

ENVIRONMENTAL PRODUCT DECLARATION

as per ISO 14025 and EN 15804+A2

Owner of the Declaration	Rudolf Hensel GmbH
Publisher	Institut Bauen und Umwelt e.V. (IBU)
Programme holder	Institut Bauen und Umwelt e.V. (IBU)
Declaration number	EPD-RHG-20240378-IBA3-EN
Issue date	14.02.2025
Valid to	13.02.2030

HENSOMASTIK® Acrylic
Rudolf Hensel GmbH

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



1. General Information**Rudolf Hensel GmbH****Programme holder**

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

Declaration number

EPD-RHG-20240378-IBA3-EN

This declaration is based on the product category rules:

Building sealants, 01.08.2021
(PCR checked and approved by the SVR)

Issue date

14.02.2025

Valid to

13.02.2030



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



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

HENSOMASTIK® Acrylic**Owner of the declaration**

Rudolf Hensel GmbH
Lauenburger Landstraße 11
21039 Börnsen
Germany

Declared product / declared unit

The declared product is HENSOMASTIK® Acrylic. The declared unit refers to one kilogramme of product. Packaging is included in the calculation. The declared unit is given in [kg].

Scope:

This document refers to HENSOMASTIK® Acrylic. Specific data from the Rudolf Hensel GmbH manufacturing plant in Börnsen was collected for the preparation of the Life Cycle Assessment (LCA). The data is based on the year 2022, which corresponds to the annual average.

The owner of the declaration shall be liable for the underlying information and evidence; the IBU shall not be liable with respect to manufacturer information, life cycle assessment data and evidences.

The EPD was created according to the specifications of EN 15804+A2. In the following, the standard will be simplified as *EN 15804*.

Verification

The standard EN 15804 serves as the core PCR	
Independent verification of the declaration and data according to ISO 14025:2011	
☐	internally
☒	externally



Dr.-Ing. Wolfram Trinius,
(Independent verifier)

2. Product

2.1 Product description/Product definition

HENSOMASTIK® Acrylic is an acrylic sealant with ablative fillers for use in linear joints and as a fire protection sealant for fire penetration seals in wall and ceiling constructions in order to retain fire resistance times. This is a factory-produced acrylic sealant with organic binders, water, mineral fillers, pigments, and additives. The sealant is classified as low-emission and contains no solvents, borates, plasticisers, halogens, formaldehydes, alkylphenol ethoxylates (APEO), or PFAS.

The sealant is part of the Green Product line at Rudolf Hensel GmbH.

Product according to CPR with ETA:

Regulation (EU) No. 305/2011 (CPR) applies to the placing on the market of the product HENSOMASTIK® Acrylic in the EU/EFTA (with the exception of Switzerland). The product requires a Declaration of Performance in accordance with *ETA Nos. 21/0816 | 22/0654 | 22/0701 | 23/0318 | 23/0324* and the corresponding CE marking. The respective national regulations apply for use.

2.2 Application

Sealing horizontal and vertical linear joints (structural joints as stepped joints and linear butt joints) with or without shear stress between fire-resistant separating rigid walls and floors, and for maintaining or reinstating the fire resistance performance of separating building elements where they are interrupted or separated by joints.

HENSOMASTIK® Acrylic may be used as a fire penetration seal for specific supporting constructions and substrates for linear joints or gaps up to 400 mm width and for individual pipes (for details see construction details and classification).

European Technical Assessment according to *EAD 350141-00-1106*: HENSOMASTIK® Acrylic is rated as a fire protection acrylic sealant for linear joints and gaps.

European Technical Assessment according to *EAD 350454-00-1104*: HENSOMASTIK® Acrylic fire stopping and fire sealing products – Penetration seals

HENSOMASTIK® Acrylic is classified as Euroclass E in accordance with *EN 13501-1* and Commission Delegated Regulation (EU) 2016/364.

