Environmental Product Declaration (EPD)
According to ISO 14025 and EN 15804

HydroBond® 403

Registration number:	EPD-Kiwa-EE-191782-EN
Issue date:	24-02-2025
Valid until:	24-02-2030
Declaration owner:	Newton Waterproofing Systems
Publisher:	Kiwa-Ecobility Experts
Programme operator:	Kiwa-Ecobility Experts
Status:	verified

1 General information

1.1 PRODUCT

HydroBond® 403

1.2 REGISTRATION NUMBER

EPD-Kiwa-EE-191782-EN

1.3 VALIDITY

Issue date: 24-02-2025

Valid until: 24-02-2030

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: Newton Waterproofing Systems

Address: Newton House, 17-19 Sovereign Way, TN9 1RH Tonbridge, Kent

E-mail: tech@newtonwaterproofing.co.uk

Website: https://www.newtonwaterproofing.co.uk/

Production location: ID Code 141

Address production location: Junghansring 52, 72108 Rottenburg a. N.

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 15804:2012+A2:2019 serves as the core PCR.

☐ Internal ☒ External

Anne Kees Jeeninga, Advieslab

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)

Institut Bauen und Umwelt e.V (IBU) - Complementary Product Category Rule (c-PCR): Plastic and elastomer roofing and sealing sheet systems (2014-07)

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. 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,

1 General information

background database, data quality), scenarios used for use and disposal phases, and the life cycle inventory (data collection, calculation methods, allocations, validity period). PCRs and general program instructions of different EPD program operators may differ. Comparability needs to be evaluated. For further guidance, see EN 15804+A2 (5.3 Comparability of EPD for construction products) and ISO 14025 (6.7.2 Requirements for comparability).

1.10 CALCULATION BASIS

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

LCA software*: Simapro 9.1

Characterization method: EN 15804 +A2 Method v1.0

LCA database profiles: EcoInvent version 3.6

Version database: v3.17 (2024-05-22)

** 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 'HydroBond® 403' with the calculation identifier ReTHiNK-91782.

2 Product

2.1 PRODUCT DESCRIPTION

HydroBond® 403 is a high quality seal fleece with a swellable coating containing modified polymers and a double-sided with PP-fleece concealed LDPE-foil. The chemical composition of the coating makes it start to expand when getting on contact with water (swelling rate appr. 150%), once the protective LDPE-coat has been damaged by mechanical attack. HydroBond® 403 is applied as external, pre- or postapplied waterproofing membrane, as holohedral seal or as linear seal of connection joints. Due to its especial characteristics the membrane integrally bonds to concrete which prevents any lateral water transport between the concrete and the membrane.

Product specification

The composition of the product is described in the following table:

Materials	Weight (%)
Seal fleece	88
Connecting adhesive tapes	3
Others (Packaging etc.)	9

2.2 APPLICATION (INTENDED USE OF THE PRODUCT)

Polyfleece SX® 1000 Wall is applied as linear or holohedral external seal for all kinds of reinforced concrete structures.

2.3 REFERENCE SERVICE LIFE

RSL PRODUCT

As the service life of product is not taken into account, there is no need to specify a reference service life.

50 years is given as the average life of a building.

USED RSL (YR) IN THIS LCA CALCULATION:

50

2.4 TECHNICAL DATA

- Length: 20,0m
- Width: 1,0m
- Thickness: 1,60mm
- Resistance to temperature: -40°C / +100°C

Visit About - Newton Waterproofing for more technical details.

