ENVIRONMENTAL PRODUCT DECLARATION

after ISO 14025 and *EN 15804+A2*

Declaration holder	ACO Passavant GmbH
Publisher	Institut Bauen und Umwelt e.V. (IBU)
Programme holder	Institut Bauen und Umwelt e.V. (IBU)
Declaration number	EPD-ACO-20240334-IBC1-DE
Date of issue	31.10.2024
Valid until	30.10.2029

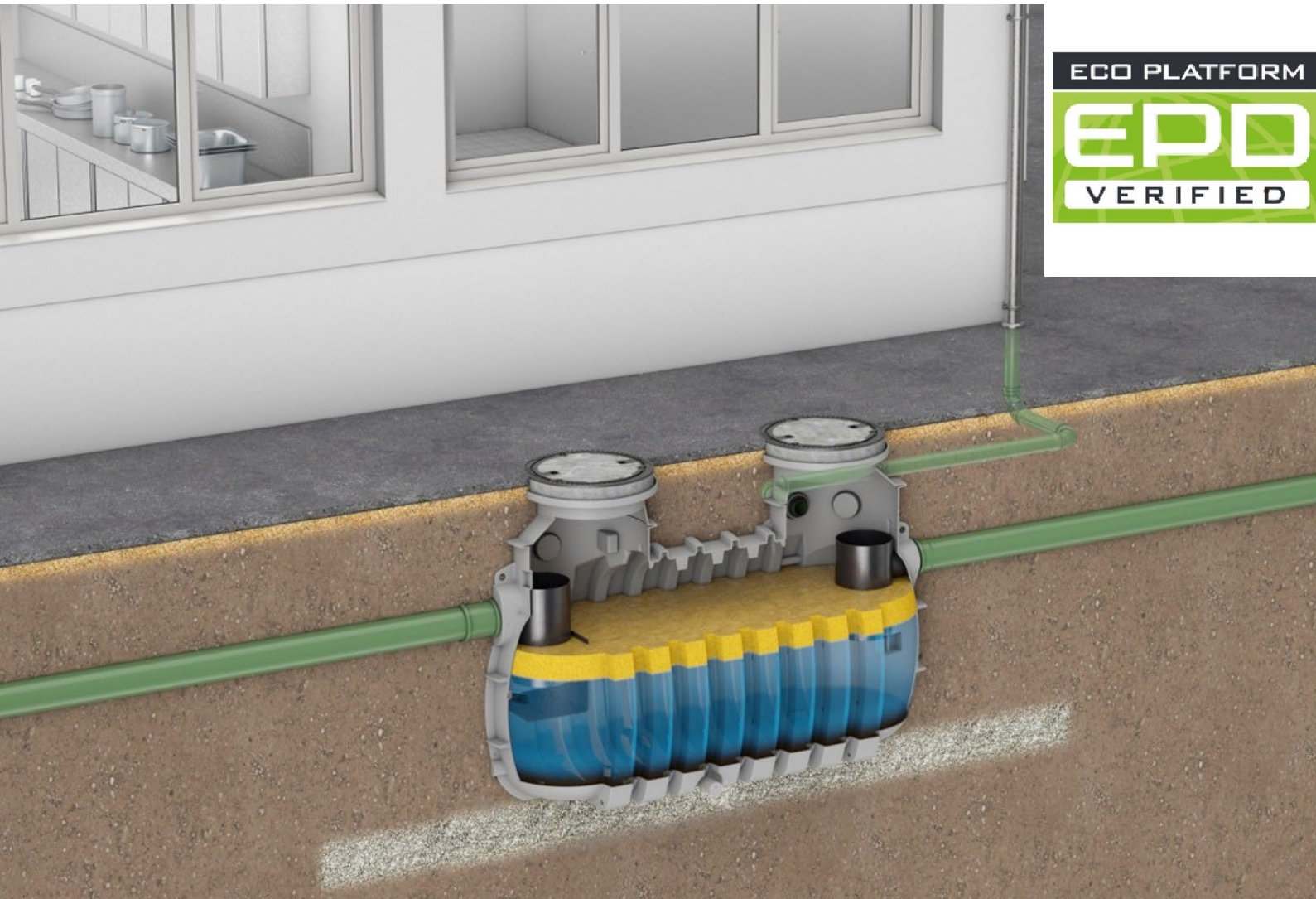
Rotomoulded containers for dewatering products

ACO Passavant GmbH

Institut Bauen und Umwelt e.V.