HENSOMASTIK® Acrylic is classified in accordance with *EN 13501-2*.

The specific building elements in which HENSOMASTIK® Acrylic can be used for linear joint or gap sealing are:

Flexible walls: The wall must have a minimum thickness of 100 mm and consist of a wooden or steel stud structure lined on both faces with at least two layers of 12.5 mm thick boards. A minimum distance of 100 mm must be maintained between the seal and the studs, and the gap between the stud and the seal must be closed with at least 100 mm of insulation material of class A1 or A2 (according to *EN 13501-1*).

Rigid walls: The wall must have a minimum thickness of 150 mm and made from concrete, aerated concrete, or masonry wall, with a maximum density of 450 kg/m³.

Rigid floors: The floor must have a minimum thickness of 150 mm and comprise aerated concrete or concrete with a minimum

density of 450 kg/m³.

Steel: Room-enclosing building components made of steel, or building components made of aerated concrete, concrete, hollow blocks or masonry, which are clad on one side with steel.

Wood: Room-enclosing building components made of solid wood or cross-laminated timber (CLT) with a minimum thickness of 25 mm.

2.3 Technical Data

HENSOMASTIK® Acrylic does not contain any hazardous substances above the limit values according to *REACH Regulation, Annex XVII*.

Structural data

Name	Value	Unit
Density (wet)	1450 - 1550	kg/m³
Solids content	80 - 85	%
Resilience (EN ISO 7389 B)	28	%
Tensile properties (EN ISO 8339)	14	-
Reaction to fire (EN 13501-1)	Construction material class E	-
Durability (EAD 350402001106) (ETAG 018-2)	Y1 / Y2 / Z1 / Z2	-
Total VOC ISO 118902	< 1g/l	Detection limit

HENSOMASTIK® Acrylic is an emission-rated acrylic sealant. Sampling, testing and evaluation were carried out in accordance with *AgBB* and *LEED* in their respective current versions.

HENSOMASTIK® Acrylic fulfils the requirements 'for low emitting paint and coating material' in credit *EQc2* of the *LEED v4* Rating System and complies with the requirements according to (i) *Standard Method v1.1-2010* and (ii) VOC content according to *ASTM D 2369-10* and (iii) *Rule 1113*.

Product according to CPR with ETA:

Performance values of the HENSOMASTIK® Acrylic product correspond to the Declaration of Performance with regard to its essential characteristics according to *ETA Nos. 21/0816 | 22/0654 | 22/0701 | 23/0318 | 23/0324* and the corresponding CE marking. The respective national regulations apply for use.

2.4 Delivery status

HENSOMASTIK® Acrylic is a flexible white acrylic sealant that is available in liquid form in cartridges or tubular bags in sizes from 310 ml to 600 ml.

2.5 Base materials/Ancillary materials

Name	Value	Unit
Polymer dispersion	35 - 45	%
Calcium carbonate	15 - 25	%
Aluminium trihydrate	12 - 25	%
Kaolin	3 - 10	%
Talcum	3 - 10	%
Pigment TiO2	1 - 5	%
Smectic clay	< 1	%
Water	1 - 5	%

FIRE PROTECTION SYSTEMS

The in-can preservative contained in the product comes from the isothiazolione group.

2.6 Manufacture

HENSOMASTIK® Acrylic is manufactured in a fully-automatically controlled dispersion system. The dosing of liquid raw materials is largely automatic, powders are dosed manually. The preliminary products required for production are made available after an incoming goods inspection. After production of the batches, an in-house quality control is carried out. This includes technical coating quality features. In addition to the factory inspection, official external monitoring is carried out at regular intervals.

2.7 Environment and health during manufacturing

The preliminary products are stored in such a way that they cannot, according to human judgement, enter the environment.

In the case of raw materials that are automatically dosed, direct contact between workers and the preliminary products is avoided. Direct contact with the raw material is minimised when dosing the powdered raw materials manually. In addition to sufficiently dimensioned extraction systems, workers are provided with protective clothing and dust masks. Suitable personal protective equipment is also provided.

