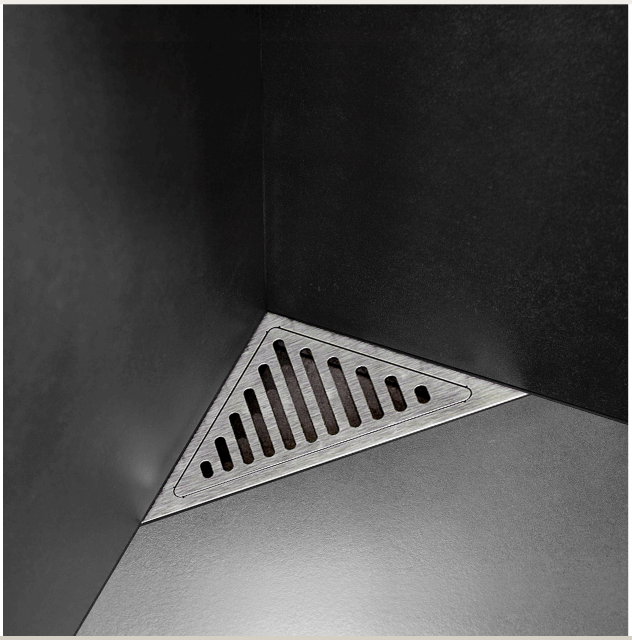
Environmental Product Declaration

In accordance with ISO 14025:2006 and EN 15804:2012+A2:2019/AC:2021 for:

Corner Drain Complete

Drain unit, Outlet unit, Classicline Frame and grating



Unidrain A/S

Programme	The International EPD® System, www.environdec.com
Programme operator	EPD International AB
Type of EPD	EPD of a single product from a manufacturer/service provider
EPD registration number	EPD-IES-0025391
Version date	2025-12-12
Validity date	2030-12-11

An EPD may be updated or unpublished if conditions change. To find the latest version of the EPD and to confirm its validity, see www.environdec.com

General Information

Programme information	
Programme	The International EPD® System
Address:	EPD International AB Box 210 60 SE-100 31 Stockholm Sweden
Website	www.environdec.com
E-mail	support@environdec.com

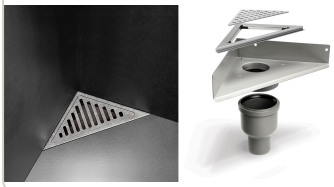
PCR and verification	
Product Category Rules (PCR)	CEN standard EN 15804 serves as the Core Product Category Rules (PCR) PCR 2019:14 Construction products (EN 15804:A2) (2.0.1) PCR review was conducted by: Technical Committee of the International EPD® System. See https://environdec.com/about-us/the-international-epd-system-about-the-system for a list of members. Review chair: Rob Rouwette (chair), Noa Meron (co-chair). The review panel may be contacted via the Secretariat www.environdec.com/support.
Third-party verification:	External and independent "third-party") verication of the declaration and data, according to ISO14025:2006, via EPD verification through: ☑ Individual EPD verification without a pre-verified LCA/EPD tool Third-party verifier Sigita Židonienė, Vesta Consulting, UAB  Approved by: The International EPD® System
Procedure for follow-up of data during EPD validity involves third party verifier: ○ Yes ◉ No	

Ownership and limitations on use of EPD

The EPD owner has the sole ownership, liability, and responsibility of the EPD.
EPDs within the same product category but published in different EPD programmes, may not be comparable. For two EPDs to be comparable, they shall be based on the same PCR (including the same first-digit version number) or be based on fully aligned PCRs or versions of PCRs; cover products with identical functions, technical performances and use (e.g. identical declared/functional units); have identical scope in terms of included life-cycle stages (unless the excluded life-cycle stage is demonstrated to be insignificant); apply identical impact assessment methods (including the same version of characterisation factors); and be valid at the time of comparison.

Information about EPD owner	
EPD owner	Unidrain A/S
Contact	Product Manager - Jacob Honoré
Contact details	+45 51542107, jho@unidrain.dk
Address	Ejby Industrivej 40, DK-26000 Denmark
Description of the organisation	Unidrain is a part of Vitas Group AB. Main markets are Nordic countries but with an export organization. Vitas Group AB is a family-owned company with own production, product development, sales etc. Mainly operating in the plumbing business. Based in Ystad Sweden production units also in Smålandsstenar and Lönsboda, Sweden.
Product-related or management system-related certifications:	EN ISO 9001:2015 EN ISO 14001:2015
Life Cycle Assessment (LCA)	Carbon Zero AB

Product information	
Product name(s)	Corner Drain Complete (Drain unit, Outlet unit, Classicline Frame and grating)
Product description:	Unidrain Corner drain is used in indoor drainage. The system includes a drain unit and an outlet unit, both installed in the floor construction, and visual design, placed in the tile layer - Classicline. Drain units: Corner. Outlet units: Various dimensions and directions for different piping applications. Classicline: Frame and gratings in different designs. The total weight of the assembly was 1,41 kg, but the declared unit is 1 kg of Product.
UN CPC code	412 - Products of iron or steel
Name and location of production site(s):	**Name of plant:** Vitas Group AB **Location:** Ystad, Sweden
Technical or actual lifespan	Assumed equal to the life of the construction works it is built into, i.e. typically 50 years.

Product image	
	**Manufacturing process** Injection moulding of plastic. Stainless steel production with pressing, laser cutting, etc Local production

Product Table

Mass is in kg

Name	kg	Unit
Corner Drain Complete (Drain unit, Outlet unit, Classicline Frame and grating)	1.41	pc

Note: the declared unit was 1 kg of product, the weight above indicates the weight of the product/s.