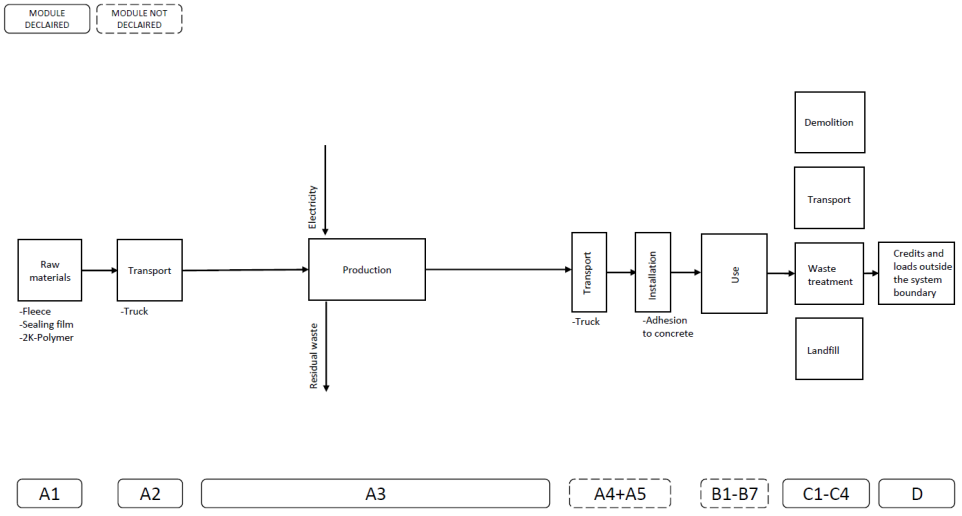
2.5 SUBSTANCES OF VERY HIGH CONCERN

The product does not contain any substances from the candidate list of substances of very high concern for authorisation (SVHC).

2.6 DESCRIPTION PRODUCTION PROCESS

The fleece, sealing membrane and 2-component polymer coating are brought together on the doctor blade system, resulting in mother rolls. After a defined drying time, these are made up into ready-to-pack 20m rolls on the winding system.

The 20m rolls are positioned horizontally on a pallet on a cardboard box. Once all 20m rolls have been positioned on the pallet, they are covered with a film and secured to the pallet with strapping tape. The pallet is now fully packed and ready for shipment.



3 Calculation rules

3.1 DECLARED UNIT

One square meter

m^2 of waterproofing membrane systems

Reference unit: square meter (m2)

3.2 CONVERSION FACTORS

Description	Value	Unit
Reference unit	1	m2
Weight per reference unit	1.287	kg
Conversion factor to 1 kg	0.776699	m2

3.3 SCOPE OF DECLARATION AND SYSTEM BOUNDARIES

This is a Cradle to gate with 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	ND	ND	ND	ND	ND	ND	ND	ND	ND	X	X	X	X	X

The modules of the EN15804 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

The input data are representative for HydroBond® 403. The data are representative for Europe.

3.5 CUT-OFF CRITERIA

Product Stage (A1-A3)

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.

3 Calculation rules

Capital goods in module A3 have been placed under cut-off criteria (<1% of the total 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.

3.6 ALLOCATION

Allocations were avoided as far as possible. There are no coproducts or by-product in the manufacturing of the examined product. Based on energy consumption measurements, the energy requirements of the production were allocated to the individual products. Specific information about allocations within the background data is included in the documentation of the Ecoinvent datasets.

3.7 DATA COLLECTION & REFERENCE PERIOD

All process-specific data was collected for the operating year 2022.

3.8 ESTIMATES AND ASSUMPTIONS

All datasets chosen for the LCA refer to the EU as the geographic reference.

A data set for a non-specific truck was used for phase A2.

No CO_2 certificates were considered.

3.9 DATA QUALITY

All process-specific data was collected for the 2022 operating year and is therefore up-to-date. The data is based on the annual average. In order to ensure comparability of the results, only consistent background data of the Ecoinvent database V3.6 was used in the LCA (e.g., records on energy, transportation, supplies and supplies), which refers to reference year 2019. The database is regularly reviewed and thus complies with the requirements of EN 15804 (background data not older than 10 years). All consistent datasets contained in the Ecoinvent database are documented and can be viewed in the online Ecoinvent documentation. The primary data were provided by the manufacturer. The life cycle was modelled with the R<THiNK EPD App.

3.10 POWER MIX

The company mainly supplies the energy from the national grid. Therefore, a local based approach was chosen and no guarantees of origin are needed.