The production process is optimised in such a way that the system components are cleaned in situ. Any cleaning water produced is fed into the production process as production water. If this is not possible due to a product change, the cleaning water is collected and thermally utilised.

All types of waste are separated, stored, and returned to the recycling circuit.

HENSOMASTIK® Acrylic does not contain any substances subject to declaration according to *REACH Regulation, Annex XVII*, and the *ECHA* Candidate List.

2.8 Product processing/Installation

Application is carried out using the cartridge tip supplied.

Details on substrate pre-treatment, application requirements, and drying behaviour can be found in the relevant technical data sheet.
(see www.rudolf-hensel.de)

2.9 Packaging

The acrylic sealant is filled into plastic cartridges or tubular bags made of polypropylene (PP), which are recycled by the customer through a packaging return system. The plastic cartridges or tubular bags are packed in groups of 20 in cardboard boxes for despatch and protected with a shrink film made of low-density polyethylene (LDPE).

2.10 Condition of use

HENSOMASTIK® Acrylic is an acrylic sealant with ablative fillers used to form a fire penetration seal in linear joints and gaps in wall and floor constructions where various wall and floor constructions adjoin. HENSOMASTIK® Acrylic can be used to maintain fire resistance in walls and ceilings when the acrylic sealant is used to seal individual penetrations.

After application of the acrylic sealant, the film is formed by physical drying (evaporation) of the receptively contained water. The dried polymer film including the non-aqueous ingredients remains on the component.

2.11 Environment and health during use

HENSOMASTIK® Acrylic is an acrylic sealant with extremely low emissions and is considered to be harmless to human

health. Emission tests – carried out in independent laboratories – confirmed that the acrylic sealant fulfils the requirements of various national and international emission standards, with classification in the lowest emission class (see section 7).

The acrylic sealant contains no borates, plasticisers, halogens, formaldehydes, alkylphenol ethoxylates (APEO), or PFAS.

2.12 Reference service life

The provisions made in this European Technical Assessment are based on an assumed intended working life of the HENSOMASTIK® Acrylic for linear joints, gaps and fire protection bulkheads of 10 years, provided the manufacturer's conditions laid down in the manufacturer's data sheet for the packaging, transport, storage, installation, use, maintenance, and repair are met.

The indications given as to the working life of the construction product cannot be interpreted as a guarantee given by either the product manufacturer or his representative or by the Technical Assessment Body issuing an *ETA* based on the *EAD No. 350454-00-1104*, but are regarded only as a means for expressing the expected economically reasonable working life of the product.

2.13 Extraordinary effects

Fire

This acrylic sealant contains components (flame retardants) that decompose and/or sublime when they absorb energy. Due to this feature, these coatings consume energy, whereby the underlying substrate and the fire environment are protected by this 'cooling mechanism'. If the decomposition temperature of the flame retardant is reached, the fire protection effect starts spontaneously and irregularly. After a relatively short time, the cooling mechanism is consumed, as the flame retardant is completely used up.

Fire protection

Name	Value
Building material class acc. to EN 13501-1	E

Water

HENSOMASTIK® Acrylic is an acrylic sealant for dry indoor areas / open halls and must not be exposed to permanent wetness.

Mechanical destruction

When repairing damage to joints, the first step is to check the backfilled mineral wool for damage and repair any noticeable damage. The area to be repaired must be checked to ensure that it is free of dust.

The damaged area can be filled with HENSOMASTIK® Acrylic and then smoothed. After curing, the area can be painted over as required in accordance with the technical data sheet.

There are no known consequences for the environment due to unforeseen mechanical destruction.

2.14 Re-use phase

Due to the organic content, HENSOMASTIK® Acrylic has a substance-inherent energy content that can be recovered in incineration plants.

