

## ENVIRONMENTAL PRODUCT DECLARATION

in accordance with ISO 14025, ISO 21930 and EN 15804

Owner of the declaration:	Saint-Gobain Sweden AB, Weber
Program operator:	The Norwegian EPD Foundation
Publisher:	The Norwegian EPD Foundation
Declaration number:	NEPD-2367-1106-EN
Registration number:	NEPD-2367-1106-EN
ECO Platform reference number:	-
Issue date:	09.09.2020
Valid to:	09.09.2025

### weber färgat murbruk M 2,5

Saint-Gobain Sweden AB, Weber



[www.epd-norge.no](http://www.epd-norge.no)



## General information

### Product:

weber färgat murbruk M 2,5

### Program operator:

The Norwegian EPD Foundation  
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e-mail: [post@epd-norge.no](mailto:post@epd-norge.no)

### Declaration number:

NEPD-2367-1106-EN

### ECO Platform reference number:

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

CEN Standard EN 15804:2012+A1:2013 serves as core PCR.  
Select PCR for this EPD

### 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 weber färgat murbruk M 2,5

### Declared unit with option:

A1,A2,A3,A4,A5

### Functional unit:

### Owner of the declaration:

Saint-Gobain Sweden AB, Weber  
Contact person: Anders Anderberg  
Phone: +46 8 625 6105  
e-mail: [anders.anderberg@weber.se](mailto:anders.anderberg@weber.se)

### Manufacturer:

Saint-Gobain Sweden AB, Weber

### Place of production:

Saint-Gobain Sweden AB, Riksten

### Management system:

ISO 9001, ISO 14001

### Organisation no:

SE-556241-2592

### Issue date: 09.09.2020

### Valid to: 09.09.2025

### Year of study:

2019

### Comparability:

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

### Author of the Life Cycle Assessment:

The declaration is developed using eEPD v4.0 from LCA.no  
Approval:  
Company specific data are:

Collected/registered by: Charlotte Karlsson

Internal verification by: Helene Wallgren

### Approved:

### Verification:

Independent verification of data, other environmental information and the declaration according to ISO14025:2010, § 8.1.3 and § 8.1.4

External

Third party verifier:

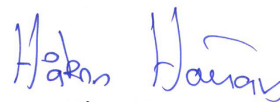
Sign



Senior Research Scientist, Anne Rønning

(Independent verifier approved by EPD Norway)

Sign



Håkon Hauan  
Managing Director of EPD-Norway

## Product

### Product description:

weber färgat murbruk M2.5 is a factory-made coloured dry mortar based on cement that can be coloured after consumers need. When mixed with water, it's a ready to use mortar for bricklaying. The mortar can be adjusted according to what kind of brick that is being used, low suction, normal suction and high suction bricks.

The mortar can be delivered in closed silos of 10 tons with a flow mixer to avoid dust.

### Product specification

The composition of the product is described in the following table:

Materials	%
Binder	5-15
Aggregate	60-90
Filler	5-10
Additives	<1
Packaging	<0,1

### Technical data:

weber färgat murbruk M2.5 is tested and approved according to EN 998-2.

Mortar category: M2,5

For further information, see [www.se.weber/](http://www.se.weber/)

### Market:

Sweden

### Reference service life, product

The reference service life of the product is similar to the service life of the building.

### Reference service life, building

50 years.

