

Environmental Product Declaration



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

SEALABLE Tunnel Gasket from **SEALABLE Solutions GmbH** **SEALABLE** pioneers in profiles

Programme:	The International EPD® System, www.environdec.com
Programme operator:	EPD International AB
EPD registration number:	S-P-13427
Version date:	2024-12-27
Validity date:	2029-12-26

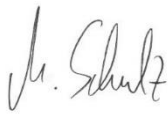
An EPD should provide current information and may be updated if conditions change. The stated validity is therefore subject to the continued registration and publication at www.environdec.com



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:	info@environdec.com

Accountabilities for PCR, LCA and independent, third-party verification
Product Category Rules (PCR)
CEN standard EN 15804 serves as the Core Product Category Rules (PCR)
Product Category Rules (PCR): <i>PCR 2019:14 Construction products, version 1.3.4 Published on 2024.04.30. Based on CEN standard EN 15804. CEN standard EN 15804 serve as the core PCR. UN CPC code 362.</i>
PCR review was conducted by: The Technical Committee of the International EPD® System. See www.environdec.com for a list of members. Review chair: Claudia A. Peña, University of Concepción, Chile. The review panel may be contacted via the Secretariat www.environdec.com/contact .
Life Cycle Assessment (LCA)
LCA accountability: SEALABLE Solutions GmbH
LCA practitioner and EPD developer: Sphera Solutions GmbH
Third-party verification
Independent third-party verification of the declaration and data, according to ISO 14025:2006, via: <input checked="" type="checkbox"/> EPD verification by individual verifier Third-party verifier: <i>Matthias Schulz</i> , Schulz Sustainability Consulting  Approved by: The International EPD® System
Procedure for follow-up of data during EPD validity involves third party verifier: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

The EPD owner has the sole ownership, liability, and responsibility for the EPD.

EPDs within the same product category but registered in different EPD programmes, or not compliant with EN 15804, may not be comparable. For two EPDs to be comparable, they must be based on the same PCR (including the same 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 equivalent system boundaries and descriptions of data; apply equivalent

data quality requirements, methods of data collection, and allocation methods; apply identical cut-off rules and impact assessment methods (including the same version of characterisation factors); have equivalent content declarations; and be valid at the time of comparison. For further information about comparability, see EN 15804 and ISO 14025.

Company information

Owner of the EPD: SEALABLE Solutions GmbH, Eisenacher Landstraße 70, 99880 Waltershausen, Germany

Contact: Matthias Klug, General Manager Tel. +49 3622 2076 120, matthias.klug@seal-able.com

Description of the organisation: SEALABLE Solutions GmbH is a company based on a passion for innovation and a long tradition in sealing technology. With over 200 years of experience in the development and manufacture of sealing solutions, SEALABLE has established itself as a leading supplier in the industry. Through continuous product development, technical expertise and strategic growth, SEALABLE is now a globally recognised partner for innovative sealing technologies and employs over 160 people at its Waltershausen site. Our heritage and innovation continue to drive us to develop pioneering solutions for our customers.

SEALABLE Solutions GmbH sets standards in the field of tunnel seals and offers innovative solutions for the safe and durable protection of tunnelling structures. With a wide range of products and services ranging from development and design to the manufacture of high-quality sealing systems, SEALABLE has contributed to the realisation of tunnel projects worldwide.

As experts in tunnel sealing technologies, SEALABLE develops sustainable systems that extend the service life of components, reduce maintenance costs and maximise protection against water, pressure and chemical influences. Our advanced sealing systems are specifically designed to increase the efficiency and longevity of tunnels and infrastructure projects in a wide range of industries and sectors.