In the event that the acrylic sealant is to be deposited separately, landfillability is guaranteed. Due to the thermoplastic properties of the acrylic sealant, it can be softened with a hot air gun and then removed mechanically with a scraper.

2.15 Disposal

FIRE PROTECTION SYSTEMS

The following waste code numbers must be taken into account:

AVV No. (recommended): 080112 Waste paint and varnish other than that mentioned in 080111

AVV No. (recommended): 150102 Plastic packaging

2.16 Further information

Further product information is available at: www.rudolf-hensel.de.

3. LCA: Calculation rules

3.1 Declared Unit

The declared product is a fire retardant manufactured by Rudolf Hensel GmbH called HENSOMASTIK® Acrylic with packaging. The calculated weight is one kilogramme of the fire retardant. Packaging is also included in the calculation. The following table shows the data of the declared unit.

Declared unit and mass reference

Name	Value	Unit
Declared unit	1	kg
Conversion factor to 1 kg	1	-
Gross density	1500	kg/m ³

3.2 System boundary

Type of EPD: Cradle to gate with modules C1-C4 and module D. The following information modules are defined as system boundaries in this study:

Production stage (A1-A3):

A1: Raw material extraction

A2: Transport to the manufacturer

A3: Production

End-of-Life (C1-C4):

C1: Dismantling/demolition

C2: Transport

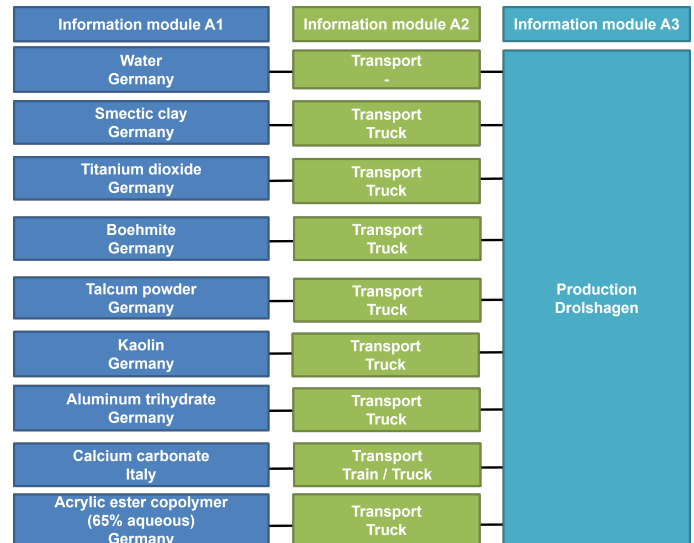
C3: Waste treatment

C4: Disposal

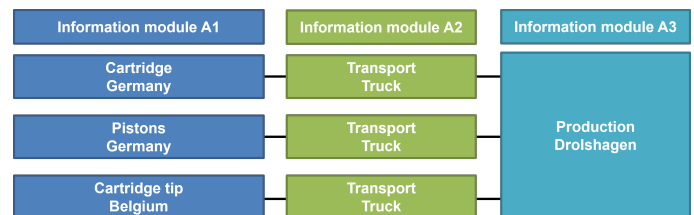
Reuse, recovery and recycling potential (D)

In order to accurately record the indicators and environmental impacts of the declared unit, a total of 8 information modules are analysed. Information modules A1 to A3 describe the provision of materials, transport to the production site, and the production processes for the product itself.

The preliminary products are sourced from the European Union. Transportation is carried out by truck and freight train. The following flow charts illustrate the underlying production process.



1 Information modules A1 to A3 of the product



2 Information modules A1 to A3 of the packaging

Information modules C1 to C4 cover the dismantling or demolition of the building, transport for waste disposal, waste treatment, and disposal of the product. Furthermore, reuse, recovery and recycling potential are shown in information module D.

3.3 Estimates and assumptions

The electricity mixes and underlying data are calculated on a country-specific basis for the production processes. No assumptions were made.