## LCA: Calculation rules

### Declared unit:

1 kg weber färgat murbruk M 2,5

### 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.

### Data quality:

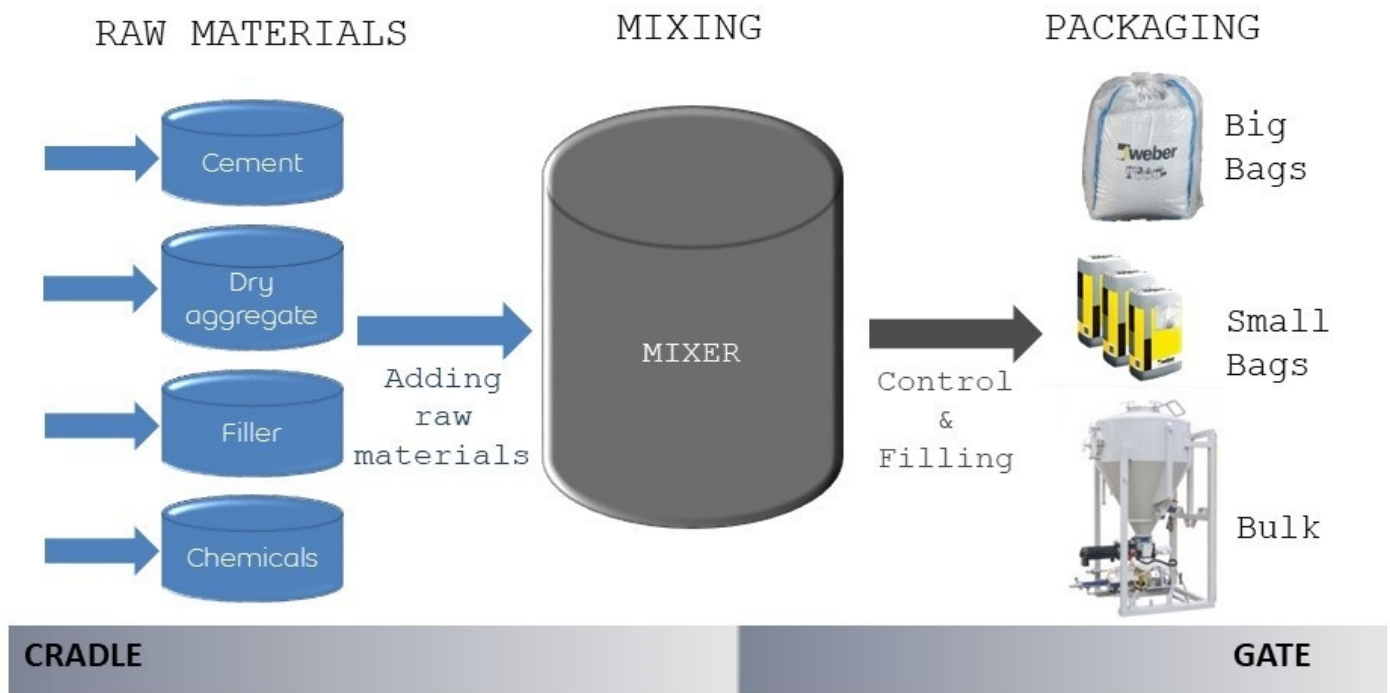
Specific data for the product composition are provided by the manufacturer. They represent the production of the declared product and were collected for EPD development in the year of study. Background data is based on registered EPDs according to EN 15804, Ostfold Research databases, ecoinvent and other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

Materials	Source	Data quality	Year
Binder	Supplier	EPD	2014
Aggregate	ecoinvent 3.4	Database	2017
Filler	ecoinvent 3.4	Database	2017
Packaging	ecoinvent 3.4	Database	2017
Pigments	ecoinvent 3.4	Database	2017
Packaging	Modified ecoinvent 3.4	Database	2017
SC 60	Owner of EPD	Database	
SC 210	Owner of EPD	Database	2019

#### System boundary:

All processes from raw material extraction to product assembly on the construction site are included in the analysis (A1-A5).

The flow chart below illustrates the system boundaries of A1 to the A3 part of the analysis. Transport from the production plant to construction site is included in A4 and the environmental impact of assembly is in A5.



#### Additional technical information:

The remaining powder is classified as hazardous waste. Cured material is inactive and not classified as hazardous waste and may be disposed as construction waste to disposal or recycling.

The packaging properly emptied is not classified as hazardous waste.

