N eq.	3.55E-3	1.79E-4	2.06E-3	5.79E-3	1.03E-4	7.29E-5	0.00E+0	6.10E-5	0.00E+0	6.80E-5	-1.37E-4
POCP	kg NMVOC eq.	1.22E-3	5.69E-5	6.95E-4	1.97E-3	2.94E-5	2.04E-5	0.00E+0	1.74E-5	0.00E+0	2.31E-5	-3.89E-5
ADP-mm	kg Sb-eq.	8.05E-6	4.60E-7	1.94E-6	1.04E-5	1.16E-7	6.89E-8	0.00E+0	6.87E-8	0.00E+0	2.27E-8	-9.80E-8
ADP-f	MJ	8.62E+0	2.15E-1	4.41E+0	1.32E+1	6.90E-2	4.26E-2	0.00E+0	4.09E-2	0.00E+0	5.02E-2	-4.40E-1
WDP	m ³ world eq.	4.59E-1	7.34E-4	6.57E-2	5.26E-1	2.47E-4	1.90E-3	0.00E+0	1.46E-4	0.00E+0	2.16E-3	-7.68E-3

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

5 Results

ADDITIONAL ENVIRONMENTAL IMPACT INDICATORS EN 15804+A2

Abbr.	Unit	A1	A2	A3	A1-A3	A4	A5	C1	C2	C3	C4	D
PM	disease incidence	1.87E-8	9.91E-10	4.59E-9	2.43E-8	4.10E-10	2.30E-10	0.00E+0	2.43E-10	0.00E+0	3.49E-10	-3.17E-10
IR	kBq U235 eq.	1.57E-2	8.98E-4	1.53E-2	3.19E-2	2.89E-4	1.67E-4	0.00E+0	1.71E-4	0.00E+0	1.96E-4	-3.22E-4
ETP-fw	CTUe	9.35E+0	1.83E-1	1.31E+0	1.08E+1	6.15E-2	4.32E-1	0.00E+0	3.64E-2	0.00E+0	7.76E-1	-1.83E-1
HTP-c	CTUh	2.20E-10	5.83E-12	7.98E-11	3.06E-10	2.00E-12	8.67E-12	0.00E+0	1.18E-12	0.00E+0	1.49E-12	-4.72E-12
HTP-nc	CTUh	9.39E-9	1.94E-10	2.82E-9	1.24E-8	6.75E-11	1.54E-10	0.00E+0	3.99E-11	0.00E+0	1.54E-10	-1.33E-10
SQP	Pt	1.02E+0	1.62E-1	2.48E+0	3.66E+0	5.98E-2	2.31E-2	0.00E+0	3.54E-2	0.00E+0	1.19E-1	-6.62E-1

PM=Potential incidence of disease due to PM emissions (PM) | **IR**=Potential Human exposure efficiency relative to U235 (IRP) | **ETP-fw**=Potential Comparative Toxic Unit for ecosystems (ETP-fw) | **HTP-c**=Potential Comparative Toxic Unit for humans (HTP-c) | **HTP-nc**=Potential Comparative Toxic Unit for humans (HTP-nc) | **SQP**=Potential soil quality index (SQP)

CLASSIFICATION OF DISCLAIMERS TO THE DECLARATION OF CORE AND ADDITIONAL ENVIRONMENTAL IMPACT INDICATORS

ILCD classification	Indicator	Disclaimer
ILCD type / level 1	Global warming potential (GWP)	None
	Depletion potential of the stratospheric ozone layer (ODP)	None
	Potential incidence of disease due to PM emissions (PM)	None
ILCD type / level 2	Acidification potential, Accumulated Exceedance (AP)	None
	Eutrophication potential, Fraction of nutrients reaching freshwater end compartment (EP-freshwater)	None
	Eutrophication potential, Fraction of nutrients reaching marine end compartment (EP-marine)	None
	Eutrophication potential, Accumulated Exceedance (EP-terrestrial)	None
	Formation potential of tropospheric ozone (POCP)	None
	Potential Human exposure efficiency relative to U235 (IRP)	1
	Abiotic depletion potential for non-fossil resources (ADP-minerals&metals)	2
ILCD type / level 3	Abiotic depletion potential for fossil resources (ADP-fossil)	2
	Water (user) deprivation potential, deprivation-weighted water consumption (WDP)	2
	Potential Comparative Toxic Unit for ecosystems (ETP-fw)	2
	Potential Comparative Toxic Unit for humans (HTP-c)	2
	Potential Comparative Toxic Unit for humans (HTP-nc)	2

5 Results

ILCD classification	Indicator	Disclaimer
	Potential Soil quality index (SQP)	2
Disclaimer 1 – 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 nor due to 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 – The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.		