3.4 Cut-off criteria

The cut-off criterion according to *EN 15804+A2* is applied. All energy and mass inputs were taken into account.

3.5 Background data

The databases used in this study are *LCA for Experts* and *Ecoinvent 3.9.1*.

3.6 Data quality

The assessment of the data quality is classified as appropriate, as the relevant data sets used to calculate the material provision of the declared unit are up to date. Data is provided in *LCA for Experts* under Data documentation with the respective reference year. Despite the use of different databases (*Sphera*, *Ecoinvent 3.9.1*), a consistent data basis is available, as all requirements for calculating the indicators in accordance with *EN 15804+A2* are met.

3.7 Period under review

FIRE PROTECTION SYSTEMS

Data from the year 2022 is used as a basis, which corresponds to the annual average.

3.8 Geographic Representativeness

Land or region, in which the declared product system is manufactured, used or handled at the end of the product's lifespan: Global

3.9 Allocation

The co-products are allocated in information modules A1-A3. The production waste from the injection-moulded components

is thermally recycled. The ensuing electrical and thermal energy credits are offset in modules A1-A3. No further allocations are made.

3.10 Comparability

Basically, a comparison or an evaluation of EPD data is only possible if all the data sets to be compared were created according to *EN 15804* and the building context, respectively the product-specific characteristics of performance, are taken into account. The databases used in this study are *LCA for Experts* and *Ecoinvent 3.9.1*

4. LCA: Scenarios and additional technical information

Characteristic product properties of biogenic carbon

No renewable raw materials are used in the product or the packaging. Biogenic carbon is therefore recognised as zero.

Information describing the biogenic carbon content at the plant gate

Name	Value	Unit
Biogenic carbon in the product	-	kg C
Biogenic carbon in the associated packaging	-	kg C

Note: 1 kg of biogenic carbon is equivalent to 44/12 kg of CO₂.

End of Life (C1-C4)

Demolition is carried out using an electric hot air gun. The electrical energy consumption for the tool is assumed to be

0.5 MJ for the declared unit. The electricity consumption is calculated using a European electricity mix. A transport distance of 50 km to the nearest waste treatment plant is assumed.

Name	Value	Unit
Collected separately waste type	1	kg
Energy recovery	0.97	kg

The material lost during the process is shredder light fraction and is disposed of.

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

No reuse, recovery and recycling potentials arise in this calculation. The information module D is therefore declared and shown as zero.

5. LCA: Results

Thermal utilisation produces electrical and thermal energy.

The thermal energy of 2.55 MJ and the electrical energy of 1.36 MJ are declared in module C3.

DESCRIPTION OF THE SYSTEM BOUNDARY (X = INCLUDED IN LCA; MND = MODULE OR INDICATOR NOT DECLARED; MNR = MODULE NOT RELEVANT)

Product stage			Construction process stage		Use stage							End of life stage				Benefits and loads beyond the system boundaries
Raw material supply	Transport	Manufacturing	Transport from the gate to the site	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
X	X	X	MND	MND	MND	MND	MNR	MNR	MNR	MND	MND	X	X	X	X	X

RESULTS OF THE LCA - ENVIRONMENTAL IMPACT according to EN 15804+A2: 1 kg HENSOMASTIK® Acrylic

