

## **ENVIRONMENTAL PRODUCT DECLARATION**

in accordance with ISO 14025, ISO 21930 and EN 15804

Owner of the declaration:

Program operator:

Publisher:

Declaration number:

Registration number:

ECO Platform reference number:

Issue date:

Valid to:

Saint-Gobain Sweden AB, Scanspac

The Norwegian EPD Foundation

The Norwegian EPD Foundation

NEPD-3386-2006-EN

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07.03.2022

07.03.2027

# Dalapro Facade, Dalapro Lightning Facade

## Saint-Gobain Sweden AB, Scanspac

**Dalapro**®

www.epd-norge.no





## **General information**

#### **Product:**

Dalapro Facade, Dalapro Lightning Facade

#### Program operator:

The Norwegian EPD Foundation Pb. 5250 Majorstuen, 0303 Oslo Phone: +47 23 08 80 00 e-mail: post@epd-norge.no

#### **Declaration number:**

NEPD-3386-2006-EN

#### **ECO Platform reference number:**

#### This declaration is based on Product Category Rules:

CEN Standard EN 15804:2012+A1:2013 serves as core PCR.

NPCR 009:2018 Part B for Technical - Chemical products in the building and construction industry

#### Statement of liability:

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

#### **Declared unit:**

1 kg Dalapro Facade, Dalapro Lightning Facade

## Declared unit with option:

A1,A2,A3,A4

#### **Functional unit:**

### General information on verification of EPD from EPD tools:

Independent verification of data, other environmental information and the declaration according to ISO 14025:2010, § 8.1.3 and § 8.1.4. Individual third party verification of each EPD is not required when the EPD tool is i) integrated into the company's environmental management system, ii) the procedures for use of the EPD tool are approved by EPDNorway, and iii) the process is reviewed annualy. See Appendix G of EPD-Norway's General Programme Instructions for further information on EPD tools.

#### **Verification of EPD tool:**

Independent third party verification of the EPD tool, background data and test-EPD in accordance with EPDNorway's procedures and guidelines for verification and approval of EPD tools.

Anne Rønning, Norsus AS (no signature required)

#### Owner of the declaration:

Saint-Gobain Sweden AB, Scanspac Contact person: Christian Nilsson Phone: +46 (0)19-46 34 00 e-mail: ehs.scanspac@dalapro.com

#### Manufacturer:

Saint-Gobain Sweden AB, Scanspac

#### Place of production:

Saint-Gobain Sweden AB, Scanspac Kemivägen 7 SE-705 97 Glanshammar Sweden

#### Management system:

ISO 9001, ISO 14001

#### Organisation no:

556241-2592

Issue date: 07.03.2022

Valid to: 07.03.2027

#### Year of study:

2020

## Comparability:

EPD of construction products may not be comparable if they not comply with EN 15804 and seen in a building context.

#### Development and verification of EPD:

The declaration has been developed and verified using EPD tool lca.tools ver EPD2020.11, developed by LCA.no AS. The EPD tool is integrated into the company's environmental management system, and has been approved by EPD-Norway

Developer of EPD:

Ellinor Johansson

Reviewer of company-specific input data and EPD:

Christian Borgenfalk

#### Approved:

Sign

Håkon Hauan, CEO EPD-Norge



## **Product**

### **Product description:**

Dalapro Lightning Facade is a ready-mixed spray filler for repairs on walls and ceilings, outdoors and indoors on mineral surfaces.

Dalapro Facade is a ready-mixed hand filler for minor repairs for walls and ceilings, outdoors and indoors on mineral surfaces. Suitable for initial filling and thin smoothing.

#### **Product specification**

#### Packaging:

Dalapro Facade: 10 litre bucket and 3 litre bucket. Dalapro Facade 10 litre and 3 litre is packaged in a bucket manufactured in 100 % recyclable plastic and consists of at least 90 % recycled plastic. Dalapro Lightning Facade: 15-litre plastic sack.

All calculations in this EPD is made with the 10 litre bucket. It represent the majority of the market.

Materials	%
Water	20-50
Filler-dolomite	10-25
Binder	10-25
Filler-cenospheres	25-50
Thickener	1-5
Additive	1-5
Packaging	
Pallet	

#### **Technical data:**

TECHNICAL DATA
Binding agent: Latex co-polymer
Solvent: Water
Grain size: Max. 0.2 mm
pH: Approx. 9
Colour: Grey

#### Market:

Europe

#### Reference service life, product

Filler has a limited shelf life and is date-marked. Unopened packaging can be kept in a dark place, free from frost, for up to 12 months. Containers that have been opened must be sealed well.