Product-related or management system-related certifications:

Quality management system	ISO 9001:2015
Environmental management system	ISO 14001:2015
Occupational safety and health management	ISO 45001:2018
Energy management system	ISO 50001:2018
System testing	STUVA - Recommendation for Gasket Frames in Segmental Tunnel Linings
Material testing	Shore Hardness A DIN ISO 7619 Tensile Strength DIN 53504 Elongation at Break DIN 53504 Aging 7d / 70°C relative change ISO 188 Tear Resistance Methode A DIN ISO 34 Resilience at RT DIN 53512 Compression Set DIN ISO 815 72 h / RT 24 h / 70°C Ozon 0.5 ppm / 48 h / RT DIN ISO 1431-1 Abrasion DIN ISO 4649

Name and location of production site(s): 99880 Waltershausen, Germany

Product information

Product name: SEALABLE Tunnel Gasket

Product identification: SEALABLE Tunnel Gasket for sealing segmental Linings

Product description: SEALABLE tunnel Gasket are high-quality sealing systems that have been specially developed for use in shield-driven tunnelling. These seals are made of high-quality EPDM material, which covers all relevant properties and therefore fulfils the requirements in underground infrastructures as well as in outdoor storage prior to use in tunnels.

The trade names ('tool numbers') covered by the EPD can be found in Annex A of the EPD. The LCA results are linearly dependent on the weight (g) of the profiles used in the frame.

For the use of SEALABLE tunnel gaskets, the respective national regulations at the place of use apply, in Germany, for example, the STUVA Recommendation for Gasket Frames in Segmental Tunnel Linings or the products approved by the building authorities (CE labelled) and the technical provisions based on these regulations.

Product Properties:

- | | |
|---------------------------------|---------------------------|
| ▪ Shore Hardness A DIN ISO 7619 | 70 ± 5 SHE |
| ▪ Tensile Strength DIN 53504 | ≥ 7,5 N / mm ² |
| ▪ Elongation at Break DIN 53504 | ≥ 300 % |

Aging 7d / 70°C relative change ISO 188

- | | |
|---|-----------------------|
| ▪ Shore Hardness A DIN ISO 7619 | ± 3 SHE |
| ▪ Tensile Strength DIN 53504 | ± 15 % |
| ▪ Elongation at Break DIN 53504 | ± 25 % |
| ▪ Tear Resistance Methode A DIN ISO 34 | ≥ 5 N / mm |
| ▪ Resilience at RT DIN 53512 | ≥ 30 % |
| ▪ Compression Set DIN ISO 815 72 h / RT 24 h / 70°C | ≤ 25 % |
| ▪ Ozon 0.5 ppm / 48 h / RT DIN ISO 1431-1 | No crack |
| ▪ Abrasion DIN ISO 4649 | ≤ 400 mm ³ |

UN CPC code: 362

Geographical scope: Germany (modules A1-A3), Europe (modules A4, A5, C1-C4, D)

LCA information

Declared unit: 1 kg of Sealing gasket made of EPDM for tubing constructions.

Time representativeness: The collection of foreground data refers to the year 2023.

