

Owner: Pressalit A/S
No.: MD-25088-EN
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Valid to: 10-10-2030

3rd PARTY VERIFIED

EPD

VERIFIED ENVIRONMENTAL PRODUCT DECLARATION | ISO 14025 & EN 15804



Owner of declaration
 Pressalit A/S
 Pressalitvej 1, DK-8680 Ry
 DK 84 36 45 17
 www.pressalit.com



Issued:
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Valid to:
 10-10-2030

Programme
 EPD Danmark
www.epddanmark.dk



- Industry EPD
- Product EPD
- Product specific
- Average
- Worst Case

Declared product(s)

Solid Pro
 Raja

The Solid Pro product is also a worst-case representative of the Signart product.

The Raja product is also a worst-case representative of the following products: Raja 2, Value 1, Value 2, Fane, Indstik, Light, and P1000.

Number of declared datasets/product variations: 2

Production site
 Isagervej 30, DK-8680 Ry

Use of Guarantees of Origin
 No certificates used
 Electricity covered by GoO
 Biogas covered by GoO

Declared/ functional unit
 1 toilet seat

Year of production site data (A3)
 2024

EPD version
 1

Basis of calculation

This EPD is developed and verified in accordance with the European standard EN 15804+A2.

Comparability

EPDs of construction products may not be comparable if they do not comply with the requirements in EN 15804. EPD data may not be comparable if the datasets used are not developed in accordance with EN 15804 and if the background systems are not based on the same database.

Validity

This EPD has been verified in accordance with ISO 14025 and is valid for 5 years from the date of issue.

Use

The intended use of an EPD is to communicate scientifically based environmental information for construction products, for the purpose of assessing the environmental performance of buildings.

EPD type

- Cradle-to-gate with modules C1-C4 and D
- Cradle-to-gate with options, modules C1-C4 and D
- Cradle-to-grave and module D
- Cradle-to-gate
- Cradle-to-gate with options

CEN standard EN 15804 serves as the core PCR

Independent verification of the declaration and data, according to EN ISO 14025

internal external

Third party verifier:

Stefan Emil Danielsson

Stefan Emil Danielsson

Martha Katrine Sørensen
 Martha Katrine Sørensen
 EPD Danmark

Life cycle stages and modules (MND = module not declared)

Product			Construction process		Use								End of life				Beyond the system boundary
Raw material supply	Transport	Manufacturing	Transport	Installation process	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-construction demolition	Transport	Waste processing	Disposal	Re-use, recovery and recycling potential	
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D	
X	X	X	X	X	ND	ND	ND	MD	ND	ND	ND	X	X	X	X	X	

Product information

Product description

The product materials are in the table below (rounded).

Material	Solid Pro	Raja
Urea (34% cellulose)	67%	88%
Stainless steel	24%	7%
Zinc	0%	2%
Plast/metal	0%	1%
Plastic	10%	3%
Sum	100%	100%

Product packaging:

The composition of the sales- and transport packaging is shown in the table below.

Material, kg	Solid Pro	Raja
Cardboard	0,46	0,38

Representativity

This declaration, including data collection and the modelled foreground system including results, represents the production of toilet seats on the production site located in Ry, Denmark.

The Solid Pro product is also representative of the Signart product.

The Raja product is also representative of the following products: Raja 2, Value 1, Value 2, Fane, Indstik, Light, P1000, and Signart.

Product specific data are based on average values for 2024. Background data is from Ecoinvent 3.11 (EN15804 setting) and are all less than 10 years old. Generally, the used background datasets are of high quality, and only a couple of years old, evaluated according to table E.1 of EN15804.

Picture of products



Solid Pro



Raja

Hazardous substances

The toilet seats do not contain substances listed on the "Candidate List of Substances of Very High Concern for authorisation".

(<http://echa.europa.eu/candidate-list-table>)

Product(s) use

The toilet seat is designed for installation on a toilet bowl to enhance user support and comfort. For indoor use only, as described in the installation instructions.