ECO PLATFORM EPD VERIFIED

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



1. General information

ACO Passavant

Programme holder

IBU - Institut Bauen und Umwelt e.V.
Hegelplatz 1
10117 Berlin Germany

Declaration number

EPD-ACO-20240334-IBC1-DE

This declaration is based on the product category rules:

Rotomoulded containers for dewatering products, 08/09/2023 (PCR tested and approved by the Independent Expert Council (SVR))

on the
Date of issue

31.10.2024

Valid until

30.10.2029

Dipl.-Ing. Hans Peters
(Chairman of the Board of the Institut Bauen und Umwelt e.V.)

Florian Pronold
(Managing Director of the Institut Bauen und Umwelt e.V.)

GmbHRotated containers for drainage products

Holder of the declaration

ACO Passavant GmbH
Ulsterstraße 3
36269 Philippsthal
Germany

Declared product/declared unit

1 kg rotomoulded containers for dewatering technology

Scope of validity:

The explanation applies to all grease separators of the LipuMax-P, LipuSmart-P, LipuLift-P, LipuJet-P, Lipator-P and LipuMobil-P series, BioJet, all lifting stations/pump stations of the Muli and Sinkamat-K series, all pump stations of the Muli-Max, Compit and Powerlift-P series and all
oil separators of the Coalisator-P and Oleopator-P series, which are mounted

production site of ACO Passavant GmbH, Im Gewerbeparkt 11c, 36466 Dermbach.
The holder of the declaration is liable for the underlying information and evidence; the IBU accepts no liability with regard to manufacturer information, life cycle assessment data and evidence.

The EPD was prepared after the specifications of EN 15804+A2. In the following, the standard is referred to simply as *EN 15804*.

Verification

The European standard EN 15804 serves as the core PCR	
Independent verification of the declaration and information in accordance with ISO 14025:2011	
☐ internal	☒ external

Matthias Klingler, (independent verifier)

2. Product

2.1 Product description/product definition

The products in the LipuJet-P, Lipator-P, LipuMobil-P, LipuSmart-P, LipuMax-P, LipuLift-P, Coalisator-P, Oleopator-/Oleopass-P, Muli, Compit, Powerlift-P, Sinkamat-K and BioJet- P are used for the pre-cleaning and drainage of domestic, commercial and industrial wastewater.

The placing on the market of the products in the EU/EFTA (with the exception of Switzerland) is subject to Decree (EU) No.
305/2011(CPR). The products require a declaration of performance taking into account the applicable product standards *EN 1825-1*, Grease separators - Part 1: Construction, function and test principles, marking and quality control, *EN 858*
Separator systems for light liquids (e.g. oil and petrol) - Part 1: Construction, function and test principles, marking and quality control, *EN 12050-1* Wastewater lifting stations for building and land drainage - *DIN EN 12050* Part 1: Faecal matter lifting stations or *EN 12050-2* Wastewater lifting stations for building and land drainage - Part 2: Wastewater lifting stations for non-faecal wastewater and CE marking.

The respective national regulations apply for use.

2.2 application

The products 'LipuJet-P', 'Lipator-P', 'LipuMobil-P', 'LipuSmart-P', 'LipuMax-P' and 'LipuLift-P' are used to separate separable animal and vegetable fats and oils from wastewater streams. 'Biojet-P' is a further treatment after grease separator systems to further reduce the proportion of animal fats and oils, especially emulsions. The products 'Coalisator-P', 'Oleopator-P' and 'Oleopass-P' are used to separate separable mineral oils from wastewater streams. The products of the 'Muli' series, 'Compit', 'Powerlift-P' and 'Sinkamat-K' are used to lift wastewater above the backflow level with subsequent discharge of the wastewater with a slope into the public sewer.

2.3 Technical data grease separator

As with all rotomoulded containers for dewatering products from ACO Passavant GmbH, the grease separators are typically manufactured from the same polyethylene base material, regardless of the design, and the essential characteristics can only ever be determined with the value 'passed'. Therefore, information on the essential characteristics listed below applies to all versions of the LipuJet-P, Lipator-P, LipuSmart-P, LipuLift-P and Lipumax-P product series.

Performance values: LipuJet-P, LipuMax-P, Lipator-P, LipuSmart-P and Lipumax-P

Bezeichnung	Wert	Einheit
Flüssigkeitsdichtheit nach DIN EN 1825-1	bestanden	-
Wirksamkeit nach DIN EN 1825-1	bestanden	-
Tragfähigkeit nach DIN EN 1825-1	bestanden	-
Dauerhaftigkeit nach DIN EN 1825-1	bestanden	-

Performance values: LipuMobil-P
EN 1825-1 does not cover grease separators smaller than nominal size
1 However, the effectiveness is still determined using the test criteria from EN 1825-1.