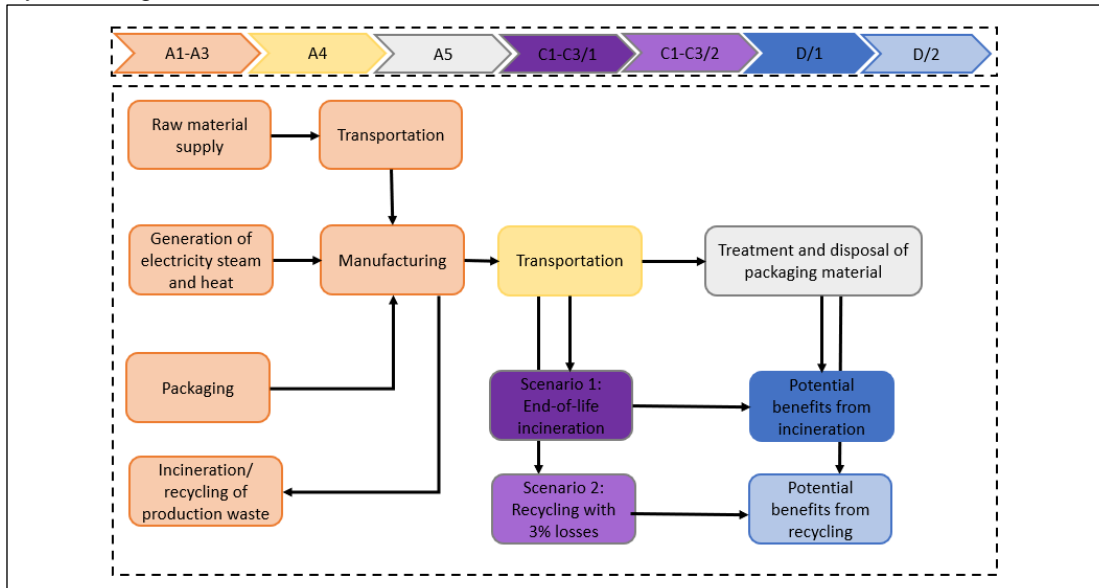
Database(s) and LCA software used: The background data has been taken from the Sphera LCA FE (GaBi) database CUP 2024.1. The LCA model was created using Sphera's LCA for Experts (LCA FE) software, version 10.8.

Description of system boundaries:

Cradle to gate with options, modules C1-C4, and module D (A1-A3, C, D and additional modules A4 and A5).

Reference package used: EN 15804+A2 reference package based on EF 3.1.

System diagram:



More information:

More information on the product can be found under [We are SEALABLE - Sealable ENGLISCH \(sealable.com\)](https://www.sealable.com)

Name and contact information of LCA practitioner:

Sphera Solutions GmbH, 70771 Leinfelden-Echterdingen, Germany, www.sphera.com

Information on electricity used in the manufacturing process:

The Austrian green electricity mix from wind power plant is used for the LCA-calculations. The emission factor (with regards to the GWP-GHG indicator) accounts for: 0,0113 kg CO₂ eq./kWh.

Data quality assessment and declaration:

Process	Source type	Source	Reference year	Data category	Share of primary data of GWP-GHG results for A1-A3
Raw materials composition of product	Collected supplier data	EPD owner	2023	Primary data	93%
Generation of electricity used in manufacturing of product	Database and collected data	Sphera LCA FE CUP 2024.1 and EPD owner	2023	Primary data	0.2%
Transport of raw materials of manufacturing site Primary data	Database and collected data	Sphera LCA FE CUP 2024.1 and EPD owner	2023	Primary data	0.002%
Packaging of declared product	Database and collected data	Sphera LCA FE CUP 2024.1 and EPD owner	2023	Primary data	1.3%
Total share of primary data of GWP-GHG results for A1-A3					94.5%

Information about declared modules:

Module A1 to A3:

The product stage includes provision of all materials, products and energy, as well as waste processing up to the end-of waste state or disposal of final residues during the product stage.

These modules consider the manufacturing of raw materials in the EPDM compound (module A1). Sealable purchases the readymade EPDM composite that is transported to their production site via diesel driven, Truck, Euro 6 (module A2) before undergoing a series of process steps including extrusion, injection moulding, and vulcanisation.

The provision and use of electrical and thermal energy sources, water consumption, production waste and waste water treatment are considered (module A3).

The impact of packaging materials is also included (module A3).

Module A4:

This module considers 100 km truck transport to site (diesel driven, Truck, Euro 6). The transport distance can be modified project specific if required by linear scaling.

Module A5:

This module considers manual installation (load-free) as well as the treatment and disposal of packaging material (EU scenario). Benefits for potential avoided burdens due to energy substitution of electricity and thermal energy generation are declared in module D and affects only the rate of primary material (no secondary materials). No material benefits are considered for the paper.

