

# Environmental EPD<sup>®</sup> Product Declaration



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

## EVOC

**FASSA  
BORTOLO**

**FASSA srl**

**Via Lazzaris, 3 - 31027 Spresiano (TV)**

**[www.fassabortolo.com](http://www.fassabortolo.com)**

*Programme:*

The International EPD<sup>®</sup> System, [www.environdec.com](http://www.environdec.com)

*Programme operator:*

EPD International AB

*EPD registration number:*

S-P-08213

*Publication date:*

2023-04-06

*Valid until:*

2028-03-15

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](http://www.environdec.com).


This EPD covers multiple products: EVOC (EVOC MATT White 10 L, EVOC MATT White 2,5 L, EVOC MATT Neutral 9 L, EVOC MATT Neutral 2,25 L, EVOC SATIN White 10 L, EVOC SATIN White 2,5 L, EVOC SATIN Neutral 9 L, EVOC SATIN Neutral 2,25 L).



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## General information

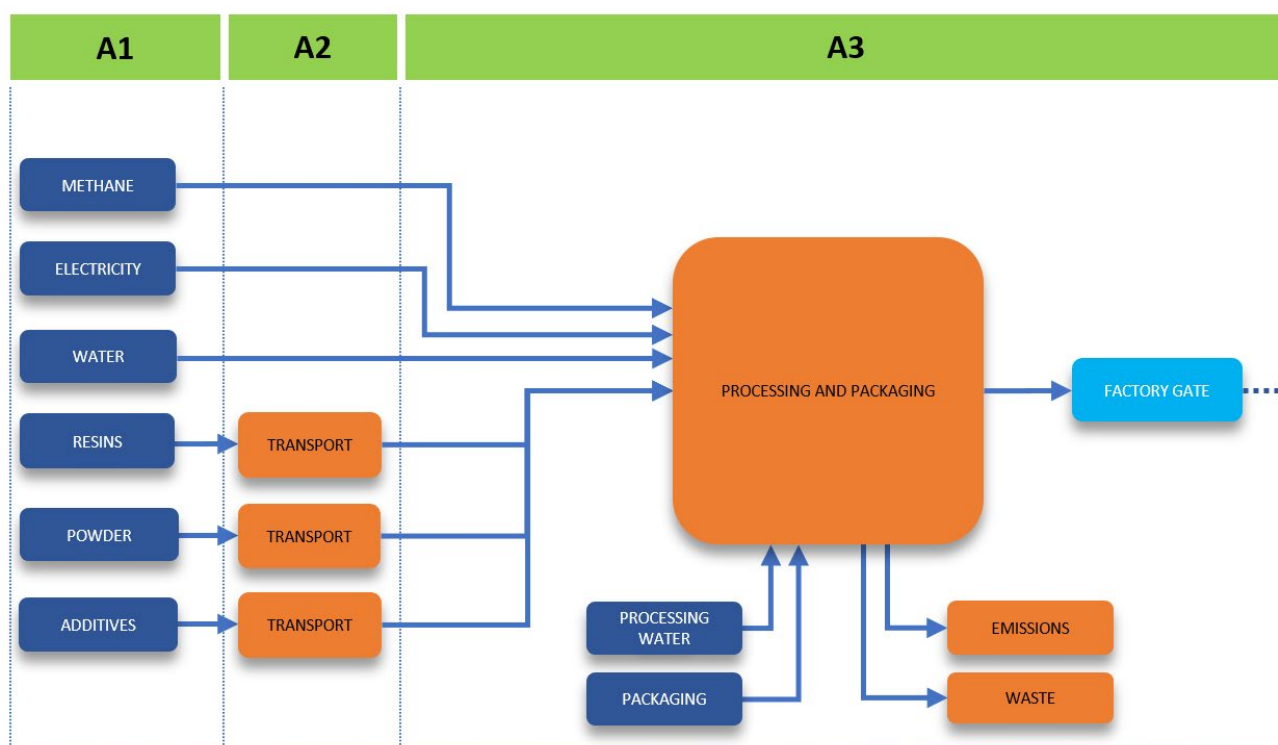
### Programme information

<b>Accountabilities for PCR, LCA and independent, third-party verification</b>
<b>Product Category Rules (PCR)</b>
CEN standard EN 15804 serves as the Core Product Category Rules (PCR)
Product Category Rules (PCR): PCR 2019:14, Construction Products, Version 1.2.5
PCR review was conducted by: Martin Erlandsson, IVL Swedish Environmental Research Institute, martin.erlandsson@ivl.se
<b>Life Cycle Assessment (LCA)</b>
LCA accountability: Spinlife S.r.l.- Spin Off dell'Università di Padova, via Carlo Cerato 14, 35122 Padova PD, <a href="mailto:info@spinlife.it">info@spinlife.it</a>

<b>Third-party verification</b>
Independent third-party verification of the declaration and data, according to ISO 14025:2006, via: <input checked="" type="checkbox"/> EPD verification by accredited certification body Third-party verification: SGS Italia S.p.A. - Via Caldera, 21 - 20153 Milano (Italy) is an approved certification body accountable for the third-party verification. The certification body is accredited by: Accredia – accreditation n° 006H.
Procedure for follow-up of data during EPD validity involves third party verifier: <input checked="" type="checkbox"/> Yes <input 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.