Parameter	Unit	A1-A3	C1	C2	C3	C4	D
Global Warming Potential total (GWP-total)	kg CO ₂ eq	2.72E+00	7.08E-02	4.87E-03	8.54E-01	0	0
Global Warming Potential fossil fuels (GWP-fossil)	kg CO ₂ eq	2.72E+00	7.08E-02	4.79E-03	8.54E-01	0	0
Global Warming Potential biogenic (GWP-biogenic)	kg CO ₂ eq	0	0	0	0	0	0
Global Warming Potential luluc (GWP-luluc)	kg CO ₂ eq	1.24E-03	1.04E-05	7.76E-05	7.97E-05	0	0
Depletion potential of the stratospheric ozone layer (ODP)	kg CFC11 eq	1.82E-08	7.65E-13	4.65E-16	1.84E-12	0	0
Acidification potential of land and water (AP)	mol H ⁺ eq	8.4E-03	1.63E-04	2.34E-05	1.32E-04	0	0
Eutrophication potential aquatic freshwater (EP-freshwater)	kg P eq	1.8E-04	3.64E-08	1.97E-08	2.69E-08	0	0
Eutrophication potential aquatic marine (EP-marine)	kg N eq	1.48E-03	2.73E-05	1.13E-05	1.47E-04	0	0
Eutrophication potential terrestrial (EP-terrestrial)	mol N eq	1.51E-02	2.92E-04	1.26E-04	1.73E-03	0	0
Formation potential of tropospheric ozone photochemical oxidants (POCP)	kg NMVOC eq	5.49E-03	8.13E-05	2.27E-05	3.39E-04	0	0
Abiotic depletion potential for non fossil resources (ADPE)	kg Sb eq	1.93E-06	3.26E-09	3.9E-10	7.32E-09	0	0
Abiotic depletion potential for fossil resources (ADPF)	MJ	5.97E+01	1.29E+00	6.02E-02	5.71E+00	0	0
Water use (WDP)	m ³ world eq deprived	5.73E-01	3.98E-03	6.87E-05	1.43E-01	0	0

RESULTS OF THE LCA - INDICATORS TO DESCRIBE RESOURCE USE according to EN 15804+A2: 1 kg HENSOMASTIK® Acrylic

Parameter	Unit	A1-A3	C1	C2	C3	C4	D
Renewable primary energy as energy carrier (PERE)	MJ	2.34E+00	1.84E-01	5.09E-03	3.53E-01	0	0
Renewable primary energy resources as material utilization (PERM)	MJ	0	0	0	0	0	0
Total use of renewable primary energy resources (PERT)	MJ	2.34E+00	1.84E-01	5.09E-03	3.53E-01	0	0
Non renewable primary energy as energy carrier (PENRE)	MJ	3.05E+01	1.29E+00	6.02E-02	-1.28E+01	0	0
Non renewable primary energy as material utilization (PENRM)	MJ	2.92E+01	0	0	7.08E+00	0	0
Total use of non renewable primary energy resources (PENRT)	MJ	5.97E+01	1.29E+00	6.02E-02	-5.71E+00	0	0
Use of secondary material (SM)	kg	0	0	0	0	0	0
Use of renewable secondary fuels (RSF)	MJ	0	0	0	0	0	0
Use of non renewable secondary fuels (NRSF)	MJ	0	0	0	0	0	0
Use of net fresh water (FW)	m ³	1.84E-02	2.59E-04	5.72E-06	2.92E-03	0	0

RESULTS OF THE LCA – WASTE CATEGORIES AND OUTPUT FLOWS according to EN 15804+A2: 1 kg HENSOMASTIK® Acrylic

Parameter	Unit	A1-A3	C1	C2	C3	C4	D
Hazardous waste disposed (HWD)	kg	4.76E-09	1.83E-10	1.95E-12	-2.34E-10	0	0
Non hazardous waste disposed (NHWD)	kg	1.47E-02	3.2E-04	9.37E-06	1.66E-01	0	0
Radioactive waste disposed (RWD)	kg	5.77E-04	1.67E-04	7.79E-08	-4.31E-04	0	0
Components for re-use (CRU)	kg	0	0	0	0	0	0
Materials for recycling (MFR)	kg	4E-02	0	0	0	0	0
Materials for energy recovery (MER)	kg	0	0	0	0	0	0
Exported electrical energy (EEE)	MJ	0	0	0	1.36E+00	0	0
Exported thermal energy (EET)	MJ	0	0	0	2.55E+00	0	0

RESULTS OF THE LCA – additional impact categories according to EN 15804+A2-optional: 1 kg HENSOMASTIK® Acrylic