Content declaration

Product Components	Mass, kg	Post-consumer material, mass-% of products	Biogenic material, mass-% of product	Biogenic material, kg C / declared unit
Metal	7.24e-1	0.00	0.00	0.00e+0
Pigments	7.83e-5	0.00	0.00	0.00e+0
Plastic	2.24e-1	0.00	0.00	0.00e+0
Rubber	3.99e-2	0.00	0.00	0.00e+0
Polymer	1.14e-2	0.00	0.00	0.00e+0
Total*	1.00e+0	0.00	0.00	0.00e+0

Packaging Materials	Mass, kg	Mass-% (versus the product)	Biogenic material kg C/declared unit
Paper	2.46e-1	24.62	9.94e-2
Plastic	2.14e-3	0.21	0.00e+0
Total*	2.48e-1	24.84	9.94e-2

Dangerous substances from the candidate list of SVHC for Authorisation	EC No.	CAS No.	Weight-% per functional or declared unit
-	-	-	0.00

At the date of issue of this declaration, there is no “Substance of Very High Concern” (SVHC) in concentration above 0.1% by weight, and neither does the packaging, following the European REACH regulation (Registration, Evaluation, Authorization and Restriction of Chemicals)

** Due to rounding, the total mass of product/packaging materials may not exactly match the sum of individual materia inputs.*

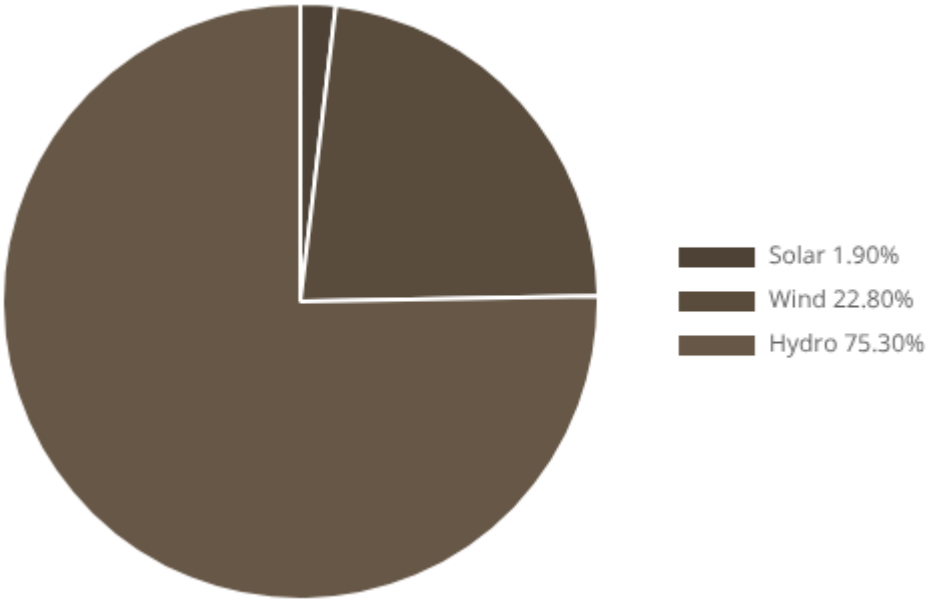
LCA information	
Conversion factor to mass	1
Functional unit / declared unit	kg
Time representativeness	Data obtained refers to the year 2024
System Boundary	The system boundaries are set to be "cradle to gate" with options, including modules A4, A5, C1-C4, D
Excluded modules	B1, B2, B3, B4, B5, B6, B7
Database(s) and LCA software used	Ecoinvent 3.11 and Eando X version 1.01
RSL	N/A
Characterisation factors used	The characterization factors used in this study refer to PCR 2019:14 and EN 15804+A2 (based on EF 3.1).
Allocation procedures used	All input and output flows in a unit process were considered, i.e., considering the value of all flows in the unit process and the corresponding LCI where data were available. - Data gaps were filled by conservative assumptions with average or generic data. Any assumptions in such cases were documented.
cut-off rules	The use of cut-off criterion on mass inputs and primary energy at the unit process level (1 %) and at the information module level (5 %). - All hazardous and toxic materials and substances are included in the inventory, and the cut-off rules do not apply.
Summary of data quality	The EPD is based on data collected by the Unidrain A/S over a one-year period from January 2024. The EPD is based on a single product, and it is manufactured at a single site. The end-of-life stage is representative of the European Union. The quality of the relevant data used for the EPD in terms of its time, geography and technology representativeness using EN 15804:2012+A2;2019, Annex E. Time representativeness is considered to be very good, Technical representativeness is deemed to be fair and Geographical representativeness is considered to be good. The relevant data assessed included no other poor or very poor data.