Essential characteristics

Pressalit toilet seat is manufactured from urea-formaldehyde, a thermosetting plastic known for high surface hardness, chemical resistance, and dimensional stability, providing a non-porous, hygienic and glossy surface. With proper cleaning, the product can last for a long time.

The toilet seat features a standard mounting system compatible with most toilet bowls and includes corrosion-resistant hinges. The product is well suited for both residential and commercial applications.

Product models differentiate in terms of shape, colour, size and mounting systems.

Further technical information can be obtained by contacting the manufacturer or on the manufacturers website: www.pressalit.com

Reference Service Life (RSL)

The expected minimum service life is 15 years.

LCA background

Declared unit

The LCI and LCIA results in this EPD relates to the product Solid Pro and the product Raja as a worst case representative of the following products: Raja 2, Value 1, Value 2, Fane, Indstik, Light, P1000, and Signart.

Name	Value	Unit
Declared unit	1	Piece

Functional unit

The use stages B1-B7 are not declared, and a functional unit is not defined.

Material properties

Name	Mass (kg/DU)	Conversion to kg/kg
Solid Pro	3,79	0,264
Raja	3,31	0,302

PCR

This EPD is developed according to the core rules for the product category of construction products in EN 15804:2012+A2:2019.

Energy modelling principles

Foreground system:

The product is produced using Danish residual grid electricity mix.

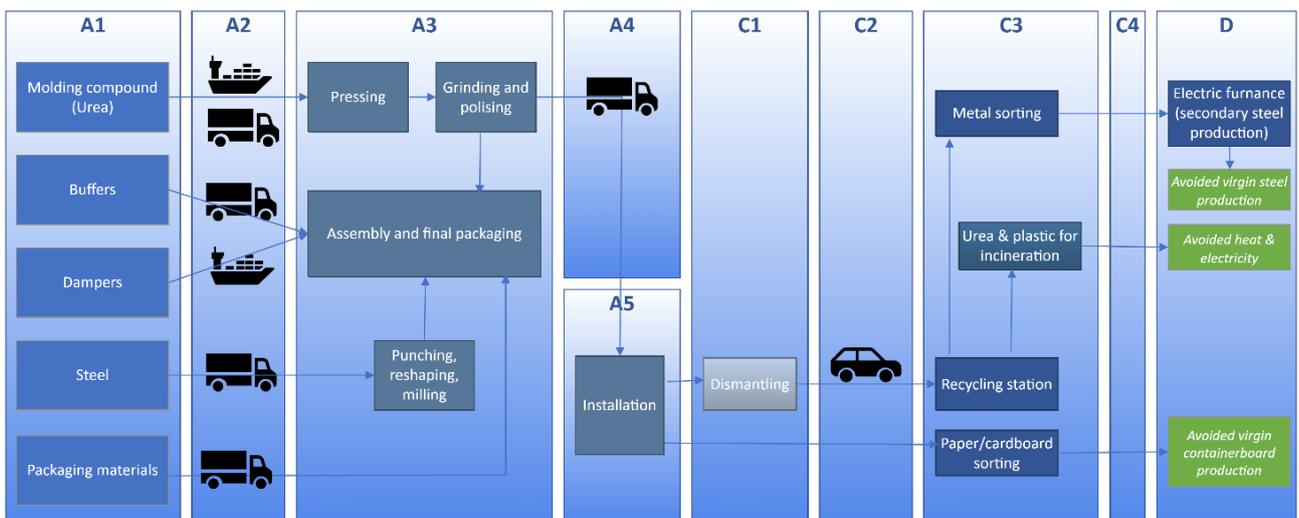
Information about the energy mix in the foreground system:

Energy mix	EF	Unit
Residual grid mix, medium voltage	0,724	kg CO ₂ e/kWh
District heating from wood chips	0,0135	kg CO ₂ e/MJ

Background system:

Background processes are modelled using Ecoinvent 3.11 with EN15804 as allocation setting and EF 3.1 as impact assessment.