Bezeichnung	Wert	Einheit
Flüssigkeitsdichtheit nach DIN EN 1825-1	bestanden	-
Wirksamkeit nach DIN EN 1825-1	bestanden	-
Tragfähigkeit nach DIN EN 1825-1	bestanden	-
Dauerhaftigkeit nach DIN EN 1825-1	bestanden	-

All light-oil separators in the Coalisator-P and Oleopator-P series are made from the same polyethylene base material and the essential characteristics can only ever be determined with the value 'passed'. Therefore, information on the essential characteristics listed below applies to all versions of the Coalisator-P and Oleopator-P product series.

Performance values: Coalisator-P and Oleopator-P series:

Bezeichnung	Wert	Einheit
Flüssigkeitsdichtheit nach EN 858-1	bestanden	-
Wirksamkeit nach EN 858-1	bestanden	-
Tragfähigkeit nach EN 858-1	bestanden	-
Dauerhaftigkeit nach EN 858-1	bestanden	-

Performance values: Muli, Powerlift-P and Sinkamat-K series after
DIN EN 12050-1/-2.

DIN EN 12050-1/-2 covers various characteristics which can always be explained with the same performance information with regard to the production material used and the possible performance specifications:

Bezeichnung	Wert	Einheit
Wasserdichtheit nach DIN EN 12050	keine Leckage	-
Geruchsdichtheit nach DIN EN 12050	keine Leckage	-
Förderung von Feststoffen nach DIN EN 12050	keine Ansammlung von Feststoffen	-
Mindestfließgeschwindigkeit DIN EN 12050	0,7	m/s
Strukturelle Stabilität des Sammelbehälters nach DIN EN 12050	0,5 bar Überdruck für 10 min	-
Geräuschpegel nach DIN EN 12050 unter	unter 70	dB
Dauerhaftigkeit und Luftdichtheit nach DIN EN 12050	keine Leckage	-

Various other features include a variety of details on the respective performances due to the absence of benefits. These are

- Pipe connections: DN 50 to DN 200
- Minimum dimensions of the vent stacks: DN 70 to DN 100

2.4 Delivery condition

As some of the dimensions do not refer to individual containers, but to complete systems with several containers:

The overall dimensions of the rotomoulded containers vary greatly, but are usually in the approx. 400 mm - 4000 mm range (LxWxH). More detailed information on the products that comprise this EPD can be requested from the declaration holder or can be accessed at https://www. ACO Building Drainage.com/products/

2.5 Base materials/auxiliary materials

The declared products consist of 100 % polyethylene. In addition, there is a release agent with a mass fraction of < 1 %.

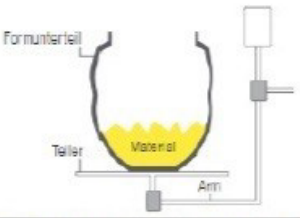
The product/product/at least one
Partial product contains substances on the *ECHA list* of substances of very high concern (SVHC) for approval (date 17.06.2024) above 0.1 mass %: no.

The product/product/at least one sub-product contains other CMR substances of category 1A or 1B, which are not on the *candidate list*, above 0.1 % weight by weight in at least one sub-product: no.

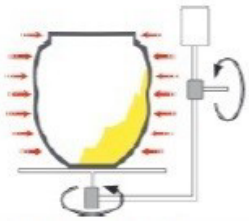
Biocidal products have been added to this construction product or it has been treated with biocidal products (it is therefore a treated product within the meaning of the Biocidal Products Regulation (EU) No. 528/2012): no.

2.6 Manufacture

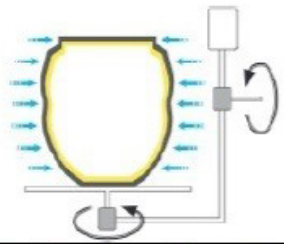
Rotary production
By rotating around two axes and heating, PE powder is deposited in layers on the inner surfaces of the mould in thin-walled moulds.



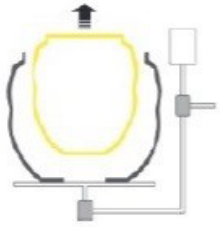
Pulverförmiges Thermoplast wird in eine Rotationsform gegeben. Die Form wird anschließend verschlossen.



Durch Rotation und gleichzeitiges Erhitzen wird das Pulver an die Formwand angelagert.



Der Prozess endet, wenn das Pulver aufgebraucht ist und somit die gewünschte Wandstärke erreicht ist.



Nach einer Abkühlphase wird das fertige Rotationsteil der Form entnommen.

Product manufacturing is monitored within the framework of the ISO 9001:2015 quality standard.