Energy Breakdown

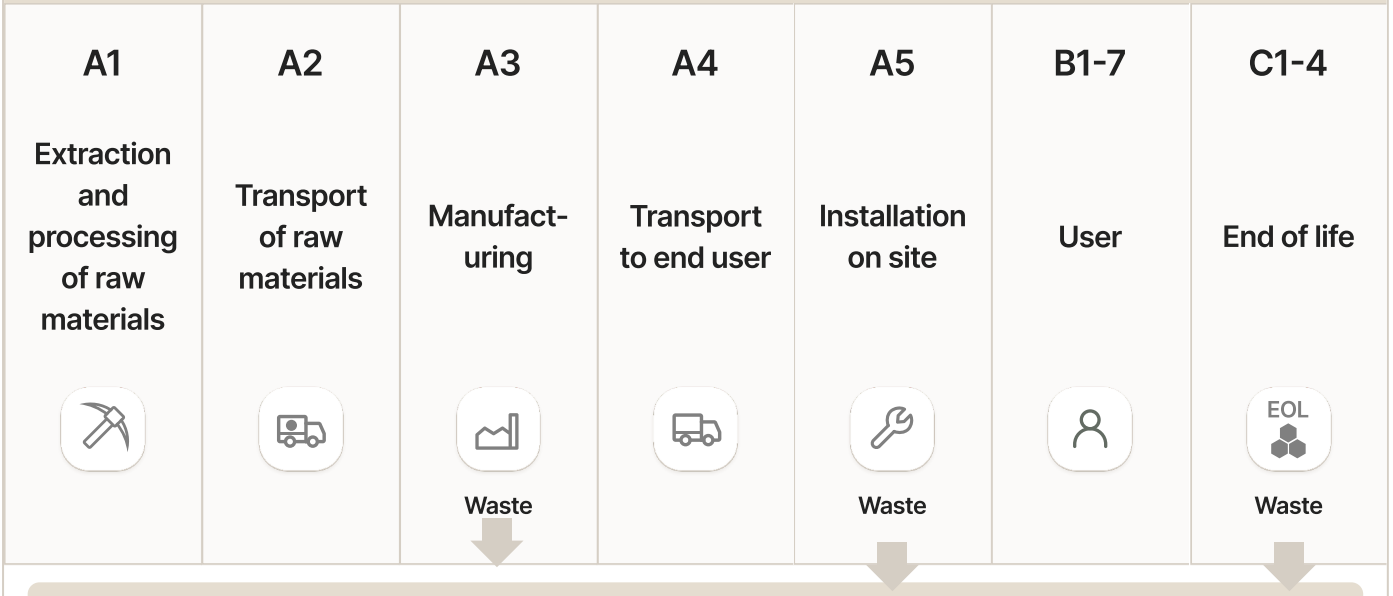
Electricity used in the manufacturing

Name	Data source	GWP excl. biogenic [kg CO2-eq/kWh]
Electricity from photovoltaic (solar panels/PV)	Ecoinvent 3.11 (2024)	4.84E-3
Electricity from Wind Power	Ecoinvent 3.11 (2024)	2.82E-3
Electricity from Hydro Power	Ecoinvent 3.11 (2024)	3.48E-3

Breakdown of electricity usage



System diagram



A1	Raw material supply	This module considers the extraction and processing of all raw materials, energy, and transportation which occur upstream to the studied manufacturing process, including packaging material.
A2	Transport to the manufacturer	The raw materials are transported to the manufacturing site.
A3	Manufacturing*	This module includes all resources used to produce and waste produced. This also includes additives and packaging material.
A4	Transport	Transportation from the manufacturing site to distribution centre and then from the distribution centre to the building site is included.
	Transport Scenario	truck: 600km
A5	Construction installation	This module covers all on-site activities required to install the product into the building structure as well as the management, transport, and treatment of any installation waste or packaging residues at the construction site
B1-B7	Use stage	This stage is not declared
C1	Deconstruction/Demolition	This stage includes the de-construction and/or demolition of the building.
C2	Transport	This stage represents the transport distance to the waste processing facility.
C3	Waste processing	This stage includes any waste treatment needed.
C4	Final disposal	This includes any material that is landfilled.
D	Benefits	Emission credits obtained from energy recovery and/or recycling materials.

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

	Product stage			Assembly stage		Use stage							End of life stage				Benefits & loads beoyond system boundary
	Raw Materials	Transport	Manufacturing	Transport	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
Declared	X	X	X	X	X	ND	ND	ND	ND	ND	ND	ND	X	X	X	X	X
Geography	EU 27	EU 27	SE	EU 27	EU 27	-	-	-	-	-	-	-	EU 27	EU 27	EU 27	EU 27	EU 27
Specific data used	27.18 %			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Variation-Products	0.00%			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Variation-Sites	0.00%			-	-	-	-	-	-	-	-	-	-	-	-	-	-

ND – Not Declared; X – Declared Reading example: 9,0E-03 = 9,0*10^-3 = 0,009
Disclaimer: The results presented for modules A1-A3 alone shall not be used for comparisons unless all relevant life cycle stages, particularly end-of-life (C1-C4), are included. This ensures a more accurate and representative assessment of the environmental impact over the full product life cycle.

Declaration of data sources, reference years, and share of primary data:

Process	Source type	Source	Reference year	Data category	GHG share (%)	Share of primary data, of GWP-GHG results for A1-A3
Manufacturing of product	Collected data	CarbonZero, Ecoinvent 3.11	2024	99% primary data 1% generic data	12.04	11.90
Transportation of raw materials to manufacturing site	Collected data	Ecoinvent 3.11	2024	Representative generic data	1.09	0.00
Production of Corner grating "Classic"	Collected data	CarbonZero, Ecoinvent 3.11, EPD-IES-0017264	2024	14% primary data 86% generic data	7.21	1.00
Production of Corner Drain unit	Collected data	CarbonZero, Ecoinvent 3.11, EPD-IES-0017264	2024	22% primary data 78% generic data	37.63	8.36
Production of Outlet unit - Ø 75 vertical	Collected data	CarbonZero, Ecoinvent 3.11	2024	15% primary data 85% generic data	19.70	2.99
Production of Classicline Frame - 10mm	Collected data	CarbonZero, Ecoinvent 3.11, EPD-IES-0017264	2024	21% primary data 79% generic data	10.98	2.28
Production of Packaging	Collected data	Ecoinvent 3.11	2024	7% primary data 93% generic data	10.33	0.65
Total share of primary data					100.00	27.18

The share of primary data is calculated based on GWP-GHG results. It is a simplified indicator for data quality that supports the use of more primary data, to increase the representativeness of and comparability between EPDs. Note that the indicator does not capture all relevant aspects of data quality and is not comparable across product categories.