Flow diagram



System boundary

This EPD is based on a cradle-to-gate with A4 and A5, modules C1-C4, and module D, in which 100 weight-% has been accounted for.

The general rules for the exclusion of inputs and outputs follows the requirements in EN 15804, 6.3.5, where the total of neglected input flows per module shall be a maximum of 5 % of energy usage and mass and 1 % of energy usage and mass for unit processes.

Product stage (A1-A3) includes:

A1 – Extraction and processing of raw materials

A2 – Transport to the production site

A3 – Manufacturing processes

The product stage comprises the acquisition of all raw materials, products and energy, transport to the production site, packaging and waste processing up to the “end-of-waste” state or final disposal. The LCA results are declared in aggregated form for the product stage, which means, that the sub-modules A1, A2 and A3 are declared as one module A1-A3.

A mixture of urea-formaldehyde resin and cellulose is loaded into the mould and heated to harden, leaving the clear surface without need for polishing.

The seat is cleaned of remaining urea residue and the fixtures are mounted.

Urea residues are recycled as sand-blasting material. Metal and paper waste is sent to recycling, and only fine urea dust is landfilled. A minor amount of office-type waste is sent to incineration.

Construction process stage (A4-A5) includes:

The product is transported via delivery truck to the point of sale (B2B). A distance of 625 km is used based on Pressalit statistics. This can cover Denmark and Northern Europe. The installation is carried out with simple hand tools, and the cardboard packaging is disposed of.

End of Life (C1-C4) includes:

The dismantling (C1) is assumed done with simple hand tools and without impact. The seats are split into two fractions: urea for incineration and metal for recycling.

Although sold via B2B from Pressalit the installation is done is assumed in private households. The product is transported to recycling (C2) 10 km via household car.

The stainless steel is sent for remelting.

The urea/cellulose mix is thermoset plastic and cannot be melted and recycled into new plastic. It can only be incinerated (C3).

The remaining plastic parts (thermoplast) are assumed incinerated with the urea material (C3).

There is no landfilling happening (C4).

Re-use, recovery and recycling potential (D) includes:

There is an avoided production of stainless steel following the remelting of the stainless steel in the product.

Packaging recycling performed in A5, leads to an avoided production of cardboard in module D.

Incineration of urea leads to an avoided production of heat and electricity.

LCA results

ENVIRONMENTAL IMPACTS PER SOLID PRO TOILET SEAT									
Indicator	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
GWP-total	kg CO ₂ eq.	1,24E+01	2,89E-01	3,13E-02	0,00E+00	6,29E-01	6,55E+00	0,00E+00	-4,69E+00
GWP-fossil	kg CO ₂ eq.	1,36E+01	2,88E-01	2,44E-02	0,00E+00	6,29E-01	5,14E+00	0,00E+00	-4,50E+00
GWP-biog	kg CO ₂ eq.	-1,19E+00	1,70E-04	6,86E-03	0,00E+00	9,35E-05	1,42E+00	0,00E+00	-1,70E-01
GWP-luluc	kg CO ₂ eq.	2,81E-02	1,07E-04	6,55E-06	0,00E+00	2,64E-04	4,04E-05	0,00E+00	-2,22E-02
ODP	kg CFC 11 eq.	8,72E-07	6,53E-09	2,92E-10	0,00E+00	1,40E-08	2,05E-09	0,00E+00	-4,77E-08
AP	mol H ⁺ eq.	6,61E-02	7,01E-04	1,13E-04	0,00E+00	1,65E-03	1,52E-03	0,00E+00	-2,65E-02
EP-fr.water	kg P eq.	7,25E-03	2,11E-05	2,46E-06	0,00E+00	7,73E-05	3,25E-05	0,00E+00	-4,93E-03
EP-marine	kg N eq.	1,51E-02	1,84E-04	4,81E-05	0,00E+00	3,04E-04	8,74E-04	0,00E+00	-5,31E-03
EP-terrestrial	mol N eq.	1,47E-01	1,99E-03	4,84E-04	0,00E+00	3,26E-03	7,27E-03	0,00E+00	-5,23E-02
POCP	kg NMVOC eq.	4,90E-02	1,17E-03	1,87E-04	0,00E+00	2,15E-03	1,81E-03	0,00E+00	-1,53E-02
ADPm ¹	kg Sb eq.	3,47E-04	8,58E-07	8,30E-08	0,00E+00	5,94E-06	1,20E-06	0,00E+00	-1,38E-04
ADPf ¹	MJ	2,13E+02	4,37E+00	2,70E-01	0,00E+00	8,26E+00	1,19E+00	0,00E+00	-5,50E+01
WDP ¹	m ³ world eq. deprived	8,53E+00	2,54E-02	2,08E-03	0,00E+00	6,48E-02	3,97E-01	0,00E+00	-2,47E+00
Caption	GWP-total = Global Warming Potential - total; 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 = Ozone Depletion; AP = Acidification;								
	EP-freshwater = Eutrophication – aquatic freshwater; EP-marine = Eutrophication – aquatic marine; EP-terrestrial = Eutrophication – terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential – minerals and metals; ADPf = Abiotic Depletion Potential – fossil fuels; WDP = water use								
Disclaimer	1 The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.								