### System diagram



## Company information

**Owner of the EPD:** FASSA s.r.l. Via Lazzaris, 3 – 31027 Spresiano (TV) - ITALY

**Contact:** [fassa@fassabortolo.it](mailto:fassa@fassabortolo.it)

**Description of the organisation:** Fassa Bortolo is a historic brand in the construction world, a leader in Italy and one of the most established internationally. Attention to quality and raw materials, research, innovation and respect for the environment have always represented the company's vision, which is expressed in a constant commitment to the development of cutting-edge solutions for the evolution of the sector. Fassa Bortolo offers a vast range of products which presents itself as an Integrated System capable of satisfying all market needs and responding to every type of work, from small interventions to large construction sites. Premixed mortars and plasters, products for painting, screeds and adhesives, adhesives, waterproofing products, fillers for joints, bio-ecological products, solutions for the restoration and rehabilitation of damp masonry, for restoring concrete and thermal insulation products. Currently the Fassa Group is present with 19 plants, 9 commercial branches, with a workforce of over 1,600 collaborators including employees and the sales force.

**Product-related or management system-related certifications:** UNI EN ISO 9001 and UNI EN ISO 14001 certifications of the production site of Impa SpA, a company subject to management activities and coordination of Fassa S.r.l.

**Name and location of production site(s):** Impa SpA - San Pietro di Feletto (TV).

## Product information

**Product name:** EVOC (EVOC MATT White 10 L, EVOC MATT White 2,5 L, EVOC MATT Neutral 9 L, EVOC MATT Neutral 2,25 L, EVOC SATIN White 10 L, EVOC SATIN White 2,5 L, EVOC SATIN Neutral 9 L, EVOC SATIN Neutral 2,25 L).

**Product identification:** The product is a water-based wall enamel for interior use. It is composed of special polymers in water emulsion, selected aggregates, titanium dioxide, additives suitable for protecting the product from the development of a broad spectrum of mould species, pigments and special additives to facilitate application and formation of the film. It is a water-dilutable enamel with very low VOC emissions. This EPD presents the highest potential environmental impacts found among the products within the EVOC family, according to the "worst-case product" approach, suggested by the PCR.

For further technical information, please refer to the technical data sheets, which are freely available at [www.fassabortolo.com](http://www.fassabortolo.com).

**Product description:** It is particularly suitable for painting indoor walls and ceilings. It can be applied as a protective and decorative product, white or coloured on suitably prepared lime, lime-cement, gypsum and plasterboard finishing plasters.