Transport to the building site (A4)

Vehicle type	Distance (km)	Capacity utilization* (%)	Bulk density of transported products (kg/m3)	Volume capacity utilisation factor**
Truck-Trailer 40 tonne	600.00	61	as product density	1.00

*Including empty returns
**Factor: =1 or <1 or>= 1 for compressed or nested packaged products

Installation of the product in the building (A5)

Scenario information	Unit (expressed per functional unit or per declared unit
Ancilliary materials for installation (specified by material)	None
Water use	None
Other resource use	None
Quantitative description of energy type (regional mix) and consumption during the installation process	Not applicable
Direct emissions at ambient air, soil and water	None

A5 Waste materials on the building site before waste processing, generated by the product's installation (specified by type)

Name	Type	Weight	Unit (expressed per functional unit or per declared unit
Paper	packaging	2.46E-1	kg
Plastic	packaging	2.14E-3	kg

A5 Output materials (specified by type) as result of waste processing at the building site e.g. of collection for recycling, for energy recovery (specified by route)

Name	Type	Route	Weight	Unit (expressed per functional unit or per declared unit
Paper	packaging	recycling waste	2.37E-2	kg
Plastic	packaging	recycling waste	1.17E-3	kg
Paper	packaging	incineration waste	2.15E-1	kg
Paper	packaging	landfill waste	7.40E-3	kg
Plastic	packaging	incineration waste	9.61E-4	kg

End-of-life (C1-C4)

Scenario information	Unit (expressed per functional unit or per declared unit	
C1: Collection process specified by type	1 kg demolition/deconstruction of steel, wood and other materials Energy carrier: Diesel. Quantity: 1.1 kWh/tonne	
C2: Waste transport specified by type	0.870 kg materials not to be incinerated transported for 80 km	0.130 kg materials to be incinerated transported for 130 km
C3: Recovery system specified by type	0 kg for re-use 0.123 kg Plastic for recycling	0.652 kg Metal for recycling 0.022 kg Rubber for recycling
C4: Disposal specified by type	0.072 kg Metal for final disposal 0.101 kg Plastic for energy recovery 0.011 kg Polymer for energy recovery	0.000 kg Pigments for energy recovery 0.018 kg Rubber for energy recovery
Assumptions for scenario development, e.g. transportation	The transportation is modelled with the same specifications as the truck transportation in module A4, except the transportation distance is assumed to be 80 km for materials not to be incinerated and 130 km for materials to be incinerated.	

Environmental Information

Potential environmental impact – indicators according to EN 15804+A2

Results per declared unit: 1 kg									
Indicator	**Unit**	**A1 - A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-total	kg CO2 eq	4.02E+0	1.14E-1	3.89E-1	3.99E-4	2.35E-2	5.90E-2	3.35E-1	-1.57E+0
GWP-fossil	kg CO2 eq	4.06E+0	1.14E-1	1.99E-2	3.99E-4	2.35E-2	5.24E-2	3.35E-1	-1.55E+0
GWP-biogenic	kg CO2 eq	-3.30E-1	1.33E-4	3.69E-1	0.00E+0	2.73E-5	6.52E-3	5.66E-6	-2.02E-2
GWP-luluc	kg CO2 eq	2.92E-1	3.78E-5	2.98E-6	4.08E-8	7.78E-6	4.26E-5	1.85E-6	-1.40E-3
ODP	kg CFC-11 eq	1.73E-5	2.49E-9	1.98E-10	5.92E-12	5.12E-10	5.78E-10	1.10E-10	-1.30E-5
AP	mole H+ eq	1.34E-2	3.67E-4	8.45E-5	3.56E-6	7.54E-5	2.13E-4	5.09E-5	-4.94E-3
EP-freshwater	kg P eq	9.28E-4	7.80E-6	2.46E-6	1.28E-8	1.60E-6	1.29E-5	1.20E-6	-4.15E-4
EP-marine	kg N eq	3.18E-3	1.24E-4	5.95E-5	1.66E-6	2.54E-5	1.26E-4	2.37E-5	-1.04E-3
EP-terrestrial	mole N eq	3.16E-2	1.34E-3	3.91E-4	1.82E-5	2.76E-4	6.97E-4	2.43E-4	-1.11E-2
POCP	kg NMVOC eq	1.21E-2	5.56E-4	1.11E-4	5.43E-6	1.14E-4	2.38E-4	6.37E-5	-4.66E-3
ADP-minerals & metals*	kg Sb eq	4.80E-5	3.85E-7	3.85E-8	1.47E-10	8.11E-8	4.49E-7	1.67E-8	-2.60E-5
ADP-fossil*	MJ	5.85E+1	1.63E+0	1.23E-1	5.19E-3	3.33E-1	5.62E-1	6.25E-2	-2.19E+1
WDP*	m3	1.05E+1	8.70E-3	1.08E-2	1.34E-5	1.75E-3	9.80E-3	2.76E-2	-5.57E-1