2.7 Environment and health during production

ACO is certified after ISO 14001 and ISO 50001.

The waste heat from the rotomoulding ovens is captured by heat exchangers and reused to heat the office wing. This saves approx. 110 tonnes of CO2 per year.

2.8 Product processing/installation

The prefabricated components are demoulded while still warm, cleaned on the outside and burrs are removed. This is done with standard cutter knives and special blades. The required openings are then produced using routers, for example. To 'finish' the surface, gas burners are used on some products to smooth the surface.

2.9 Packaging

Due to their size, the systems are usually packed and banded on a pallet. PE film bags are used to protect them from the weather. These can be fed into the recycling process.

2.10 State of utilisation

Polyethylene as a base material is subject to various physical and biological changes during its service life, which can alter its properties.

2.11 Environment and health during use

Polyethylene can release harmful substances, e.g:

- Plasticiser
- Stabilisers
- Residues from processing agents

2.12 Reference service life

The reference service life (RSL) could not be determined in accordance with *ISO 15686*. The reference service life according to the manufacturer's specifications is given in Chapter 4.

2.13 Exceptional events Fire

fire protection

Designation	Value	unit
building material class	E	

Water
The declared products do not change when exposed to water (e.g. Flood).

Mechanical destruction
Mechanical destruction of rotomoulded containers is not expected to pose a hazard to the environment.

2.14 Post-utilisation phase

Polyethylene can usually be mechanically recycled by shredding it into small particles and then processing it into new products such as bags, pipes, bottles or foils. However, this process is boundary due to the chemical stability of polyethylene and the recycled material may not be as high quality as the original material. For this reason, it is important that polyethylene products are appropriately labelled and sorted to enable effective separation and recycling.

There are also methods for the chemical recycling of polyethylene, in which the material is broken down into its parts and then converted into raw materials for new products.

is converted. However, this technology is still relatively new and its commercial application is limited.

2.15 disposal

Polythene waste is either recycled or thermally utilised in waste incineration plants. If the polyethylene can be recycled, it is usually taken to a recycling plant where it is sorted, cleaned and shredded into small particles. These particles can then be used to make new products from polyethylene.

If the polyethylene cannot be recycled, it is usually thermally utilised. In some cases, it can also be incinerated to generate energy, although this is not a viable option.

is not the preferred method of disposal as it can release pollutants into the air.

There are also methods for the chemical recycling of polyethylene, in which the material is broken down into its parts and then converted into raw materials for new products. However, this technology is still relatively new and its commercial application is limited.

The waste code for the declared rotomoulded containers for dewatering products is 17 02 03 and 19 12 04 (*EWC*).

2.16 Further information

https://www. ACO Building Drainage.com/products/

3. LCA: Calculation rules

3.1 Declared unit

The declaration refers to the production of one kg of rotomoulded containers for dewatering products. The bulk density is 0.9 g/cm³

Declared unit

Designation	Value	unit
Declared unit	1	kg
Raw density	900	kg/m3
Raw density	0,9	g/cm³

3.2 System boundary

Type of EPD: Cradle-to-gate (from the cradle to the factory gate).
The life cycle assessment takes into account the extraction of raw materials, the transport of raw materials and the actual manufacture of the product (modules A1 - A3).
Furthermore, the product is dismantled after the gullies of its service life (module C1).
The collection rate is set at 100 %.
After the transport of the dismantled product (module C2), the recycling process for 100 % of the rotomoulded containers after reprocessing (module C3) is
have been recognised. Credits as a result of recycling of the rotomoulded containers are declared in Module D. The construction stage of the structure (modules A4 and A5) and the utilisation stage (modules B1 - B7) are not taken into account in this study.

3.3 Estimates and assumptions

The raw material polyethylene powder used was substituted with the data set: "DE: Polyethylene high density granulate".
The factors primarily responsible for the environmental impacts of the declared product are shown under 6 (LCA: Interpretation).

3.4 Cutting rules

The packaging materials were cut off due to their very marginal share in relation to the declared unit, taking into account the 1 % rule. The same applies to the wear factor of the wooden pallet for transport and in the
machines, equipment and infrastructure required for production. It can be assumed that the neglected processes would have contributed less than 5 % to the respective impact categories.

3.5 Background data

For modelling the production stage of rotomoulded containers of ACO Passavant GmbH, the system developed by *LCA for Experts software* developed by Sphera Solutions GmbH. All background data sets relevant to production were taken from *the LCA for Experts Software 10 database*. The corresponding quantities (mass/material balance) were provided by the manufacturer.