4 Scenarios and additional technical information

4.1 DE-CONSTRUCTION, DEMOLITION (C1)

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

4.2 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.

Waste Scenario	Transport conveyance	Not removed (stays in work) [km]	Landfill [km]	Incineration [km]	Recycling [km]	Re-use [km]
finishes (adhered to wood, plastic, metal) (NMD ID 2)	Lorry (Truck), unspecified (default) | market group for (GLO)	0	100	150	50	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	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

4.3 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 [%]
finishes (adhered to wood, plastic, metal) (NMD ID 2)	NL	0	0	100	0	0

4 Scenarios and additional technical information

Waste Scenario	Not removed (stays in work) [kg]	Landfill [kg]	Incineration [kg]	Recycling [kg]	Re-use [kg]
finishes (adhered to wood, plastic, metal) (NMD ID 2)	0.000	0.000	1.287	0.000	0.000
Total	**0.000**	**0.000**	**1.287**	**0.000**	**0.000**

4.4 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.

Waste Scenario	Net output flow [kg]	Energy recovery [MJ]
finishes (adhered to wood, plastic, metal) (NMD ID 2)	0.000	14.705
Total	**0.000**	**14.705**

5 Results

For the impact assessment, the characterization factors of the LCIA method EN 15804 +A2 Method v1.0 are used. Long-term emissions (>100 years) are not considered in the impact assessment. 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 SQUARE METER

CORE ENVIRONMENTAL IMPACT INDICATORS EN15804+A2

Abbr.	Unit	A1	A2	A3	A1-A3	C1	C2	C3	C4	D
GWP-total	kg CO_2 eq.	6.73E+0	5.91E-2	1.57E-1	6.94E+0	0.00E+0	2.61E-2	3.08E+0	0.00E+0	-6.13E-1
GWP-f	kg CO_2 eq.	6.74E+0	5.90E-2	2.94E-1	7.09E+0	0.00E+0	2.61E-2	3.08E+0	0.00E+0	-6.13E-1
GWP-b	kg CO_2 eq.	-1.92E-2	2.73E-5	-1.39E-1	-1.58E-1	0.00E+0	1.20E-5	1.26E-4	0.00E+0	3.46E-12
GWP-luluc	kg CO_2 eq.	4.37E-3	2.16E-5	1.37E-3	5.76E-3	0.00E+0	9.55E-6	5.51E-6	0.00E+0	-1.74E-5
ODP	kg CFC 11 eq.	4.19E-7	1.30E-8	1.69E-8	4.49E-7	0.00E+0	5.75E-9	2.86E-9	0.00E+0	-7.97E-8
AP	mol H+ eq.	3.53E-2	3.42E-4	1.38E-3	3.70E-2	0.00E+0	1.51E-4	2.72E-4	0.00E+0	-5.01E-4
EP-fw	kg P eq.	2.90E-4	5.95E-7	2.74E-5	3.19E-4	0.00E+0	2.63E-7	3.41E-7	0.00E+0	-6.60E-7
EP-m	kg N eq.	5.20E-3	1.21E-4	2.85E-4	5.60E-3	0.00E+0	5.33E-5	1.21E-4	0.00E+0	-1.51E-4
EP-T	mol N eq.	5.28E-2	1.33E-3	2.93E-3	5.71E-2	0.00E+0	5.87E-4	1.34E-3	0.00E+0	-1.65E-3
POCP	kg NMVOC eq.	2.08E-2	3.80E-4	8.17E-4	2.20E-2	0.00E+0	1.68E-4	3.31E-4	0.00E+0	-5.46E-4
ADP-mm	kg Sb-eq.	7.22E-5	1.50E-6	2.82E-6	7.65E-5	0.00E+0	6.60E-7	2.39E-7	0.00E+0	-1.62E-7
ADP-f	MJ	1.48E+2	8.90E-1	4.30E+0	1.53E+2	0.00E+0	3.93E-1	2.64E-1	0.00E+0	-1.02E+1
WDP	m3 world eq.	4.15E+0	3.19E-3	1.36E-1	4.29E+0	0.00E+0	1.41E-3	-1.28E-2	0.00E+0	-4.46E-2