Module C1 to C4:

- De-construction/ demolition (C1): Manual de-construction, load-free (EU Scenario)
- Transport (C2): 50 km via a diesel driven, Truck, Euro 6 (EU Scenario)
- Waste processing (C3):
 - Scenario 1 – C3/1: 100% thermal treatment
 - Scenario 2 – C3/2: 100% recycling with reuse as crushed material including recycling losses sent to landfill (approximately 3%) where old rubber products are shredded into small pieces. The resulting rubber granules can be reused in new rubber products, such as rubber mats, sports field surfaces or road surfaces.

Module D:

- Benefits and loads beyond the system boundaries (D/1): Potentials from packaging treatment in module A5, and benefits from EoL treatment scenarios in module C3/1 (energy substitution).
- Benefits and loads beyond the system boundaries (D/2): Potentials from packaging treatment in module A5, and benefits from EoL treatment scenarios in module C3/2 (material benefits from recycling scenario). The resulting benefits of rubber recycling at EoL are reduced to consider a conservative estimate of quality losses by a factor of 50%.

Excluded data and flows from the LCA calculation:

Infrastructure and capital goods are not considered within this EPD.

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

	Product stage			Construction process stage		Use stage							End of life stage				Resource recovery stage
	Raw material supply	Transport	Manufacturing	Transport	Construction installation	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-construction demolition	Transport	Waste processing	Disposal	Reuse-Recovery-Recycling-potential
Module	A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Modules declared	X	X	X	X	X	MN D	MN D	MN D	MN D	MN D	MN D	MN D	X	X	X	X	X
Geography	DE	DE	DE	EU	EU								EU	EU	EU	EU	EU
Specific data used	0.2%			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Variation – products	0%			0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Variation – sites	0%			0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Content information

Product components	Weight, kg	Post-consumer material, weight-%	Biogenic material, weight-% and kg C/declared unit
EPDM Rubber 70 °Shore A	1.00	0	Below 5%, thus, not declared.
TOTAL	1.00	0	0
Packaging materials	Weight, kg	Weight-% (versus the product)	Weight biogenic carbon, kg C/declared unit
Carton	0.033	3.3	0.015
Wooden pallet (one way)	0.034	3.4	0.014
TOTAL	0.067	6.7	0.029

The product does not contain dangerous substances from the candidate list of SVHC for Authorisation.

Module A4:

The following table displays technical information used in module A4 (transportation by truck to the building site)

Parameter	Unit	Amount
Diesel consumption	l/100 km (per kg of transported good)	0.0029
Distance	km	100
Capacity utilization (including empty returns)	%	61
Gross weight of transported product	kg	1

Module A5:

The following table displays technical information regarding the installation in the building (treatment of packaging waste). Note: Installation offcuts or installation efforts and related auxiliary materials are not considered in this study and therefore not listed,

Parameter	Unit	Amount
Carton packaging waste sent to recycling	kg/ declared unit	0.033
Wooden pallets sent to incineration	kg/ declared unit	0.034

End-of-life (C-modules)

The following table displays the waste flows at the products end of life (for the representative product). The amounts listed represent gross quantities including secondary material.

Parameter	Unit	Amount
Waste collected separately	kg	1
EoL Scenario 1 (Incineration) Waste materials for energy recovery	kg	1
EoL Scenario 1 (Incineration) Waste materials for final deposition after incineration process	kg	0
EoL Scenario 2 (Recycling) Waste materials for recycling	kg	1
EoL Scenario 2 (Recycling) Collection losses sent to landfill	kg	0.03

Results of the environmental performance indicators

The environmental performance of the declared unit of one kilogram (1 kg) of Sealing gasket made of EPDM for tubing constructions are reported below using the parameters and units as specified in PCR 2019:14 v1.3.4. To evaluate the environmental impact of a specific length or amount of SEALABLE Tunnel Gasket, corresponding scaling according to the mass of the product is needed. 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.