A calculation of the GWP-total of the A1-A3 modules for variations of Solidpro and Signart can be calculated via the formula:

$$GWP-tot (A1-A3) = \text{product weight} * 2,24 \text{ kg CO}_2\text{-eq/kg} + 3,7 \text{ kg CO}_2\text{-eq}$$

This will estimate the GWP-tot within max. 6% discrepancy.

ADDITIONAL ENVIRONMENTAL IMPACTS PER SOLID PRO TOILET SEAT									
Parameter	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
PM	[Disease incidence]	7,48E-07	2,86E-08	2,47E-09	0,00E+00	2,94E-08	8,99E-09	0,00E+00	-3,51E-07
IRP ²	[kBq U235 eq.]	9,82E-01	4,90E-03	7,41E-04	0,00E+00	1,46E-02	7,75E-03	0,00E+00	-4,63E-01
ETP-fw ¹	[CTUe]	1,11E+02	5,13E-01	7,01E-02	0,00E+00	2,25E+00	1,15E+01	0,00E+00	-6,33E+01
HTP-c ¹	[CTUh]	5,52E-08	4,80E-11	5,84E-12	0,00E+00	1,82E-10	3,68E-10	0,00E+00	-4,20E-09
HTP-nc ¹	[CTUh]	1,80E-07	2,81E-09	1,87E-10	0,00E+00	4,58E-09	1,51E-08	0,00E+00	-1,03E-07
SQP ¹	-	8,10E+01	4,40E+00	5,86E-02	0,00E+00	3,36E+00	1,66E+00	0,00E+00	-4,00E+01
Caption	PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality								
Disclaimers	1 The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.								
	2 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.								

RESOURCE USE PER SOLID PRO TOILET SEAT									
Parameter	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
PERE	[MJ]	4,87E+00	6,74E-02	8,32E-03	0,00E+00	2,24E-01	1,40E+01	0,00E+00	-2,48E+01
PERM	[MJ]	1,39E+01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	-1,39E+01	0,00E+00	0,00E+00
PERT	[MJ]	1,88E+01	6,74E-02	8,32E-03	0,00E+00	2,24E-01	1,33E-01	0,00E+00	-2,48E+01
PENRE	[MJ]	1,74E+02	4,37E+00	2,70E-01	0,00E+00	8,26E+00	4,04E+01	0,00E+00	-5,51E+01
PENRM	[MJ]	3,92E+01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	-3,92E+01	0,00E+00	0,00E+00
PENRT	[MJ]	2,13E+02	4,37E+00	2,70E-01	0,00E+00	8,26E+00	1,19E+00	0,00E+00	-5,51E+01
SM	[kg]	1,86E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
RSF	[MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
NRSF	[MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
FW	[m ³]	1,95E-01	5,91E-04	3,84E-05	0,00E+00	1,45E-03	6,56E-03	0,00E+00	-5,51E-02
Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non renewable primary energy excluding non renewable primary energy resources used as raw materials; PENRM = Use of non renewable primary energy resources used as raw materials; PENRT = Total use of non renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non renewable secondary fuels; FW = Net use of fresh water								