Parameter	Unit	A1-A3	C1	C2	C3	C4	D
Incidence of disease due to PM emissions (PM)	Disease incidence	ND	ND	ND	ND	ND	ND
Human exposure efficiency relative to U235 (IR)	kBq U235 eq	ND	ND	ND	ND	ND	ND

FIRE PROTECTION SYSTEMS

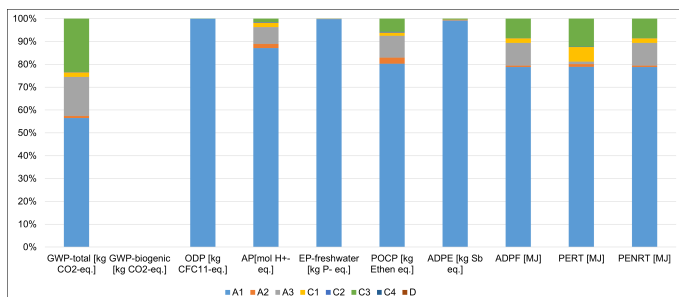
Comparative toxic unit for ecosystems (ETP-fw)	CTUe	ND	ND	ND	ND	ND	ND
Comparative toxic unit for humans (carcinogenic) (HTP-c)	CTUh	ND	ND	ND	ND	ND	ND
Comparative toxic unit for humans (noncarcinogenic) (HTP-nc)	CTUh	ND	ND	ND	ND	ND	ND
Soil quality index (SQP)	SQP	ND	ND	ND	ND	ND	ND

Disclaimer 1 – for the indicator “Potential Human exposure efficiency relative to U235”. 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 or radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, radon and from some construction materials is also not measured by this indicator.

Disclaimer 2 – for the indicators “abiotic depletion potential for non-fossil resources”, “abiotic depletion potential for fossil resources”, “water (user) deprivation potential, deprivation-weighted water consumption”, “potential comparative toxic unit for ecosystems”, “potential comparative toxic unit for humans – cancerogenic”, “Potential comparative toxic unit for humans - not cancerogenic”, “potential soil quality index”. The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high as there is limited experience with the indicator.

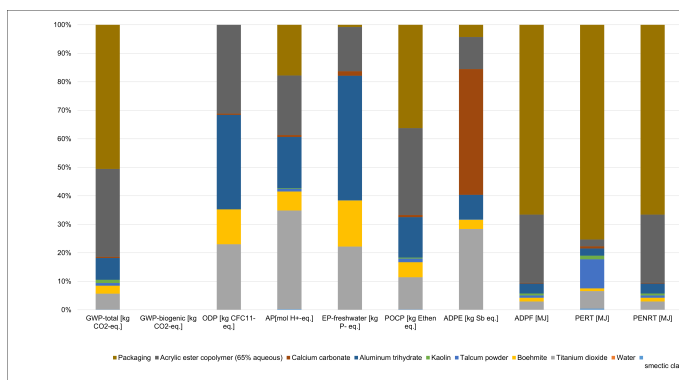
6. LCA: Interpretation

The dominance analysis shows that the main causes of the environmental impacts and indicators can be found in information module A1. This shows the total global warming potential for material provision at approx. 55% and approx. 16% for production, based on all information modules.

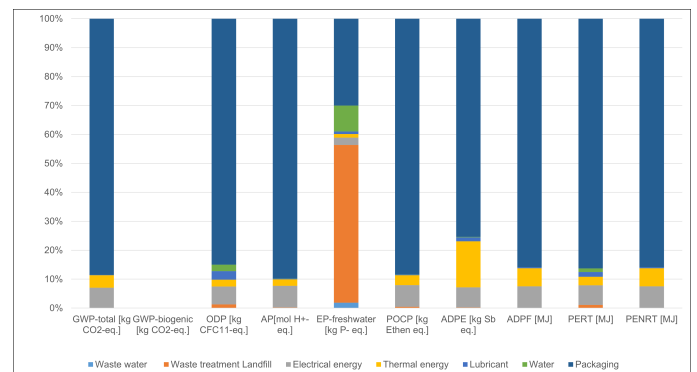


Looking at the material provision of the product and the packaging in detail, it becomes clear which raw materials make a decisive contribution to the respective environmental impacts and indicators.