Mandatory impact category indicators according to EN 15804

Results per 1 kg of Sealing gasket made of EPDM for tubing constructions												
Indicator	Unit	A1-A3	A4	A5	C1	C2	C3/1	C3/2	C4/1	C4/2	D/1	D/2
GWP-fossil	kg CO ₂ eq.	2.52E+00	9.52E-03	8.85E-04	0	4.46E-03	6.99E-01	3.13E-03	0	0	-2.16E-01	-1.15E+00
GWP-biogenic	kg CO ₂ eq.	-1.37E-01	2.27E-05	1.10E-01	0	1.07E-05	4.05E-02	4.03E-02	0	0	-9.44E-04	-2.58E-02
GWP-luluc	kg CO ₂ eq.	7.94E-04	1.60E-04	5.00E-07	0	7.50E-05	1.81E-04	3.89E-05	0	0	-1.97E-05	-2.01E-04
GWP-total	kg CO ₂ eq.	2.39E+00	9.70E-03	1.11E-01	0	4.55E-03	7.40E-01	4.35E-02	0	0	-2.17E-01	-1.17E+00
ODP	kg CFC 11 eq.	9.79E-12	1.40E-15	5.75E-15	0	6.58E-16	7.07E-13	6.05E-15	0	0	-1.95E-12	-4.75E-12
AP	mol H ⁺ eq.	5.85E-03	1.07E-05	8.62E-06	0	5.00E-06	2.63E-04	1.66E-05	0	0	-2.28E-04	-2.73E-03
EP-freshwater	kg P eq.	5.86E-06	4.07E-08	1.48E-09	0	1.91E-08	3.43E-07	1.15E-08	0	0	-3.64E-07	-2.50E-06
EP-marine	kg N eq.	1.05E-03	3.29E-06	2.52E-06	0	1.54E-06	9.48E-05	7.00E-06	0	0	-6.95E-05	-4.63E-04
EP-terrestrial	mol N eq.	1.16E-02	4.05E-05	3.61E-05	0	1.90E-05	1.14E-03	7.73E-05	0	0	-7.45E-04	-5.10E-03
POCP	kg NMVOC eq.	3.12E-03	1.04E-05	6.95E-06	0	4.87E-06	2.58E-04	1.96E-05	0	0	-1.97E-04	-1.38E-03
ADP-minerals&metals*	kg Sb eq.	3.38E-05	8.30E-10	6.12E-11	0	3.89E-10	8.01E-09	2.84E-09	0	0	-1.90E-08	-1.63E-05
ADP-fossil*	MJ	6.90E+01	1.25E-01	1.27E-02	0	5.88E-02	1.34E+00	5.61E-02	0	0	-3.86E+00	-3.22E+01
WDP*	m ³	4.55E-02	1.48E-04	5.72E-03	0	6.91E-05	1.48E-01	5.64E-04	0	0	-2.39E-02	-2.09E-02
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										

* Disclaimer: The results of this environmental impact indicator shall be used with care as the uncertainties of these results are high or as there is limited experience with the indicator.

Additional mandatory and voluntary impact category indicators

Results per 1 kg of Sealing gasket made of EPDM for tubing constructions

Indicator	Unit	A1-A3	A4	A5	C1	C2	C3/1	C3/2	D/1	D/2
GWP-GHG ¹	kg CO ₂ eq.	2.53E+00	9.68E-03	8.88E-04	0	4.47E-03	6.99E-01	3.14E-03	-2.17E-01	-1.15E+00

Resource use indicators

The calculation of the resource use indicators follows option B from Annex 3 in PCR 2019:14 - Construction Products v.1.3.4. Thus, there is an input in A3 for PERM and in A1 for PENRM values and an output in A5 (PERM) and C3 (PENRM).