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 stratosperic ozon 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 minerals&metals) | **ADP-f**=Abiotic depletion for fossil resources potential (ADP fossil) | **WDP**=Water (user) deprication potential, deprivation-weighted water consumption (WDP)

5 Results

ADDITIONAL ENVIRONMENTAL IMPACT INDICATORS EN15804+A2

Abbr.	Unit	A1	A2	A3	A1-A3	C1	C2	C3	C4	D
PM	disease incidence	2.41E-7	5.31E-9	1.23E-8	2.58E-7	0.00E+0	2.34E-9	2.18E-9	0.00E+0	-1.42E-9
IR	kBq U235 eq.	3.33E-1	3.73E-3	1.30E-2	3.49E-1	0.00E+0	1.65E-3	5.56E-4	0.00E+0	-3.30E-3
ETP-fw	CTUe	7.90E+1	7.94E-1	4.27E+0	8.41E+1	0.00E+0	3.51E-1	8.31E-1	0.00E+0	-5.94E-1
HTP-c	CTUh	6.67E-8	2.57E-11	1.18E-9	6.79E-8	0.00E+0	1.14E-11	3.95E-9	0.00E+0	-3.86E-11
HTP-nc	CTUh	6.60E-8	8.68E-10	3.36E-9	7.02E-8	0.00E+0	3.83E-10	1.21E-8	0.00E+0	-5.47E-10
SQP	Pt	2.18E+1	7.72E-1	1.70E+1	3.96E+1	0.00E+0	3.41E-1	1.08E-1	0.00E+0	-1.47E-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 idex (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
ILCD type / level 3	Abiotic depletion potential for non-fossil resources (ADP-minerals&metals)	2
	Abiotic depletion potential for fossil resources (ADP-fossil)	2
	Water (user) deprivation potential, deprivation-weighted water consumption (WDP)	2

5 Results

ILCD classification	Indicator	Disclaimer
	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
	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	C1	C2	C3	C4	D
PERE	MJ	8.44E+0	1.11E-2	8.26E-1	9.28E+0	0.00E+0	4.92E-3	7.43E-3	0.00E+0	-2.18E-2
PERM	MJ	0.00E+0	0.00E+0	1.98E+0	1.98E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
PERT	MJ	8.44E+0	1.11E-2	2.80E+0	1.13E+1	0.00E+0	4.92E-3	7.43E-3	0.00E+0	-2.18E-2
PENRE	MJ	1.03E+2	9.45E-1	3.76E+0	1.08E+2	0.00E+0	4.17E-1	2.86E-1	0.00E+0	-1.14E+1
PENRM	MJ	5.29E+1	0.00E+0	7.98E-1	5.37E+1	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
PENRT	MJ	1.56E+2	9.45E-1	4.55E+0	1.62E+2	0.00E+0	4.17E-1	2.86E-1	0.00E+0	-1.14E+1
SM	Kg	0.00E+0	0.00E+0	6.28E-6	6.28E-6	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
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
FW	m^3	1.12E-1	1.08E-4	4.73E-3	1.17E-1	0.00E+0	4.79E-5	2.37E-4	0.00E+0	-5.91E-4

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	C1	C2	C3	C4	D
HWD	Kg	1.32E-3	2.26E-6	2.27E-5	1.35E-3	0.00E+0	9.96E-7	4.24E-6	0.00E+0	-1.30E-5
NHWD	Kg	9.34E-1	5.65E-2	3.54E-2	1.03E+0	0.00E+0	2.49E-2	5.15E-2	0.00E+0	-4.12E-3
RWD	Kg	2.96E-4	5.85E-6	1.35E-5	3.16E-4	0.00E+0	2.58E-6	7.35E-7	0.00E+0	-4.90E-6