Acronyms	GWP-fossil = Global Warming Potential fossil fuels; GWP-biogenic = Global Warming Potential biogenic; GWP-luluc = Global Warming Potential land use and land use change; ODP = Depletion potential of the stratospheric ozone layer; AP = Acidification potential, Accumulated Exceedance; EP-freshwater = Eutrophication potential, fraction of nutrients reaching freshwater end compartment; EP-marine = Eutrophication potential, fraction of nutrients reaching marine end compartment; EP-terrestrial = Eutrophication potential, Accumulated Exceedance; POCP = Formation potential of tropospheric ozone; ADP-minerals&metals = Abiotic depletion potential for non-fossil resources; ADP-fossil = Abiotic depletion for fossil resources potential; WDP = Water (user) deprivation potential, deprivation-weighted water consumption

* 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 experience with the indicator.

For more information refer to disclaimer table.

Use of resources

Results per declared unit: 1 kg									
Indicator	Unit	A1 - A3	A4	A5	C1	C2	C3	C4	D
PERE	MJ	5.03E+1	2.64E-2	3.21E+0	-3.93E-3	-1.18E-1	-1.04E-1	4.49E-3	0.00E+0
PERM	MJ	3.05E+0	0.00E+0	-3.05E+0	0.00E+0	0.00E+0	-1.96E-4	-2.17E-5	0.00E+0
PERT	MJ	5.34E+1	2.64E-2	1.67E-1	-3.93E-3	-1.18E-1	-1.04E-1	4.47E-3	0.00E+0
PENRE	MJ	3.72E+1	1.63E+0	2.25E-1	-3.96E-3	-1.23E-1	5.04E+0	4.35E+0	0.00E+0
PENRM	MJ	9.30E+0	0.00E+0	-5.69E-2	0.00E+0	0.00E+0	-4.96E+0	-4.29E+0	0.00E+0
PENRT	MJ	4.65E+1	1.63E+0	1.68E-1	-3.96E-3	-1.23E-1	7.85E-2	6.25E-2	0.00E+0
SM	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
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
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
FW	m3	3.70E-1	2.02E-4	2.27E-5	1.28E-8	1.01E-6	7.64E-5	6.42E-4	-1.13E-1
Acronyms	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials; PENRT = Total use of non-renewable primary energy re-sources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Use of net fresh water								

Option A has been selected in calculating the primary energy indicators. Under this option, the energy is recorded as an input in the module where it enters the product system (A1–A3) and as an equivalent output in the module where it exits the system (A5 for packaging content and C3 and/or C4 for product content), whether it is transferred to another product system or treated as waste.

Additional voluntary indicators

Results per declared unit: 1 kg									
Indicator	Unit	A1 - A3	A4	A5	C1	C2	C3	C4	D
GWP-GHG	kg CO2 eq	4.36E+0	1.14E-1	2.46E-2	3.99E-4	2.35E-2	5.90E-2	3.35E-1	-1.55E+0
Acronyms	GWP-GHG global warming potential - greenhouse gases								

The GWP-GHG indicator is identical to GWP-total except that the characterisation factor (CF) for biogenic CO2 is set to zero. This means that the uptake and emissions of biogenic CO2 are “balanced out” already in modules A1-A3, instead of in modules A1-A5 (for packaging) or modules A-C (for product). In the context of Norwegian public procurement legislation, GWP-GHG is also referred to as GWP-IOBC.

Waste and output flows

Results per declared unit: 1 kg									
Indicator	Unit	A1 - A3	A4	A5	C1	C2	C3	C4	D
HWD	kg	3.58E-1	0.00E+0	6.10E-2	9.46E-4	2.95E-2	3.47E-2	0.00E+0	-2.41E-1
NHWD	kg	6.17E-1	0.00E+0	2.40E-2	3.06E-3	9.55E-2	0.00E+0	7.24E-2	-3.42E-1
RWD	kg	5.53E-5	0.00E+0	6.73E-8	5.43E-10	9.80E-8	2.06E-7	0.00E+0	-4.37E-5
Acronyms	HW Hazardous waste disposed; NHW Non-hazardous waste disposed; RW Radioactive waste disposed								

Output flows

Results per declared unit: 1 kg									
Indicator	Unit	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	0.00E+0	0.00E+0	0.00E+0
MFR	kg	1.31E-1	0.00E+0	2.49E-2	0.00E+0	0.00E+0	7.97E-1	0.00E+0	-2.27E-4
MER	kg	4.87E-8	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	-3.94E-8
EEE	MJ	2.65E-1	0.00E+0	3.77E-1	0.00E+0	0.00E+0	0.00E+0	5.21E-1	0.00E+0
EET	MJ	5.34E-1	0.00E+0	7.58E-1	0.00E+0	0.00E+0	0.00E+0	1.02E+0	0.00E+0
Acronyms	CRU Components for reuse; MFR Materials for recycling; MER Materials for energy recovery; EEE Exported electric energy; ETE Exported thermal energy								

Information on biogenic carbon content

Parameter	Unit	Value
Biogenic carbon content in product	kg C	0.00
Biogenic carbon content in accompanying packaging	kg C	0.10
Note	1 kg biogenic carbon is equivalent to 44/12 kg of CO2	