**UN CPC code:** 3511 – Paints and varnishes and related products.

**Geographical scope:** European

## LCA information

**Declared unit:** the production of 1 kg of water paint produced. The product under study is analysed considering also its packaging.

**Time representativeness:** 1 year (2021).

**Database and LCA software used:** Ecoinvent v3.8 and SimaPro v.9.3.0.2.

**Description of system boundaries:** Cradle to gate (A1–A3), with the omission of modules C1-C4 and D, according to the requirements of §5.2 of EN 15804:2012+A2:2019:

- The product is physically integrated with other products during installation; therefore, it cannot be physically separated at end-of-life;
- The product is no longer identifiable separately from other materials at end-of-life;
- The product does not contain biogenic carbon.

**Cut-off and exclusions:** The following phases were excluded in this study: the construction, maintenance and decommissioning of infrastructure, understood as machinery and buildings (if this information was not already present within the dataset used).

**Data quality:** In conducting this study, primary data were used, where available. Where access to this type of data was not possible, datasets from the Ecoinvent v3.8 database were taken as reference.

In conducting this study, the physical allocation coefficients were calculated on the basis of the kg of paint produced at the plant in 2021.

The allocation was applied in the following cases:

- To allocate electricity consumption between the different products;
- To allocate thermal energy consumption among the different products;
- To allocate water consumption among the different products;
- To allocate the consumption of generated emissions among the different products;
- To allocate consumption and plant waste among the different products.

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

	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	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Geography	EU	EU	IT														
Specific data used	> 90 %																
Variation – products	37 %																
Variation – sites	Not relevant																
X = included module, MND = module not declared																	

- Module A1: includes the extraction and production of the raw materials, the production of the packaging with which the raw materials reach the production plant and the production and consumption of electricity and methane gas involved in the production process.
- Module A2: includes the transport of raw materials to the production plant.
- Module A3: includes the emissions generated during the production process, the consumption of tap water used during the production process, the waste generated during the production process, its transport to the disposal site and the relative treatment and the production of packaging for the finished product.

## Content information

Product components	Weight, kg	Post-consumer material, weight-%	Renewable material, weight-%
Water	0,22	/	/
Additives	0,06	/	/
Pigments and Fillers	0,32	/	/
Dispersions and Resins	0,40	/	/
<b>Total</b>	<b>1,00</b>	<b>/</b>	<b>/</b>
Packaging materials	Weight, kg	Weight-% (versus the product)	
Tinplate	0,1042	10,42%	
Paper	0,0003	0,03%	
Wood	0,0669	6,69%	
Cardboard	0,0057	0,57%	
<b>Total</b>	<b>0,1771</b>	<b>17,71%</b>	

### Dangerous substances from the candidate list of SVHC for Authorisation

The products do not contain any substances on the 'Candidate list of very high concern (SVHC) for authorisation' in a percentage greater than 0.1%.

## Environmental Information

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.

### Potential environmental impact – mandatory indicators according to EN 15804

Results per functional or declared unit					
Indicator	Unit	A1	A2	A3	Tot.A1-A3
GWP-fossil	kg CO <sub>2</sub> eq.	2,10E+00	6,90E-02	3,85E-01	2,55E+00
GWP-biogenic	kg CO <sub>2</sub> eq.	3,57E-02	1,83E-04	-1,19E-01	-8,27E-02
GWP-luluc	kg CO <sub>2</sub> eq.	1,83E-03	2,71E-05	1,12E-03	2,97E-03
GWP-total	kg CO <sub>2</sub> eq.	2,14E+00	6,92E-02	2,34E-01	2,44E+00
ODP	kg CFC 11 eq.	2,61E-07	1,60E-08	2,64E-08	3,03E-07
AP	mol H+ eq.	1,10E-02	2,80E-04	1,84E-03	1,31E-02
EP-freshwater	kg P eq.	8,14E-04	4,44E-06	1,79E-04	9,98E-04
EP-marine	kg N eq.	1,96E-03	8,44E-05	4,77E-04	2,52E-03
EP-terrestrial	mol N eq.	1,92E-02	9,22E-04	4,61E-03	2,47E-02
POCP	kg NMVOC eq.	6,75E-03	2,28E-04	1,17E-03	8,15E-03
ADP-minerals&metals*	kg Sb eq.	2,09E-05	2,40E-07	1,23E-05	3,34E-05
ADP-fossil*	MJ	3,51E+01	1,04E+00	4,47E+00	4,07E+01
WDP *	m <sup>3</sup> depriv.	1,46E+00	1,52E-02	1,89E-01	1,67E+00