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	C1	C2	C3	C4	D
CRU	Kg	0.00E+0	0.00E+0	3.60E-6	3.60E-6	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
MFR	Kg	0.00E+0	0.00E+0	3.68E-2	3.68E-2	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
EET	MJ	0.00E+0	0.00E+0	-1.13E-1	-1.13E-1	0.00E+0	0.00E+0	0.00E+0	0.00E+0	-4.56E+0
EEE	MJ	0.00E+0	0.00E+0	-6.54E-2	-6.54E-2	0.00E+0	0.00E+0	0.00E+0	0.00E+0	-2.65E+0

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 SQUARE METER

BIOGENIC CARBON CONTENT

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

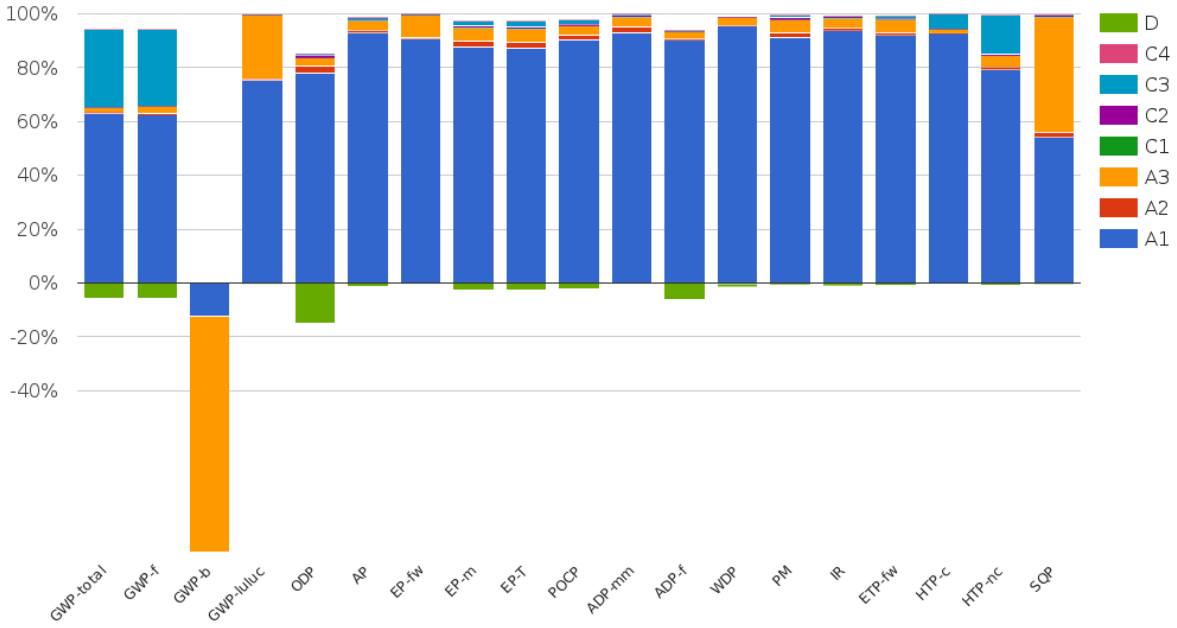
Biogenic carbon content	Amount	Unit
Biogenic carbon content in the product	0	kg C
Biogenic carbon content in accompanying packaging	0.03929	kg C

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	0.1441	kg CO2 (biogenic)

6 Interpretation of results



For easier understanding, the results are presented graphically in order to be able to see correlations and connections between the data more clearly.

As can be seen in the graph, raw material provision (module A1) dominates in almost all environmental impacts, often followed by production process (A3). The highest influence on the Global Warming Potential have raw material provision (module A1).

Note: The majority of the CO2 emissions within the impact category GWP-biogenic originate from the packaging. Since the module A5, which includes the waste processing of packaging, is not declared there seems to be a disbalance of biogenic CO2 emissions. Therefore, the alleged disbalance can be explained by the fact that module A5 is not included in the EPD declaration.

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 14040:2006

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

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

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