Results per 1 kg of Sealing gasket made of EPDM for tubing constructions

Indicator	Unit	A1-A3	A4	A5	C1	C2	C3/1	C3/2	D/1	D/2
PERE	MJ	1.03E+01	1.08E-02	1.05E+00	0	5.07E-03	4.68E-01	6.38E-03	-1.31E+00	-2.64E+00
PERM	MJ	1.05E+00	0	-1.05E+00	0	0	0	0	0	0
PERT	MJ	1.14E+01	1.08E-02	3.59E-03	0	5.07E-03	4.68E-01	6.38E-03	-1.31E+00	-2.64E+00
PENRE	MJ	5.78E+01	1.25E-01	1.27E-02	0	5.88E-02	1.25E+01	1.13E+01	-3.86E+00	-3.22E+01
PENRM	MJ	1.12E+01	0	0	0	0	-1.12E+01	-1.12E+01	0	0
PENRT	MJ	6.90E+01	1.25E-01	1.27E-02	0	5.88E-02	1.34E+00	5.61E-02	-3.86E+00	-3.22E+01
SM	kg	0	0	0	0	0	0	0	0	4.85E-01
RSF	MJ	0	0	0	0	0	0	0	0	0
NRSF	MJ	0	0	0	0	0	0	0	0	0
FW	m ³	4.44E-03	1.20E-05	1.34E-04	0	5.64E-06	3.61E-03	1.65E-05	-1.00E-03	-2.10E-03
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									

Waste indicators

Results per 1 kg of Sealing gasket made of EPDM for tubing constructions

Indicator	Unit	A1-A3	A4	A5	C1	C2	C3/1	C3/2	D/1	D/2
Hazardous waste disposed	kg	4.42E-08	4.81E-12	7.46E-12	0	2.25E-12	9.34E-10	8.73E-12	-2.65E-09	-6.37E-09
Non-hazardous waste disposed	kg	2.74E-02	2.05E-05	1.02E-03	0	9.60E-06	3.62E-01	3.00E-02	-2.02E-03	-1.19E-02
Radioactive waste disposed	kg	4.83E-04	2.29E-07	6.84E-07	0	1.07E-07	9.35E-05	6.93E-07	-2.89E-04	-2.41E-04

Output flow indicators

Results per 1 kg of Sealing gasket made of EPDM for tubing constructions

Indicator	Unit	A1-A3	A4	A5	C1	C2	C3/1	C3/2	D/1	D/2
-----------	------	-------	----	----	----	----	------	------	-----	-----

¹ This indicator accounts for all greenhouse gases except biogenic carbon dioxide uptake and emissions and biogenic carbon stored in the product. As such, the indicator is identical to GWP-total except that the CF for biogenic CO₂ is set to zero.

Components for re-use	kg	0	0	0	0	0	0	0	0	0
Material for recycling	kg	5.17E-03	0	3.30E-02	0	0	0	1.00E+00	0	0
Materials for energy recovery	kg	0	0	0	0	0	0	0	0	0
Exported energy. electricity	MJ	0	0	7.23E-02	0	0	9.64E-01	0	0	0
Exported energy. thermal	MJ	0	0	1.30E-01	0	0	1.73E+00	0	0	0

Optional impact category indicators according to EN 15804+A2 (EF 3.1)

Results per 1 kg of plastic spacer made of secondary material										
Indicator	Unit	A1-A3	A4	A5	C1	C2	C3/1	C3/2	D/1	D/2
Particulate matter	Disease incidences	5.57E-08	1.16E-10	5.76E-11	0	5.44E-11	4.35E-09	3.04E-10	-1.87E-09	-2.25E-08
Ionising radiation. human health *	kBq U235 eq.	5.25E-02	3.32E-05	1.08E-04	0	1.55E-05	1.51E-02	1.08E-04	-4.76E-02	-2.68E-02
Ecotoxicity. freshwater **	CTUe	2.22E+01	9.32E-02	5.47E-03	0	4.37E-02	4.84E-01	3.84E-02	-5.52E-01	-
Human toxicity. cancer **	CTUh	8.80E-10	1.88E-12	5.47E-13	0	8.82E-13	2.09E-11	8.45E-13	-4.44E-11	-3.52E-10
Human toxicity. non-cancer **	CTUh	4.27E-08	8.44E-11	2.90E-11	0	3.96E-11	5.40E-10	3.11E-11	-1.04E-09	-2.00E-08
Land Use **	Pt	2.38E+01	6.17E-02	4.03E-03	0	2.89E-02	4.01E-01	1.73E-02	-7.65E-01	-
										4.73E+00