Environmental impact performance from 100% scenarios

Potential environmental impact – indicators according to EN 15804+A2

Mandatory impact category indicators according to EN 15804

Results per declared unit: 1 kg													
Indicator	Unit	C2 100% RC	C2 100% INC	C2 100% LF	C3 100% RC	C3 100% INC	C3 100% LF	C4 100% RC	C4 100% INC	C4 100% LF	D 100% RC	D 100% INC	D 100% LF
GWP-total	kg CO2 eq	2.48E-2	1.52E-2	2.48E-2	8.87E-2	0.00E+0	0.00E+0	0.00E+0	7.07E-1	3.30E-2	-1.99E+0	-1.44E-1	0.00E+0
GWP-fossil	kg CO2 eq	2.47E-2	1.52E-2	2.47E-2	8.14E-2	0.00E+0	0.00E+0	0.00E+0	7.07E-1	2.95E-2	-1.97E+0	-1.43E-1	0.00E+0
GWP-biogenic	kg CO2 eq	2.87E-5	1.77E-5	2.87E-5	7.25E-3	0.00E+0	0.00E+0	0.00E+0	1.01E-4	3.55E-3	-2.29E-2	0.00E+0	0.00E+0
GWP-luluc	kg CO2 eq	8.19E-6	5.04E-6	8.19E-6	6.92E-5	0.00E+0	0.00E+0	0.00E+0	3.49E-6	3.20E-6	-1.51E-3	-5.01E-4	0.00E+0
ODP	kg CFC-11 eq	5.39E-10	3.32E-10	5.39E-10	8.97E-10	0.00E+0	0.00E+0	0.00E+0	2.12E-10	2.10E-10	-1.52E-5	-6.29E-9	0.00E+0
AP	mole H+ eq	7.94E-5	4.89E-5	7.94E-5	3.23E-4	0.00E+0	0.00E+0	0.00E+0	1.02E-4	5.10E-5	-6.49E-3	-2.48E-4	0.00E+0
EP-freshwater	kg P eq	1.69E-6	1.04E-6	1.69E-6	1.91E-5	0.00E+0	0.00E+0	0.00E+0	2.52E-6	6.74E-7	-5.23E-4	-7.09E-6	0.00E+0
EP-marine	kg N eq	2.67E-5	1.65E-5	2.67E-5	1.83E-4	0.00E+0	0.00E+0	0.00E+0	4.77E-5	5.87E-4	-1.36E-3	-8.07E-5	0.00E+0
EP-terrestrial	mole N eq	2.91E-4	1.79E-4	2.91E-4	1.06E-3	0.00E+0	0.00E+0	0.00E+0	4.87E-4	2.18E-4	-1.42E-2	-9.22E-4	0.00E+0
POCP	kg NMVOC eq	1.20E-4	7.41E-5	1.20E-4	3.70E-4	0.00E+0	0.00E+0	0.00E+0	1.25E-4	8.54E-5	-6.46E-3	-3.24E-4	0.00E+0
ADP-minerals & metals*	kg Sb eq	8.53E-8	5.25E-8	8.53E-8	6.24E-7	0.00E+0	0.00E+0	0.00E+0	3.51E-8	1.26E-8	-3.08E-5	-2.27E-7	0.00E+0
ADP-fossil*	MJ	3.51E-1	2.16E-1	3.51E-1	8.91E-1	0.00E+0	0.00E+0	0.00E+0	1.11E-1	1.75E-1	-3.07E+1	-3.96E+0	0.00E+0
WDP*	m3	1.84E-3	1.13E-3	1.84E-3	1.60E-2	0.00E+0	0.00E+0	0.00E+0	6.00E-2	8.06E-3	-7.23E-1	-4.12E-2	0.00E+0
Acronyms	GWP-fossil = Global Warming Potential fossil fuels; GWP-biogenic = Global Warming Potential biogenic; GWP-luluc = Global Warming Potential land use and land use change; ODP = Depletion potential of the stratospheric ozone layer; AP = Acidification potential, Accumulated Exceedance; EP-freshwater = Eutrophication potential, fraction of nutrients reaching freshwater end compartment; EP-marine = Eutrophication potential, fraction of nutrients reaching marine end compartment; EP-terrestrial = Eutrophication potential, Accumulated Exceedance; POCP = Formation potential of tropospheric ozone; ADP-minerals&metals = Abiotic depletion potential for non-fossil resources; ADP-fossil = Abiotic depletion for fossil resources potential; WDP = Water (user) deprivation potential, deprivation-weighted water consumption; RC = Recycling; INC = Incineration; LF = Landfill												

*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 experience with the indicator.

Use of resources 100% scenarios

Results per declared unit: 1 kg													
Indicator	Unit	C2 100% RC	C2 100% INC	C2 100% LF	C3 100% RC	C3 100% INC	C3 100% LF	C4 100% RC	C4 100% INC	C4 100% LF	D 100% RC	D 100% INC	D 100% LF
PERE	MJ	-1.24E-1	-7.65E-2	-1.24E-1	-2.14E-1	0.00E+0	0.00E+0	0.00E+0	9.82E-3	2.73E-1	0.00E+0	0.00E+0	0.00E+0
PERM	MJ	0.00E+0	0.00E+0	0.00E+0	-2.17E-4	0.00E+0	0.00E+0	0.00E+0	-2.17E-4	-2.17E-4	0.00E+0	0.00E+0	0.00E+0
PERT	MJ	-1.24E-1	-7.65E-2	-1.24E-1	-2.15E-1	0.00E+0	0.00E+0	0.00E+0	9.60E-3	2.73E-1	0.00E+0	0.00E+0	0.00E+0
PENRE	MJ	-1.30E-1	-8.00E-2	-1.30E-1	9.22E+0	0.00E+0	0.00E+0	0.00E+0	9.36E+0	9.63E+0	0.00E+0	0.00E+0	0.00E+0
PENRM	MJ	0.00E+0	0.00E+0	0.00E+0	-9.25E+0	0.00E+0	0.00E+0	0.00E+0	-9.25E+0	-9.25E+0	0.00E+0	0.00E+0	0.00E+0
PENRT	MJ	-1.30E-1	-8.00E-2	-1.30E-1	-2.68E-2	0.00E+0	0.00E+0	0.00E+0	1.11E-1	3.82E-1	0.00E+0	0.00E+0	0.00E+0
SM	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
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
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
FW	m3	1.06E-6	6.54E-7	1.06E-6	8.55E-5	0.00E+0	0.00E+0	0.00E+0	1.40E-3	1.18E-4	-1.29E-1	-1.12E-4	0.00E+0
Acronyms	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials; PENRT = Total use of non-renewable primary energy re-sources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Use of net fresh water												