#### Reference service life, building

Not included in the declaration

## LCA: Calculation rules

#### **Declared unit:**

1 kg Dalapro Facade, Dalapro Lightning Facade

#### **Cut-off criteria:**

All major raw materials and all the essential energy is included. The production processes for raw materials and energy flows with very small amounts (less than 1%) are not included. These cut-off criteria do not apply for hazardous materials and substances.

#### Allocation:

The allocation is made in accordance with the provisions of EN 15804. Incoming energy and water and waste production in-house is allocated equally among all products through mass allocation. Effects of primary production of recycled materials is allocated to the main product in which the material was used. The recycling process and transportation of the material is allocated to this analysis.

### Data quality:

Specific data for the product composition are provided by the manufacturer. They represent the production of the declared product and were collected for EPD development in the year of study. Background data is based on registered EPDs according to EN 15804, Ostfold Research databases, ecoinvent and other LCA databases. The data quality of the raw materials in A1 is presented in the table below.

Materials	Source	Data quality	Year
Chemicals	Chemicals below cut-off	No data	0
Additives	ecoinvent 3.4	Database	2017
Binder	ecoinvent 3.4	Database	2017
Filler	ecoinvent 3.4	Database	2017
Packaging	ecoinvent 3.4	Database	2017
Water	ecoinvent 3.4	Database	2017
Packaging	Modified ecoinvent 3.4	Database	2017
Filler	LCA.no	Database	2018
Packaging	Supplier	Specific	2020



## System boundary:

The flowchart shows the system boundaries A1-A4.
All calculations in this EPD is made with the 10 litre bucket. It represent the majority of the market.



## Additional technical information:

The product meets CE-marking requirements in accordance with EN 15824. Manufactured in accordance with ISO 9001 and ISO 14001



Unit

Value

## LCA: Scenarios and additional technical information

The following information describe the scenarios in the different modules of the EPD.

### Transport from production place to user (A4)

Туре	Capacity utilisation (incl. return) %	Type of vehicle	Distance km	Fuel/Energy consumption	Unit	Value (I/t)
Truck	55,0 %	Truck, lorry over 32 tonnes, EURO 6	300	0,022606	l/tkm	6,78
Railway					l/tkm	
Boat					l/tkm	
Other Transportation					l/tkm	

Assembly (A5)	Use (B1)

	Unit	Value
Auxiliary	kg	
Water consumption	m <sup>3</sup>	
Electricity consumption	kWh	
Other energy carriers	MJ	
Material loss	kg	
Output materials fr ste treatment	kg	
Dust in the air	kg	
VOC emissions	kg	

Maintenance (B2)/Repair (B3) Replacement (B4)/Refurbishment (B5)

	Unit	Value
Maintenance cycle*	SCO	
Auxiliary	char.	
Other resources	4/10	
Water consumption	Scenario	J. 95
Electricity consumption	kWh	dite
Other energy carriers	MJ	
Material loss	kg	
VOC emissions	kg	

	Unit	Value
Replacement cycle*		
Electricity consumption	kWh	
Replacement of worn parts		
* Described above if relevant	100	

## Operational energy (B6) and water consumption (B7)

	Unit	Value
Water consumption	m <sup>3</sup>	
Electricity consumption	kWh	
Other energy carriers	MJ	
Power output of equipment	KW	

* Described above if relevant		
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·Aa		
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"6 <sub>0</sub>		
End of Life (C1, C 1/O)		
. '/p-	Unit	Value
1/0/		
Hazardous waste disposed	kg	
Hazardous waste disposed  Collected as mixed construction was.	kg kg	
Hazardous waste disposed  Collected as mixed construction was  Reuse	kg kg kg	
Hazardous waste disposed Collected as mixed construction was Reuse Recycling	kg kg kg	
End of Life (C1, C) Hazardous waste disposed Collected as mixed construction was. Recycling Energy recovery	kg kg kq	

### Transport to waste processing (C2)

Туре	Capacity utilisation (incl. return) %	Type of vehicle	Distance km	Fuel/Energy consumption	Unit	Value (I/t)
Truck					I/tkm	
Railway					I/tkm	
Boat					I/tkm	
Other Transportation					I/tkm	



## **LCA: Results**

The LCA results are presented below for the declared unit defined on page 2 of the EPD document.