* Disclaimer: This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents. occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil. from radon and from some construction materials is also not measured by this indicator.

** Disclaimer: The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.

When using the EPD. the results of module C should be considered together with modules A1-A3 (incl. A4 and A5).

Further information on the assumptions made in the LCA calculation and the interpretation of the results can be provided upon request.

Additional environmental. social and economic information

See the most recent sustainability report SEALABLE_Nachhaltigkeitsbericht_2021_EN_web.pdf (sealable.com)

References

General Programme Instructions of the International EPD[®] System. Version 4.0.

EN 15804:2012+A2:2019. Sustainability of construction works — Environmental Product Declarations — Core rules for the product category of construction products.

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

EN ISO 14040:2009-11 Environmental management - Life cycle assessment - Principles and framework

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

PCR 2019:14: CONSTRUCTION PRODUCTS. version 1.3.4 The International EPD System.
www.environdec.com.

Sphera LCA for Experts. LCA FE. software-system and databases. Managed LCA content MLC (fka GaBi database). University of Stuttgart and Sphera Solutions GmbH. 2024. CUP Version: 2024.1. MLC data set documentation under <https://lcadatabase.sphera.com/> (Sept 2024)

Annex A. List of EPDM Sealing Gaskets

<p>20 mm</p>	<p>29mm</p>
<p><i>Glued</i></p> <ul style="list-style-type: none"> ▪ M38572 	<p><i>Glued</i></p> <ul style="list-style-type: none"> ▪ M38550 ▪ M80376 <p><i>Anchored</i></p> <ul style="list-style-type: none"> ▪ M80263 ▪ M80601
<p>26 mm</p>	<p>33 mm</p>
<p><i>Glued</i></p> <ul style="list-style-type: none"> ▪ M38392 ▪ M38541 ▪ M38571 ▪ M38596 ▪ M38912 ▪ M80133 ▪ M80357 <p><i>Anchored</i></p> <ul style="list-style-type: none"> ▪ M38566 ▪ M80365 ▪ M80544 ▪ M38933 ▪ M80362 ▪ M80207 ▪ M80543 ▪ M80296 ▪ M80332 ▪ M80364 ▪ M80488 ▪ M80651 	<p><i>Glued</i></p> <ul style="list-style-type: none"> ▪ M38527 ▪ M38540 ▪ M38544 ▪ M38903 ▪ M38916 ▪ M38917 ▪ M80532 ▪ M80546 <p><i>Anchored</i></p> <ul style="list-style-type: none"> ▪ M38921 ▪ M38923 ▪ M38936 ▪ M80322 ▪ M80323 ▪ M80396 ▪ M80520 ▪ M80535 ▪ M80568
<p>36 mm</p>	<p>44 mm</p>
<p><i>Glued</i></p> <ul style="list-style-type: none"> ▪ M38587 <p><i>Anchored</i></p> <ul style="list-style-type: none"> ▪ M80103 ▪ M80400 	<p><i>Glued</i></p> <ul style="list-style-type: none"> ▪ M38573 ▪ M38925 ▪ M38934 ▪ M38935 ▪ M80157 <p><i>Anchored</i></p> <ul style="list-style-type: none"> ▪ M38928 ▪ M80375 ▪ M80382 ▪ M80395 ▪ M80583