3.6 Data quality

The revision date of the background data is less than 10 years ago. The data provided by the manufacturer is of good quality and dates back to the 2022 financial year.

3.7 Period under review

The data basis for this life cycle assessment is based on current data collected at the production site of the manufacturer ACO Passavant GmbH from the 2022 financial year. Questionnaires for recording input and output flows were used to record all relevant material and energy flows from the reference year 2022 and related to the end product of 1 kg of rotomoulded containers.

3.8 Geographical representativeness

Country or region in which the declared product system is manufactured and, if necessary, used and treated at the end of life: Germany

3.9 Allocation

The production process does not yield any by-products. No allocation is therefore integrated in the applied life cycle assessment model.
The internal waste from production is recycled.

3.10 Comparability

In principle, a comparison or evaluation of EPD data is only possible if all data sets to be compared were created *after EN 15804* and the building context or product-specific performance characteristics are taken into account. The background data comes from the *LCA for Experts database 10* (Content Version 2023.2)

4. LCA: Scenarios and further technical information

Characteristic product features of biogenic carbon

The declared product and the packaging do not contain any biogenic carbon.

Information on the description of the biogenic carbon content at the plant gate

Designation	Value	unit
Biogenic carbon in the product	-	kg C
Biogenic carbon in the associated packaging	-	kg C

Reference service life

Designation	Value	unit
Service life after manufacturer's specification	40	a

End of the journey through life (C1-C4)

Designation	Value	unit
Collected separately Waste type	1	kg
For recycling	0,6	kg
For energy recovery	0,4	kg

Reuse, recovery and recycling potential (D), relevant scenario information

Designation	Value	unit

D:Credits due to recycling and thermal utilisation after processing

5. LCA: Results

The following tables show the results of the impact assessment indicators, resource use, waste and other output flows in relation to one kilogramme of rotomoulded containers.

The version number of the characterisation factors used is *EN 15804+A2* (based on EF 3.1)

INDICATION OF SYSTEM BOUNDARIES (X = INCLUDED IN LIFE CYCLE ASSESSMENT; MND = MODULE OR INDICATOR NOT DECLARED;
MNR = MODULE NOT RELEVANT)

Production stage			Stage of construction of the structure		Utilisation stage							Disposal stage				Credits and debits outside the system boundary
Raw material supply	transport	Manufacture	Transport from the manufacturer to assembly		Utilisation/application	maintenance	repair	Replacement	Renewal	Energy use for the operator of the building	Use of water for the operator of the building	Dismantling/demolition	transport	Waste treatment	Elimination	Reuse, recovery or recycling potential
A1	**A2**	**A3**	**A4**	**A5**	**B1**	**B2**	**B3**	**B4**	**B5**	**B6**	**B7**	**C1**	**C2**	**C3**	**C4**	**D**
X	X	X	MND	MND	MND	MND	MNR	MNR	MNR	MND	MND	X	X	X	X	X

RESULTS OF THE ECOBALANCE - ENVIRONMENTAL IMPACT after EN 15804+A2: 1 kg rotomoulded containers

Indicator	unit	A1-A3	C1	C2	C3	C4	D
Total global warming potential (GWP-total)	kg CO_2 -eq.	2,51E+00	2,62E-04	4,03E-03	5,44E-02	0	-2,11E+00
Global warming potential fossil (GWP fossil)	kg CO_2 -eq.	2,49E+00	2,61E-04	4,03E-03	5,37E-02	0	-2,1E+00
Global warming potential biogenic (GWP-biogenic)	kg CO_2 -eq.	1,4E-02	9,94E-07	-1,83E-05	7,12E-04	0	-6,8E-03
Global warming potential luluc (GWP-luluc)	kg CO_2 -eq.	4,21E-04	1,57E-06	2,43E-05	8,31E-06	0	-9,04E-05
Depletion potential of the stratospheric ozone layer (ODP)	kg CFC11-eq.	7,42E-12	4,61E-17	7,11E-16	1,66E-12	0	-3,07E-12
Acidification potential of soil and water (AP)	mol H+-eq.	2,78E-03	3,59E-06	5,03E-06	8,27E-05	0	-1,41E-03
Eutrophication potential freshwater (EP-freshwater)	kg P-eq.	2,8E-06	6,13E-10	9,46E-09	3,09E-07	0	-1,33E-06
Eutrophication potential salt water (EP-marine)	kg N-eq.	9,13E-04	1,64E-06	1,85E-06	2,68E-05	0	-3,84E-04
Eutrophication potential land (EP-terrestrial)	mol N-eq.	9,69E-03	1,8E-05	2,21E-05	2,76E-04	0	-4,57E-03
Formation potential for tropospheric ozone (POCP)	kg NMVOC-Eq.	3,6E-03	4,89E-06	4,38E-06	6,44E-05	0	-1,7E-03
Potential for abiotic depletion of non-fossil resources (ADPE)	kg Sb-eq.	1,55E-05	1,87E-11	2,89E-10	9,8E-09	0	-4,61E-08
Potential for abiotic depletion of fossil fuels (ADPF)	MJ	8,46E+01	3,57E-03	5,51E-02	7,5E-01	0	-3,97E+01
Water utilisation (WDP)	m^3 world eq. withdrawn	7,6E+00	1,37E-06	2,11E-05	1,57E-03	0	-1,28E-02