**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.

### Potential environmental impact – additional mandatory and voluntary indicators

Results per functional or declared unit					
Indicator	Unit	A1	A2	A3	Tot.A1-A3
GWP-GHG <sub>1</sub>	kg CO <sub>2</sub> eq.	2,07E+00	6,86E-02	3,79E-01	2,52E+00

**Acronyms:** GWP-GHG = global warming potential – greenhouse gases

<sup>1</sup> The indicator includes all greenhouse gases included in GWP-total but excludes biogenic carbon dioxide uptake and emissions and biogenic carbon stored in the product. This indicator is thus almost equal to the GWP indicator originally defined in EN 15804:2012+A1:2013.

## Use of resources

Results per functional or declared unit					
Indicator	Unit	A1	A2	A3	Tot.A1-A3
PERE	MJ	1,45E+00	1,10E-02	2,90E-01	1,75E+00
PERM	MJ	9,20E-01	3,67E-03	2,50E+00	3,43E+00
PERT	MJ	2,37E+00	1,47E-02	2,78E+00	5,17E+00
PENRE	MJ	2,76E+01	1,04E+00	4,47E+00	3,31E+01
PENRM	MJ	9,14E+00	0,00E+00	0,00E+00	9,14E+00
PENRT	MJ	3,51E+01	1,04E+00	4,47E+00	4,07E+01
SM	kg	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
NRSF	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00
FW	m <sup>3</sup>	3,66E-02	3,75E-04	5,58E-03	4,26E-02

**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 production and output flows

### Waste production

Results per functional or declared unit					
Indicator	Unit	A1	A2	A3	Tot.A1-A3
Hazardous waste disposed	kg	2,87E-05	2,72E-06	2,06E-05	5,20E-05
Non-hazardous waste disposed	kg	5,33E-01	5,37E-02	1,47E-01	7,34E-01
Radioactive waste disposed	kg	1,13E-04	7,06E-06	1,25E-05	1,33E-04

### Output flows

Results per functional or declared unit					
Indicator	Unit	A1	A2	A3	Tot.A1-A3
Components for re-use	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Material for recycling	kg	0,00E+00	0,00E+00	1,97E-02	1,97E-02
Materials for energy recovery	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Exported energy, electricity	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Components for re-use	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00

### Information on biogenic carbon content

Results per functional or declared unit		
Biogenic Carbon Content	Unit	Quantity
Biogenic carbon content in product	kg C	0,00E+00
Biogenic carbon content in packaging	kg C	2,92E-02

Note: 1 kg biogenic carbon is equivalent to 44/12 kg CO<sub>2</sub>.



## Differences versus previous versions

- First emission.

## References

- General programme instructions of the international EPD® system. version 4.0
- PCR 2019:14 construction products, version 1.2.5
- EN 15804:2012+A2:2019/AC:2021 sustainability of construction works - environmental product declarations - core rules for the product category of construction products
- EN ISO 14025:2010 environmental labels and declarations - type III environmental declarations – principles and procedures
- EN ISO 14044:2006+A1:2018+A2:2020 environmental management – life cycle assessment – requirements and guidelines
- EN ISO 14040:2006+A1:2020: environmental management – life cycle assessment – principles and framework
- Studio di Life Cycle Assessment finalizzato all'ottenimento di due Dichiarazioni Ambientali di Prodotto per: EVOC e SICURA G3 28/02/2023 Rev.02