5.2 INDICATORS DESCRIBING RESOURCE USE AND ENVIRONMENTAL INFORMATION BASED ON LIFE CYCLE INVENTORY (LCI)

PARAMETERS DESCRIBING RESOURCE USE

Abbr.	Unit	A1	A2	A3	A1- A3	A4	A5	C1	C2	C3	C4	D
PERE	MJ	4.31E-1	3.36E-3	5.11E-1	9.45E-1	8.64E-4	3.17E-3	0.00E+0	5.11E-4	0.00E+0	8.66E-4	-1.31E-1
PERM	MJ	0.00E+0	0.00E+0	1.42E-1	1.42E-1	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
PERT	MJ	4.31E-1	3.36E-3	6.52E-1	1.09E+0	8.64E-4	3.17E-3	0.00E+0	5.11E-4	0.00E+0	8.66E-4	-1.31E-1
PENRE	MJ	6.26E+0	2.28E-1	3.89E+0	1.04E+1	7.33E-2	4.53E-2	0.00E+0	4.34E-2	0.00E+0	5.33E-2	-4.31E-1
PENRM	MJ	2.99E+0	0.00E+0	6.16E-1	3.60E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	-5.25E-2
PENRT	MJ	9.25E+0	2.28E-1	4.51E+0	1.40E+1	7.33E-2	4.53E-2	0.00E+0	4.34E-2	0.00E+0	5.33E-2	-4.83E-1
SM	Kg	4.80E-2	0.00E+0	0.00E+0	4.80E-2	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
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
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
FW	m³	7.03E-3	2.68E-5	2.98E-3	1.00E-2	8.41E-6	5.74E-5	0.00E+0	4.98E-6	0.00E+0	5.25E-5	-8.78E-5

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**=Net use of fresh water

5 Results

OTHER ENVIRONMENTAL INFORMATION DESCRIBING WASTE CATEGORIES

Abbr.	Unit	A1	A2	A3	A1-A3	A4	A5	C1	C2	C3	C4	D
HWD	Kg	6.60E-6	5.51E-7	7.94E-6	1.51E-5	1.75E-7	8.40E-8	0.00E+0	1.04E-7	0.00E+0	7.64E-8	-4.98E-7
NHWD	Kg	2.97E-2	1.15E-2	1.66E-2	5.78E-2	4.38E-3	2.01E-2	0.00E+0	2.59E-3	0.00E+0	2.01E-1	-6.45E-4
RWD	Kg	1.39E-5	1.39E-6	1.15E-5	2.68E-5	4.54E-7	1.81E-7	0.00E+0	2.69E-7	0.00E+0	2.99E-7	-3.60E-7

HWD=Hazardous waste disposed | **NHWD**=Non-hazardous waste disposed | **RWD**=Radioactive waste disposed

ENVIRONMENTAL INFORMATION DESCRIBING OUTPUT FLOWS

Abbr.	Unit	A1	A2	A3	A1-A3	A4	A5	C1	C2	C3	C4	D
CRU	Kg	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	1.00E-6	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
MFR	Kg	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	6.61E-3	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
EET	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	1.68E-1
EEE	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	9.74E-2

CRU=Components for re-use | **MFR**=Materials for recycling | **MER**=Materials for energy recovery | **EET**=Exported Energy, Thermic | **EEE**=Exported Energy, Electric

5 Results

5.3 INFORMATION ON BIOGENIC CARBON CONTENT PER METER

BIOGENIC CARBON CONTENT

The following Information describes the biogenic carbon content in (the main parts of) the product at the factory gate per meter:

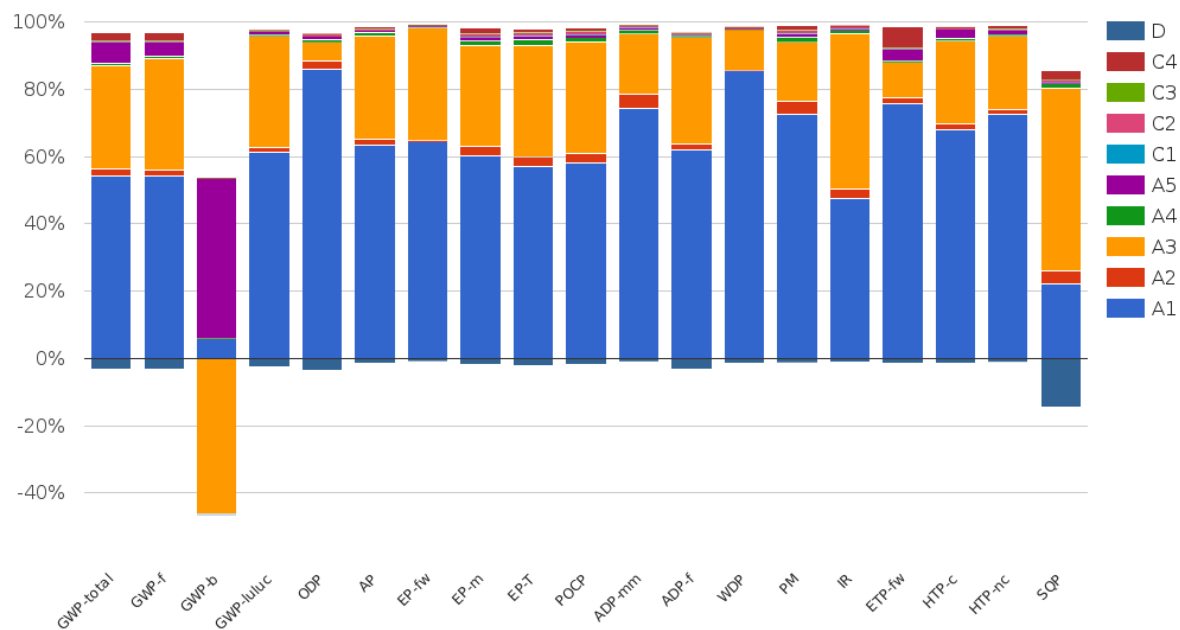
Biogenic carbon content	Amount	Unit
Biogenic carbon content in the product	0	kg C
Biogenic carbon content in accompanying packaging	0.004328	kg C

UPTAKE OF BIOGENIC CARBON DIOXIDE

The following amount of carbon dioxide uptake is taken into account. Related uptake and release of carbon dioxide in downstream processes are not taken into account in this number although they do appear in the presented results. One kilogram of biogenic Carbon content is equivalent to 44/12 kg of biogenic carbon dioxide uptake.

Uptake Biogenic Carbon dioxide	Amount	Unit
Packaging	0.01587	kg CO2 (biogenic)

6 Interpretation of results



The figure illustrates the impact categories for 1 m of the product (FAP3D210). As depicted, Modules A1, A3, and D emerge as the most significant contributors to all assessed indicators. The contribution of raw materials (A1) is notably higher, whereas transportation (A2 and C2) exhibits a comparatively minor impact. For most indicators, Module D indicates environmental benefits.

7 References

ISO 14040

ISO 14040:2006-10, Environmental management - Life cycle assessment - Principles and framework; EN ISO 14040:2006

ISO 14044

ISO 14044:2006-10, Environmental management - Life cycle assessment - Requirements and guidelines; EN ISO 14044:2006

ISO 14025

ISO 14025:2011-10: Environmental labels and declarations — Type III environmental declarations — Principles and procedures

EN 15804+A2

EN 15804+A2: 2019: Sustainability of construction works — Environmental Product Declarations — Core rules for the product category of construction products

General PCR Ecobility Experts

Kiwa-Ecobility Experts (Kiwa-EE) – General Product Category Rules (2022-02-14)

Ecoinvent

Ecoinvent Database, Version 3.6 (2019)

Characterisation method

Characterisation method Environmental Footprint 3.1.

8 Contact information

Publisher	Operator	Owner of declaration
		
Kiwa-Ecobility Experts Wattstraße 11-13 13355 Berlin, DE	Kiwa-Ecobility Experts Wattstraße 11-13 13355 Berlin, DE	K-Uni Kunststoffproduktions- und Handels GmbH Triglavstraße 16 A-9500 Villach, AT
E-mail: DE.Ecobility.Experts@kiwa.com Website: https://www.kiwa.com/de/en/themes/ecobility-experts/ecobility-experts-epd-program/	E-mail: DE.Ecobility.Experts@kiwa.com Website: https://www.kiwa.com/de/en/themes/ecobility-experts/ecobility-experts-epd-program/	E-mail: office@k-uni.at Website: https://www.k-uni.at/

Kiwa-Ecobility Experts is established member of the 