RESULTS OF THE ECOBALANCE - INDICATORS FOR THE DESCRIPTION OF RESOURCE USE after EN 15804+A2: 1 kg rotomoulded containers

Indicator	unit	A1-A3	C1	C2	C3	C4	D
Renewable primary energy as an energy source (PERE)	MJ	3,65E+00	2,31E-04	3,56E-03	7,4E-01	0	-1,54E+00
Renewable primary energy for material utilisation (PERM)	MJ	0	0	0	0	0	0
Total renewable primary energy (PERT)	MJ	3,65E+00	2,31E-04	3,56E-03	7,4E-01	0	-1,54E+00
Non-renewable primary energy as an energy source (PENRE)	MJ	8,46E+01	3,57E-03	5,51E-02	7,5E-01	0	-3,97E+01
Non-renewable primary energy for material utilisation (PENRM)	MJ	2,05E+01	0	0	-2,05E+01	0	0
Total non-renewable primary energy (PENRT)	MJ	1,05E+02	3,57E-03	5,51E-02	-1,98E+01	0	-3,97E+01
Use of secondary materials (SM)	kg	0	0	0	0	0	6E-01
Renewable secondary fuels (RSF)	MJ	0	0	0	0	0	0
Non-renewable secondary fuels (NRSF)	MJ	0	0	0	0	0	4E-01
Use of freshwater resources (FW)	m^3	7,19E-03	2,1E-07	3,24E-06	2,5E-04	0	-6,68E-03

RESULTS OF THE ECOBALANCE - WASTE CATEGORIES AND OUTPUT FLOWS after EN 15804+A2: 1 kg rotomoulded container

Indicator	unit	A1-A3	C1	C2	C3	C4	D
Hazardous waste to landfill (HWD)	kg	9,4E-09	9,57E-15	1,48E-13	1,43E-10	0	3,45E-09
Non-hazardous waste disposed of (NHWD)	kg	2,43E-02	5,21E-07	8,04E-06	7,08E-04	0	-1,61E-02
Disposed radioactive waste (RWD)	kg	3,75E-04	3,74E-09	5,76E-08	7,39E-05	0	-1,63E-04
Components for reuse (CRU)	kg	0	0	0	0	0	0
Materials for recycling (MFR)	kg	0	0	0	6E-01	0	0
Materials for energy recovery (MER)	kg	0	0	0	4E-01	0	0
Exported electrical energy (EEE)	MJ	0	0	0	0	0	0
Exported thermal energy (EET)	MJ	0	0	0	0	0	0

RESULTS OF THE ECOBALANCE - additional impact categories after EN 15804+A2-optional: 1 kg rotomoulded container

Indicator	unit	A1-A3	C1	C2	C3	C4	D

Occurrence of diseases due to particulate matter (PM) emissions	Cases of illness	ND	ND	ND	ND	ND	ND
Effects of human exposure to U235 (IR)	kBq U235-eq.	ND	ND	ND	ND	ND	ND
Toxicity comparison unit for ecosystems (ETP-fw)	CTUe	ND	ND	ND	ND	ND	ND
Toxicity comparison unit for humans (carcinogenic) (HTP-c)	CTUh	ND	ND	ND	ND	ND	ND
Toxicity comparison unit for humans (non-carcinogenic) (HTP-nc)	CTUh	ND	ND	ND	ND	ND	ND
Soil Quality Index (SQP)	SQP	ND	ND	ND	ND	ND	ND

Restriction notice 1 - applies to the indicator "Potential effect of human exposure to U235".