## 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)

Type	Capacity utilisation (incl. return) %	Type of vehicle	Distance km	Fuel/Energy consumption	Unit	Value (l/t)
Truck	55,0 %	Truck, lorry over 32 tonnes, EURO 5	152	0,022823	l/tkm	3,47
Railway					l/tkm	
Boat					l/tkm	
Other Transportation					l/tkm	

### Assembly (A5)

.	Unit	Value
Auxiliary	kg	
Water consumption	m <sup>3</sup>	0,0002
Electricity consumption	kWh	0,0016
Other energy carriers	MJ	
Material loss	kg	
Output materials from waste treatment	kg	0,0250
Dust in the air	kg	
VOC emissions	kg	

## LCA: Results

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

Product stage			Construction installation stage		User stage							End of life stage				Beyond the system boundaries
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
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
X	X	X	X	X	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND

### Environmental impact

Parameter	Unit	A1-A3	A4	A5
GWP	kg CO <sub>2</sub> -eq	1,53E-01	1,33E-02	1,23E-04
ODP	kg CFC11 -eq	6,56E-09	2,58E-09	8,00E-11
POCP	kg C <sub>2</sub> H <sub>4</sub> -eq	3,05E-05	2,14E-06	3,53E-08
AP	kg SO <sub>2</sub> -eq	4,25E-04	4,31E-05	6,56E-07
EP	kg PO <sub>4</sub> <sup>3-</sup> -eq	6,57E-05	7,23E-06	1,25E-07
ADPM	kg Sb -eq	2,75E-07	2,99E-08	1,09E-09
ADPE	MJ	2,01E+00	2,08E-01	1,15E-03

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<sup>-3</sup> = 0,009"

\*INA Indicator Not Assessed

## Resource use

Parameter	Unit	A1-A3	A4	A5
RPEE	MJ	8,32E-01	3,76E-03	4,53E-03
RPEM	MJ	4,50E-01	0,00E+00	0,00E+00
TPE	MJ	1,28E+00	3,76E-03	4,53E-03
NRPE	MJ	2,18E+00	2,14E-01	1,09E-02
NRPM	MJ	8,25E-01	0,00E+00	0,00E+00
TRPE	MJ	3,01E+00	2,14E-01	1,09E-02
SM	kg	1,24E-02	0,00E+00	0,00E+00
RSF	MJ	6,97E-02	0,00E+00	4,27E-06
NRSF	MJ	8,53E-02	0,00E+00	0,00E+00
W	m <sup>3</sup>	1,71E-03	5,05E-05	1,78E-04

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 energy carrier; NRPM 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; W Use of net fresh water

"Reading example: 9,0 E-03 =  $9,0 \cdot 10^{-3}$  = 0,009"

\*INA Indicator Not Assessed

## End of life - Waste

Parameter	Unit	A1-A3	A4	A5
HW	kg	7,61E-05	1,14E-07	6,01E-09
NHW	kg	6,14E-02	1,95E-02	1,05E-04
RW	kg	INA*	INA*	INA*

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

"Reading example: 9,0 E-03 =  $9,0 \cdot 10^{-3}$  = 0,009"

\*INA Indicator Not Assessed

## End of life - Output flow

Parameter	Unit	A1-A3	A4	A5
CR	kg	0,00E+00	0,00E+00	0,00E+00
MR	kg	1,00E-04	0,00E+00	2,50E-02
MER	kg	1,20E-03	0,00E+00	0,00E+00
EEE	MJ	INA*	INA*	INA*
ETE	MJ	INA*	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 =  $9,0 \cdot 10^{-3}$  = 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 CO <sub>2</sub> -ekv/kWh

### Dangerous substances

The product contains no substances given by the REACH Candidate list or the Norwegian priority list. The product is classified as hazardous waste (Avfallsforskriften, Annex III), see table.

Name	CASNo	Amount
Portland cement	65997-15-1	10-20%

### Indoor environment

The product has no impact on the 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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NPCR Part A: Construction products and services. Ver. 1.0. April 2017, EPD-Norge.

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

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