## System boundaries (X=included, MND=module not declared, MNR=module not relevant)

	Product stage			instal	uction lation ige		User stage							End of	life stage	•	Beyond the system bondaries
	Raw materials	Transport	Manufacturing	Transport	Assembly	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De- construction demolition	Transport	Waste processing	Disposal	Reuse-Recovery- Recycling- potential
Ī	A1	A2	A3	A4	A5	B1	B2	В3	В4	B5	В6	В7	C1	C2	C3	C4	. D
ſ	Х	Х	Х	Х												•	

## **Environmental impact**

Parameter	Unit	A1-A3	A4
GWP	kg CO <sub>2</sub> -eq	4,18E-01	2,48E-02
ODP	kg CFC11 -eq	4,07E-08	5,10E-09
POCP	kg C <sub>2</sub> H <sub>4</sub> -eq	1,27E-04	3,88E-06
AP	kg SO <sub>2</sub> -eq	1,45E-03	6,41E-05
EP	kg PO <sub>4</sub> <sup>3-</sup> -eq	3,92E-04	8,84E-06
ADPM	kg Sb -eq	1,10E-06	5,91E-08
ADPE	MJ	1,34E+01	4,08E-01

GWP Global warming potential; ODP Depletion potential of the stratospheric ozone layer, POCP Formation potential of tropospheric photochemical oxidants; AP Acidification potential of land and water; EP Eutrophication potential; ADPM Abiotic depletion potential for non fossil resources; ADPE Abiotic depletion potential for fossil resources

"Reading example: 9,0 E-03 = 9,0\*10-3 = 0,009"

\*INA Indicator Not Assessed



### Resource use

Parameter	Unit	A1-A3	A4
RPEE	MJ	2,10E+00	7,41E-03
RPEM	MJ	9,91E-01	0,00E+00
TPE	MJ	3,09E+00	7,41E-03
NRPE	MJ	1,16E+01	4,20E-01
NRPM	MJ	2,95E+00	0,00E+00
TRPE	MJ	1,46E+01	4,20E-01
SM	kg	5,00E-02	0,00E+00
RSF	MJ	0,00E+00	0,00E+00
NRSF	MJ	0,00E+00	0,00E+00
W	m <sup>3</sup>	2,07E-02	9,95E-05

RPEE Renewable primary energy resources used as energy carrier; RPEM Renewable primary energy resources used as raw materials; TPE Total use of renewable primary energy resources; NRPE Non renewable primary energy resources used as materials; TRPE Total use of non renewable primary energy resources; SM Use of secondary materials; RSF Use of renewable secondary fuels; NRSF Use of non renewable secondary fuels; NRSF Use of non renewable secondary fuels; W Use of net fresh water

"Reading example: 9.0 E-03 = 9.0\*10-3 = 0.009"

\*INA Indicator Not Assessed

## End of life - Waste

Parameter	Unit	A1-A3	A4
HW	kg	3,72E-03	2,24E-07
NHW	kg	2,03E-01	3,84E-02
RW	kg	INA*	INA*

HW Hazardous waste disposed; NHW Non hazardous waste disposed; RW Radioactive waste disposed

"Reading example: 9,0 E-03 = 9,0\*10-3 = 0,009"

\*INA Indicator Not Assessed

## End of life - Output flow

·			
Parameter	Unit	A1-A3	A4
CR	kg	0,00E+00	0,00E+00
MR	kg	8,00E-04	0,00E+00
MER	kg	4,73E-03	0,00E+00
EEE	MJ	INA*	INA*
ETE	MJ	INA*	INA*

CR Components for reuse; MR Materials for recycling; MER Materials for energy recovery; EEE Exported electric energy; ETE Exported thermal energy

"Reading example: 9,0 E-03 = 9,0\*10-3 = 0,009"

\*INA Indicator Not Assessed



## **Additional Norwegian requirements**

### Greenhouse gas emissions from the use of electricity in the manufacturing phase

National production mix from import, low voltage (production of transmission lines, in addition to direct emissions and losses in grid) of applied electricity for the manufacturing process (A3).

Electricity mix	Data source	Amount	Unit
Renewable electricity with Guarantee of Origin from LOS (kWh)	Modified ecoinvent 3.4	60,20	g CO2-ekv/kWh

#### **Dangerous substances**

The product contains no substances given by the REACH Candidate list or the Norwegian priority list.

#### Indoor environment

## **Bibliography**

 $ISO\ 14025: 2010\ Environmental\ labels\ and\ declarations\ -\ Type\ III\ environmental\ declarations\ -\ Principles\ and\ procedures.$ 

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

EN 15804:2012+A1:2013 Environmental product declaration - Core rules for the product category of construction products.

ISO 21930:2017 Sustainability in buildings and civil engineering works. Core rules for environmental product declarations of construction products.

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Iversen et al., (2019) EPD generator for Saint-Gobain Weber and Scanspac - Background information and LCA data, LCA.no report number 05.18

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NPCR 009 Part B for technical-chemical products. Ver. 1.0 June 2018, EPD-Norge.

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