WASTE CATEGORIES AND OUTPUT FLOWS PER SOLID PRO TOILET SEAT									
Parameter	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
HWD	[kg]	5,24E+00	6,38E-03	8,55E-04	0,00E+00	2,67E-02	9,58E-02	0,00E+00	-4,19E+00
NHWD	[kg]	3,86E+01	1,30E-01	2,41E-02	0,00E+00	4,54E-01	3,86E+00	0,00E+00	-2,63E+01
RWD	[kg]	2,49E-04	1,20E-06	1,89E-07	0,00E+00	3,61E-06	1,86E-06	0,00E+00	-1,14E-04
CRU	[kg]	0,00E+00							
MFR	[kg]	2,95E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	9,90E-01	0,00E+00	0,00E+00
MER	[kg]	0,00E+00							
EEE	[MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	8,04E+00	0,00E+00	0,00E+00
EET	[MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,58E+01	0,00E+00	0,00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy								

BIOGENIC CARBON CONTENT PER SOLID PRO TOILET SEAT		
Parameter	Unit	At the factory gate
Biogenic carbon content in product	kg C	0,39
Biogenic carbon content in accompanying packaging	kg C	0,21

ENVIRONMENTAL IMPACTS PER RAJA TOILET SEAT									
Indicator	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
GWP-total	kg CO ₂ eq.	7,82E+00	2,58E-01	2,58E-02	0,00E+00	6,29E-01	7,06E+00	0,00E+00	-5,45E+00
GWP-fossil	kg CO ₂ eq.	9,31E+00	2,58E-01	2,02E-02	0,00E+00	6,29E-01	5,38E+00	0,00E+00	-5,23E+00
GWP-bio	kg CO ₂ eq.	-1,51E+00	1,52E-04	5,67E-03	0,00E+00	9,35E-05	1,68E+00	0,00E+00	-1,98E-01
GWP-luluc	kg CO ₂ eq.	2,28E-02	9,61E-05	5,41E-06	0,00E+00	2,64E-04	3,47E-05	0,00E+00	-2,06E-02
ODP	kg CFC 11 eq.	8,82E-07	5,84E-09	2,41E-10	0,00E+00	1,40E-08	2,08E-09	0,00E+00	-5,39E-08
AP	mol H ⁺ eq.	4,27E-02	6,26E-04	9,36E-05	0,00E+00	1,65E-03	1,56E-03	0,00E+00	-3,10E-02
EP-fr.water	kg P eq.	3,75E-03	1,89E-05	2,03E-06	0,00E+00	7,73E-05	2,92E-05	0,00E+00	-5,76E-03
EP-marine	kg N eq.	1,04E-02	1,65E-04	3,97E-05	0,00E+00	3,04E-04	9,15E-04	0,00E+00	-6,01E-03
EP-terrestrial	mol N eq.	1,06E-01	1,78E-03	4,00E-04	0,00E+00	3,26E-03	7,63E-03	0,00E+00	-6,06E-02
POCP	kg NMVOC eq.	3,70E-02	1,05E-03	1,55E-04	0,00E+00	2,15E-03	1,90E-03	0,00E+00	-1,78E-02
ADPm ¹	kg Sb eq.	2,63E-04	7,68E-07	6,86E-08	0,00E+00	5,94E-06	8,35E-07	0,00E+00	-1,63E-04
ADPf ¹	MJ	1,70E+02	3,91E+00	2,23E-01	0,00E+00	8,26E+00	1,16E+00	0,00E+00	-6,39E+01
WDP ¹	m ³ world eq. deprived	7,10E+00	2,27E-02	1,72E-03	0,00E+00	6,48E-02	4,17E-01	0,00E+00	-2,88E+00
Caption	GWP-total = Global Warming Potential - total; 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 = Ozone Depletion; AP = Acidification;								
	EP-freshwater = Eutrophication – aquatic freshwater; EP-marine = Eutrophication – aquatic marine; EP-terrestrial = Eutrophication – terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential – minerals and metals; ADPf = Abiotic Depletion Potential – fossil fuels; WDP = water use								
Disclaimer	1 The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.								