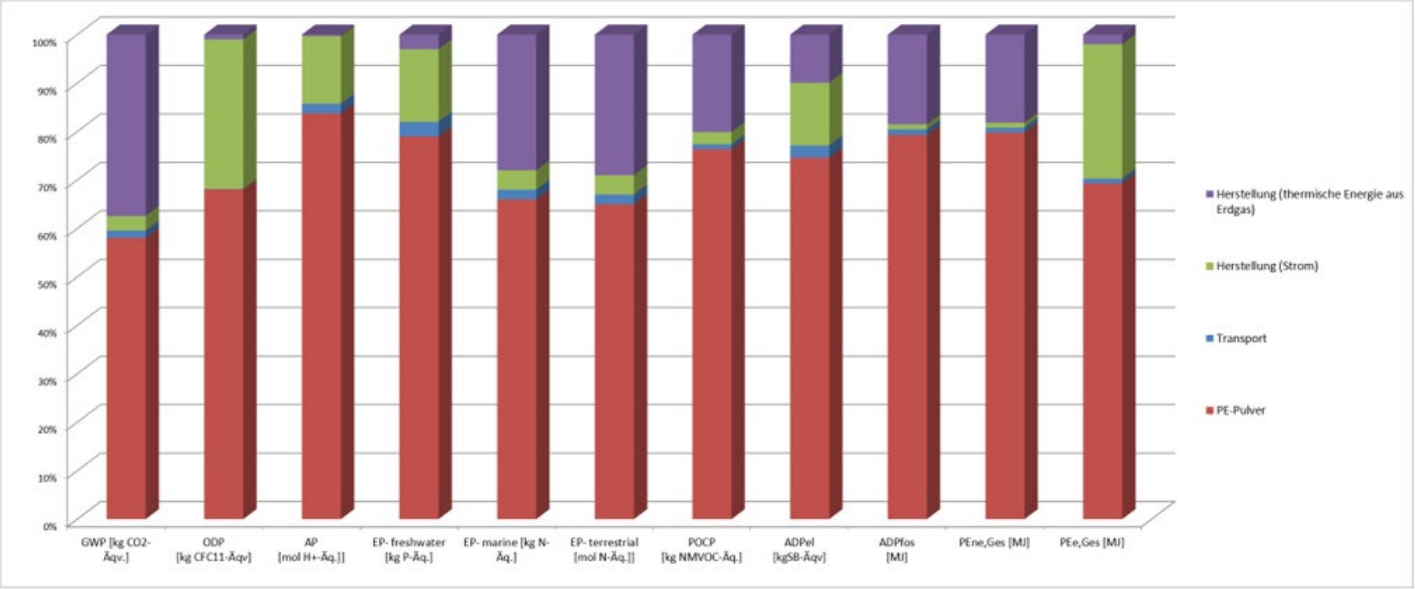
This impact category mainly deals with the possible effect of low-dose ionising radiation on human health in the nuclear fuel cycle. It does not take into account effects due to possible nuclear accidents and occupational exposure, nor the disposal of radioactive waste in underground facilities. Potential ionising radiation from soil, radon and some building materials is also not measured by this indicator.

Caveat 2 - applies to the indicators: "Potential for depletion of abiotic resources - non-fossil resources", "Potential for depletion of abiotic resources - fossil fuels", "Water depletion potential (user)", "Potential toxicity comparison unit for ecosystems", "Potential toxicity comparison unit for humans - carcinogenic effect", "Potential toxicity comparison unit for humans - non-carcinogenic effect", "Potential soil quality index".

The results of this environmental impact indicator must be applied with caution, as the uncertainties in these results are high or as there is only limited experience with the indicator.

6. LCA: Interpretation

The following bar chart shows the most important factors influencing the key impact and life cycle inventory indicators for production for the relevant product (A1 to A3) again.



The evaluation of the life cycle assessment results of the declared rotomoulded containers shows that the

environmental impacts in all environmental categories are primarily dominated by the PE powder used. The manufacturing process (natural gas and electricity consumption) plays a secondary role.

The majority of waste results from the upstream chains of raw materials. Most of this waste is non-hazardous. Radioactive waste is generated in the frame of the production of the electrician's energy, which is used in the production of the raw materials.

The data quality for modelling the rotomoulded containers of ACO Passavant GmbH
can be rated as good. For the basic and auxiliary materials used
corresponding consistent data sets in the *LCA for Experts Software 10 database*. For a small number of substances, the processes were estimated using preliminary products with similar production and environmental impacts.

The products covered by the EPD all have the same formulation (they consist of 100% polyethylene and a release agent). The manufacturing process is also identical. The energy requirement in the manufacturing process was determined using the annual production quantities of the products covered by the EPD and the annual energy consumption.
No specific energy requirement could be determined for the individual products.
Due to the identical formulation and manufacturing process, it can be assumed that the average variance in the environmental impact of the products covered is negligible.

A standardisation of the results for the life cycle inventory and impact assessment is not ducted, as this could lead to misleading statements.