Option A has been selected in calculating the primary energy indicators. Under this option, the energy is recorded as an input in the module where it enters the product system (A1–A3) and as an equivalent output in the module where it exits the system (A5 for packaging content and C3 and/or C4 for product content), whether it is transferred to another product system or treated as waste.

Additional voluntary indicators 100% scenarios

Results per declared unit: 1 kg													
Indicator	Unit	C2 100% RC	C2 100% INC	C2 100% LF	C3 100% RC	C3 100% INC	C3 100% LF	C4 100% RC	C4 100% INC	C4 100% LF	D 100% RC	D 100% INC	D 100% LF
GWP-GHG	kg CO2 eq	2.48E-2	1.52E-2	2.48E-2	8.87E-2	0.00E+0	0.00E+0	0.00E+0	7.07E-1	3.30E-2	-1.97E+0	-1.44E-1	0.00E+0
Acronyms	GWP-GHG global warming potential - greenhouse gases; RC = Recycling; INC = Incineration; LF = Landfill												

The GWP-GHG indicator is identical to GWP-total except that the characterisation factor (CF) for biogenic CO2 is set to zero. This means that the uptake and emissions of biogenic CO2 are “balanced out” already in modules A1-A3, instead of in modules A1-A5 (for packaging) or modules A-C (for product). In the context of Norwegian public procurement legislation, GWP-GHG is also referred to as GWP-IOBC.

Waste and output flows 100% scenarios

Results per declared unit: 1 kg													
Indicator	Unit	C2 100% RC	C2 100% INC	C2 100% LF	C3 100% RC	C3 100% INC	C3 100% LF	C4 100% RC	C4 100% INC	C4 100% LF	D 100% RC	D 100% INC	D 100% LF
HWD	kg	3.11E-2	1.91E-2	3.11E-2	6.58E-2	0.00E+0	0.00E+0	0.00E+0	0.00E+0	6.44E-2	-2.35E-1	-7.30E-2	0.00E+0
NHWD	kg	1.01E-1	6.19E-2	1.01E-1	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	9.36E-1	-2.72E-1	-2.36E-1	0.00E+0
RWD	kg	1.03E-7	6.35E-8	1.03E-7	3.91E-7	0.00E+0	0.00E+0	0.00E+0	0.00E+0	2.68E-8	-3.27E-5	-3.02E-5	0.00E+0
Acronyms	HW Hazardous waste disposed; NHW Non-hazardous waste disposed; RW Radioactive waste disposed												

Output flows 100% scenarios

Results per declared unit: 1 kg													
Indicator	**Unit**	**C2 100% RC**	**C2 100% INC**	**C2 100% LF**	**C3 100% RC**	**C3 100% INC**	**C3 100% LF**	**C4 100% RC**	**C4 100% INC**	**C4 100% LF**	**D 100% RC**	**D 100% INC**	**D 100% LF**
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
MFR	kg	0.00E+0	0.00E+0	0.00E+0	1.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	-2.52E-4	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	-4.38E-8	0.00E+0	0.00E+0
EEE	MJ	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	1.10E+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	2.15E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
Acronyms		CRU Components for reuse; MFR Materials for recycling; MER Materials for energy recovery; EEE Exported electric energy; ETE Exported thermal energy RC = Recycling; INC = Incineration; LF = Landfill											

Disclaimers

ILCD classification	Indicator	Disclaimer
ILCD Type 1	Global warming potential (GWP)	None
	Depletion potential of the stratospheric ozone layer (ODP)	None
ILCD Type 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
ILCD Type 3	Abiotic depletion potential for non-fossil resources (ADP-minerals & metals)	1
	Abiotic depletion potential for fossil resources (ADP-fossil)	1
	Water (user) deprivation potential, deprivation-weighted water consumption (WDP)	1
Disclaimer 1 – 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 experience with the indicator.		
Note 1: The estimated impact results are only relative statements, which do not indicate the endpoints of the impact categories, exceeding threshold values, safety margins, and/or risks.		
Note 2: The results presented for modules A1-A3 alone shall not be used for comparisons unless all relevant life cycle stages, particularly end-of-life (C1-C4), are included. This ensures a more accurate and representative environmental impact assessment over the full product life cycle.		