A calculation of the GWP-total of the A1-A3 modules can be calculated via the formula:

$$GWP-tot (Raja, A1-A3) = \text{product weight} * 1,25 \text{ kg CO}_2\text{-eq/kg} + 3,7 \text{ kg CO}_2\text{-eq}$$

This will estimate the GWP-tot within max. 6% discrepancy for the P1000 product line, and a max. 3% discrepancy for the other product lines.

ADDITIONAL ENVIRONMENTAL IMPACTS PER RAJA TOILET SEAT									
Parameter	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
PM	[Disease incidence]	3,86E-07	2,56E-08	2,04E-09	0,00E+00	2,94E-08	8,65E-09	0,00E+00	-4,12E-07
IRP ²	[kBq U235 eq.]	6,73E-01	4,38E-03	6,12E-04	0,00E+00	1,46E-02	6,28E-03	0,00E+00	-5,48E-01
ETP-fw ¹	[CTUe]	6,63E+01	4,59E-01	5,79E-02	0,00E+00	2,25E+00	1,20E+01	0,00E+00	-7,35E+01
HTP-c ¹	[CTUh]	5,98E-08	4,29E-11	4,83E-12	0,00E+00	1,82E-10	3,88E-10	0,00E+00	-4,94E-09
HTP-nc ¹	[CTUh]	1,14E-07	2,52E-09	1,55E-10	0,00E+00	4,58E-09	1,58E-08	0,00E+00	-1,21E-07
SQP ¹	-	6,29E+01	3,93E+00	4,84E-02	0,00E+00	3,36E+00	1,16E+00	0,00E+00	-4,71E+01
Caption	PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality								
Disclaimers	1 The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.								
	2 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.								

RESOURCE USE PER RAJA TOILET SEAT									
Parameter	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
PERE	[MJ]	1,15E+01	6,03E-02	6,88E-03	0,00E+00	2,24E-01	1,61E+01	0,00E+00	-2,96E+01
PERM	[MJ]	1,60E+01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	-1,60E+01	0,00E+00	0,00E+00
PERT	[MJ]	2,74E+01	6,03E-02	6,88E-03	0,00E+00	2,24E-01	1,05E-01	0,00E+00	-2,96E+01
PENRE	[MJ]	1,34E+02	3,91E+00	2,23E-01	0,00E+00	8,26E+00	3,73E+01	0,00E+00	-6,40E+01
PENRM	[MJ]	3,61E+01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	-3,61E+01	0,00E+00	0,00E+00
PENRT	[MJ]	1,70E+02	3,91E+00	2,23E-01	0,00E+00	8,26E+00	1,16E+00	0,00E+00	-6,40E+01
SM	[kg]	1,58E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
RSF	[MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
NRSF	[MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
FW	[m ³]	1,62E-01	5,28E-04	3,17E-05	0,00E+00	1,45E-03	6,84E-03	0,00E+00	-6,43E-02
Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non renewable primary energy excluding non renewable primary energy resources used as raw materials; PENRM = Use of non renewable primary energy resources used as raw materials; PENRT = Total use of non renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non renewable secondary fuels; FW = Net use of fresh water								