7. Verifiable evidence

According to PCR, no special evidence is required or verifiable.

verifiable.

8. References

Standards

DIN EN 12050
DIN EN 12050-1:2015-05: Sewage lifting units

EN 858
EN 858-1:2005-02 Separator systems for light oils (e.g. oil and petrol) - Part 1: Construction and test principles, marking and quality control

EN 1825
EN 1825-1: 2004-12, Grease separators - Part 1: Construction and test principles, marking and quality control

EN 12050
EN 12050-1: 2015-05 Wastewater lifting stations for building and land drainage
EN 12050-2: 2015-05 Wastewater lifting stations for building and land drainage - Part 2-: Wastewater lifting stations for non-faecal wastewater

EN 15804
EN 15804:2012+A2:2019+AC:2021, Sustainability of structures - Environmental product declarations - Basic rules for the product category construction products.

ISO 14025
EN ISO 14025:2011, Environmental labelling and declarations - Type III environmental declarations - Principles and methods.

Further literature

EAV
European Waste Catalogue, Waste Catalogue - Regulation on the European Waste Catalogue Decree of 10 June 2009. December 2001 (BGBl. I p.
3379), last amended by Article 1 of the Decree of30 June 2020 (BGBl. June 2020 (Federal Law Gazette I p. 1533).

BBSR
Assessment system for sustainable building, 16/06/2021.

ECHA Candidate List
Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Approval and Restriction of Chemicals (REACH), to create a
European Chemicals Agency, amending Directive 1999/45/EC and repealing Decree (EEC) No.
793/93
of the Council, Council Regulation (EC) No 1488/94 of the Commission, Council Directive 76/769/EEC and Council Directives 91/155/EEC, 93/105/EC of the Commission.

IBU 2024
Institut Bauen und Umwelt e.V.: General instructions for the EPD programme of Institut Bauen und Umwelt e.V., Version 2.0, Berlin: Institut Bauen und Umwelt e.V., 2024

LCAFE documentation
LCAFE 10: Documentation of the LCAFE 10 datasets of the Holistic Accounting Database. LBP, University of Stuttgart and Sphera Solutions GmbH. http://documentation.gabi-software.com/.

LCAFE 10
LCAFE 10: Software
and database for holistic accounting. LBP,
University of Stuttgart
and Sphera Solutions
GmbH, 2024.

PCR Rotomoulded containers for dewatering products
Product category rules for building-related
Products and services Part B: EPD requirements for rotomoulded containers for dewatering products, version 8th Berlin: Institute
Bauen und Umwelt e.V. (ed.), 19 October
2023.

PCR Part A+A2 2019
Product category rules for building-related products and services Part A: Calculation rules for the life cycle assessment and requirements for the background report, Version 1.3. Berlin: Institute
Bauen und Umwelt e.V. (ed.), 31 August
2022.

Decree (EU) No. 305/2011
Decree (EU) No. 305/2011 of the European Parliament and of the Council of 9 March 2011 on the
laying down harmonised conditions for the marketing of construction products and repealing Council Directive 89/106/EEC 'Construction Products Regulation' (CPR).

WECOBIS
Ecological Building Material Information System of the Federal Ministry of Transport, Building and Urban Development, 2013.

96/603/EC
Commission Decision 96/603/EC of 4 October 1996 establishing a list of products falling into the category "No contribution to the environment".
Fire" in accordance with Decision 94/611/EC on the duct of article
20 of Council Directive 89/106/EEC on construction products.

2000/553/EC
Commission Decision 2000/553/EC of 6 September 2000 on the duct of guideline 89/106/EEC
of the Council with regard to the behaviour of roofing in the event of a fire from the outside.

The literature referenced in the Environmental Product Declaration must be cited in full from the following sources. Standards and norms already cited in full in the EPD for the verifications or technical properties do not have to be listed here.

Publisher

Institut Bauen und Umwelt e.V.
Hegelplatz 1
10117 Berlin
Germany

+49 (0)30 3087748- 0
info@ibu-epd.com
www.ibu-epd.com

Programme holder

Institut Bauen und Umwelt e.V.
Hegelplatz 1
10117 Berlin
Germany

+49 (0)30 3087748- 0
info@ibu-epd.com
www.ibu-epd.com

Creator of the life cycle assessment

LCEE - Life Cycle Engineering Experts GmbH
Birkenweg 24
64295 Darmstadt
Germany

+49 6151 1309860
t.mielecke@lcee.de
www.lcee.de

Holder of the declaration

ACO Passavant GmbH
Ulsterstraße 3
36269 Philippsthal
Germany

+496620770
https://www.haustechnik@aco.com
Https://www.aco.com