The PP in the packaging accounts for approx. 51% and the acrylester copolymer (65% aqueous) accounts for approx. 32% of the total global warming potential in information module A1. Aluminium trihydrate accounts for approx. 7%.



Information module A3 clearly shows that approx. 88% of the total global warming potential is caused by the preliminary production of packaging and approx. 7% is attributable to electrical energy.



7. Requisite evidence

Test report from Eco-Institut Germany GmbH:

AgBB result overview (28 days [µg/m³])

Name	Value	Unit
TVOC	≤ 20	µg/m³
TSVOC	≤ 5	µg/m³
R (dimensionless)	<1	-
Carcinogens	< 1	µg/m³

HENSOMASTIK® Acrylic: Report no. 56449-001-AgBB-L

The emission values were determined directly after application of the coating materials. HENSOMASTIK® Acrylic fulfils the requirements for a low VOC content according to LEED credit EQ c4.2 (adhesives and sealants).

FIRE PROTECTION SYSTEMS

HENSOMASTIK® Acrylic fulfils the requirements for low-emission adhesives and sealants according to *LEED v4* credit EQ c2.

Ecobau certification:

HENSOMASTIK® Acrylic: *Reg. No. 202211.11626*

8. References

EN 15804

EN 15804:2019-04+A2+AC:2021, Sustainability of construction works - Environmental product declarations – Core rules for the product category of construction products

DIN EN ISO 14025

DIN EN ISO 14025:2011-10, Environmental labels and declarations – Type III environmental declarations

DIN EN ISO 14040

DIN EN ISO 14040:2021-02, Environmental management – Life cycle assessment – Principles and framework

DIN EN ISO 14044

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

EN 1366

EN 1366-4:2021-05, Fire resistance tests for service installations – Part 4: Linear joint seals

EN 13501

EN 13501-1:2019, Fire classification of construction products and building elements – Part 1: Classification using data from reaction to fire tests

EN 13501-2:2016, Fire classification of construction products and building elements – Part 2: Classification using data from fire resistance and/or smoke control tests, excluding ventilation services

ISO 11890

ISO 11890-2:2020-12, Paints and varnishes, Determination of volatile organic compound (VOC) content – Part 2: Gas chromatographic method

ISO 16000

ISO 16000-3:2023, Indoor air – Part 3: Determination of formaldehyde and other carbonyl compounds in indoor air and test chamber air – Active sampling method

ISO 16000-6:2022, Indoor air – Part 6: Determination of volatile organic compounds in indoor and test chamber air by active sampling on Tenax TA sorbent, thermal desorption and gas chromatography using MS or MS-FID

ISO 16000-9:2006, Indoor air – Part 9: Determination of the emission of volatile organic compounds from building products and furnishing – Emission test chamber method

ISO 16000-11:2006, Indoor air – Part 11: Determination of the emission of volatile organic compounds from building products and furnishing – Sampling, storage of samples and preparation of test specimens

AgBB

Committee for Health-related Evaluation of Building Products (AgBB) Evaluation scheme for VOC emissions from indoor-relevant building products (2021)

AVV

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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

**Author of the Life Cycle Assessment**

FIT-Umwelttechnik GmbH
Westerstr. 13
38442 Wolfsburg
Germany

05362 72 69 474
bertram@fit-umwelttechnik.de
www.fit-umwelttechnik.com

**Owner of the Declaration**

Rudolf Hensel GmbH
Lauenburger Landstraße 11
21039 Börnsen
Germany

+49 (0)40 7210 6210
info@rudolf-hensel.de
www.rudolf-hensel.de