WASTE CATEGORIES AND OUTPUT FLOWS PER RAJA TOILET SEAT									
Parameter	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
HWD	[kg]	1,76E+00	5,70E-03	7,06E-04	0,00E+00	2,67E-02	1,02E-01	0,00E+00	-4,94E+00
NHWD	[kg]	2,07E+01	1,16E-01	1,99E-02	0,00E+00	4,54E-01	4,16E+00	0,00E+00	-3,09E+01
RWD	[kg]	1,69E-04	1,08E-06	1,56E-07	0,00E+00	3,61E-06	1,52E-06	0,00E+00	-1,34E-04
CRU	[kg]	0,00E+00							
MFR	[kg]	4,20E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,50E-01	0,00E+00	0,00E+00
MER	[kg]	0,00E+00							
EEE	[MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	9,24E+00	0,00E+00	0,00E+00
EET	[MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,81E+01	0,00E+00	0,00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy								

BIOGENIC CARBON CONTENT PER RAJA TOILET SEAT		
Parameter	Unit	At the factory gate
Biogenic carbon content in product	kg C	0,44
Biogenic carbon content in accompanying packaging	kg C	0,17

Additional information

LCA interpretation

The overall interpretations of the two types of toilet seats are quite similar. The largest impact across the impact categories comes from the material production module A1, although for GWP the largest single impact is from incineration of plastic materials (mainly urea) from the disposed toilet seats.

For the Solid Pro product, the A1 impact is split between production of stainless steel and urea/cellulose. For the Raja, there is less stainless steel and the main A1 impact is from urea production.

There are minor impacts in module A3 from the electricity production. Minor credits from avoided production in module D are from recycling of stainless steel.

Technical information on scenarios

Transport to the building site (A4)

Scenario information	Value	Unit
Fuel type	Diesel	-
Vehicle type	Lorry	-
Transport distance	642	km
Capacity utilisation (including empty runs)	n/a	%
Gross density of products transported	n/a	kg/m ³
Capacity utilisation volume factor	n/a	-

Installation of the product in the building (A5)

Scenario information	Value	Unit
Ancillary materials	0	kg
Water use	0	m ³
Other resource use	0	kg
Energy type and consumption	0	kWh
Waste materials	0,38-0,46	kg
Output materials	0	kg
Direct emissions to air, soil or water	0	kg

Reference service life

RSL information		Unit
Reference service Life	15	Years
Declared product properties	Refer to Pressalit website on www.pressalit.com	
Design application parameters		
Assumed quality of work		
Outdoor environment		
Indoor environment		
Usage conditions		
Maintenance		

End of life (C1-C4)

Scenario information	Value	Unit
Collected separately		kg
Collected with mixed waste	3,31-3,79	kg
For reuse	0	kg
For recycling	0,25-0,99	kg
For energy recovery	2,80-3,06	kg
For final disposal	0	kg
Assumptions for scenario development	0	As appropriate

Re-use, recovery and recycling potential (D)

Scenario information/Material	Value	Unit
Displaced material	0,25-0,99	kg
Electric recovery from waste incineration	8,04-9,24	MJ
Thermal recovery from waste incineration	15,79-18,13	MJ

Indoor air

The EPD does not give information on release of dangerous substances to indoor air because the horizontal standards on the relevant measurements are not available. Read more in EN15804+A1 chapter 7.4.1.

Soil and water

The EPD does not give information on release of dangerous substances to soil and water because the horizontal standards on the relevant measurements are not available. Read more in EN15804+A1 chapter 7.4.2.

References

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General programme instructions

General Programme Instructions, version 3.0, spring 2025

www.epddanmark.dk

Technical Rules and Guidelines

Technical Rules and Guidelines, version 1.0, spring 2025

www.epddanmark.dk

EN 15804

DS/EN 15804 + A2:2019 - "Sustainability of construction works – Environmental product declarations – Core rules for the product category of construction products"

EN 15942

DS/EN 15942:2011 – " Sustainability of construction works – Environmental product declarations – Communication format business-to-business"

ISO 14025

DS/EN ISO 14025:2010 – " Environmental labels and declarations – Type III environmental declarations – Principles and procedures"

ISO 14040

DS/EN ISO 14040:2008 – " Environmental management – Life cycle assessment – Principles and framework"

ISO 14044

DS/EN ISO 14044:2008 – " Environmental management – Life cycle assessment – Requirements and guidelines"