Abbreviations

General Abbreviations

EN	European Norm (Standard)
EPD	Environmental Product Declaration
EF	Environmental Footprint
GPI	General Programme Instructions
ISO	International Organization for Standardization
LCA	Life Cycle Assessment
PCR	Product Category Rules
c-PCR	Complementary Product Category Rules
CEN	European Committee for Standardization
CLC	Co-location centre
CPC	Central Product Classification
GHS	Globally harmonized system of classification and labelling of chemicals
GRI	Global Reporting Initiative

Environmental Impact Indicators (EN 15804)

GHG	Greenhouse gas
GWP	Global Warming Potential (kg CO_2 eq.)
GWP-fossil	Global Warming Potential from fossil sources (kg CO_2 eq.)
GWP-biogenic	Global Warming Potential from biogenic sources (kg CO_2 eq.)
GWP-luluc	Global Warming Potential from land use and land use change (kg CO_2 eq.)
GWP-total	Total Global Warming Potential (kg CO_2 eq.)
GWP-GHG	Global Warming Potential for greenhouse gases (kg CO_2 eq.)
ODP	Ozone Depletion Potential (kg CFC-11 eq.)
AP	Acidification Potential (mol H^+ eq.)
EP	Eutrophication Potential
EP-freshwater	Freshwater eutrophication potential (kg P eq.)
EP-marine	Marine eutrophication potential (kg N eq.)
EP-terrestrial	Terrestrial eutrophication potential (mol N eq.)
POCP	Photochemical Ozone Creation Potential (kg NMVOC eq.)
ADP	Abiotic Depletion Potential
ADP-minerals&metals	Abiotic depletion potential for non-fossil resources (kg Sb eq.)
ADP-fossil	Abiotic depletion potential for fossil resources (MJ)
WDP	Water Deprivation Potential (m^3)

Resource Use Indicators

PERE	Use of renewable primary energy excluding renewable primary energy resources used as raw materials (MJ)
PERM	Use of renewable primary energy resources used as raw materials (MJ)
PERT	Total use of renewable primary energy resources (MJ)
PENRE	Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials (MJ)
PENRM	Use of non-renewable primary energy resources used as raw materials (MJ)
PENRT	Total use of non-renewable primary energy resources (MJ)
SM	Use of secondary material (kg)
RSF	Use of renewable secondary fuels (MJ)
NRSF	Use of non-renewable secondary fuels (MJ)
FW	Use of net fresh water (m^3)

Abbreviations continued

Waste Indicators

HW	Hazardous Waste (disposed) (kg)
NHW	Non-Hazardous Waste (disposed) (kg)
RW	Radioactive Waste (disposed) (kg)

Output Flow Indicators

CFR	Components for Reuse (kg)
MR	Material for Recycling (kg)
MER	Materials for Energy Recovery (kg)
EEE	Exported Energy, Electricity (MJ)
EET	Exported Energy, Thermal (MJ)

Lifecycle Stages / Modules

A1	Raw material supply
A2	Transport
A3	Manufacturing
A4	Transport to site
A5	Construction/Installation
B1	Use
B2	Maintenance
B3	Repair
B4	Replacement
B5	Refurbishment
B6	Operational energy use
B7	Operational water use
C1	Deconstruction/Demolition
C2	Transport to waste processing
C3	Waste processing
C4	Disposal
D	Reuse-Recovery-Recycling potential

Other Relevant Terms

SVHC	Substances of Very High Concern
EC No.	European Community Number
CAS No.	Chemical Abstracts Service Number
MJ	Megajoule
kg	Kilogram
m^3	Cubic Meter
NMVOC	Non-Methane Volatile Organic Compounds
Sb eq.	Antimony Equivalents
RC	Recycling
LF	Landfill
P eq.	Phosphorus Equivalents
N eq.	Nitrogen Equivalents
CFC-11 eq.	Chlorofluorocarbon-11 Equivalents
CO_2 eq.	Carbon Dioxide Equivalents
kg C	Kilograms of Carbon
kg CO_2 eq.	Kilograms of Carbon Dioxide Equivalent
ND	Not Declared
INC	Incineration
MND	Module not declared

References

EN 15804:2012+A2	Sustainability of construction works: Environmental product declaration – Core rules for the product category of construction products
EPD International (2024)	General Programme Instructions of the International EPD® System, version 5.0
EPD International (2025)	PCR 2019:14. Construction products and construction services (EN 15804: A2) v2.0.1.
ISO 14020:2000	Environmental labels and declarations: General principles
ISO 14025:2006	Environmental labels and declarations — Type III environmental declarations — Principles and procedures
ISO 14040:2006	Environmental Management – Life cycle assessment – Principles and framework.
ISO 14044:2006	Environmental Management – Life Cycle Assessment – Requirements and Guidelines.
SCB (2023)	https://www.statistikdatabasen.scb.se/pxweb/en/ssd/START__MI__MI0305/MI0305T003/table/tableViewLayout1/ Accessed 2024
AIB (2022)	European Residual Mixes 2021 L2022) https://www.aibnet.org/sites/default/files/assets/facts/residualmix/2021/AIB_2021_Residual_Mix_Results_1_1.pdf LRetrieved 2023

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Contact Info

EPD owner

Unidrain A/S
Email: jho@unidrain.dk
Telephone: +45 51542107
Address: Ejby Industrivej 40, DK-26000 Denmark

LCA author

CarbonZero AB
Email: info@eando.se
Telephone: +46 4 317 07 07
Address: SE-262 32 Ängelholm, Sweden

Third party verifier

Sigita Židonienė
Email: sigita@vestaconsulting.lt
Telephone: +370 686 44423
Address: Bebrų str. 1, LT-08124 Vilnius, Lithuania

Program operator

EPD International AB
Email: info@environdec.com
Telephone: +46 (0)73 311 30 20
Address: SE-11427 Stockholm, Sweden