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The Norwegian EPD Foundation

ENVIRONMENTAL PRODUCT DECLARATION

in accordance with ISO 14025, ISO 21930 and EN 15804

Owner of the declaration:	Saint-Gobain Sweden AB, Weber floor
Program operator:	The Norwegian EPD Foundation
Publisher:	The Norwegian EPD Foundation
Declaration number:	NEPD-2325-1073-EN
Registration number:	NEPD-2325-1073-EN
ECO Platform reference number:	-
Issue date:	28.08.2020
Valid to:	28.08.2025

weberfloor 4602 industry base extra / weberfloor industri

Saint-Gobain Sweden AB, Weber floor

www.epd-norge.no

General information

Product:

weberfloor 4602 industry base extra / weberfloor industri

Owner of the declaration:

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Manufacturer:

Saint-Gobain Sweden AB, Weber floor

Declaration number:

NEPD-2325-1073-EN

Place of production:

Saint-Gobain Sweden AB, Weber, Vingåker

ECO Platform reference number:

Management system:

ISO 9001, ISO 14001

This declaration is based on Product Category Rules:

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

Organisation no:

SE-556241-2592

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.

Issue date: 28.08.2020

Valid to: 28.08.2025

Declared unit:

1 kg weberfloor 4602 industry base extra / weberfloor industri

Year of study:

2019

Declared unit with option:

A1,A2,A3,A4,A5

Comparability:

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

Functional unit:

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:	Thomas Flycht
Internal verification by:	Helene Wallgren

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)

Approved:

Sign

Håkon Hauan
Managing Director of EPD-Norway

Product

Product description:

weberfloor 4602 Industry Base Extra / weberfloor industri is a pumpable rapid hardening levelling compound for floors internally in buildings with light industrial loads such as industrial areas, public areas, basements and storage rooms. It can be used for making slopes and is ready for traffic loads without further finishing, but can also be used as a substrate for resin flooring and glued wooden flooring.

Product specification

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

Materials	%
Binder	15-40
Aggregate	30-60
Filler	10-30
Additives	1-5

Technical data:

weberfloor 4602 industry base extra/ weberfloor industri is designed, produced and CE marked according to EN 13813

For further information, see www.se.weber/

Market:

Scandinavian countries

Reference service life, product

> 50 years

Reference service life, building

> 50 years

LCA: Calculation rules

Declared unit:

1 kg weberfloor 4602 industry base extra / weberfloor industri

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.

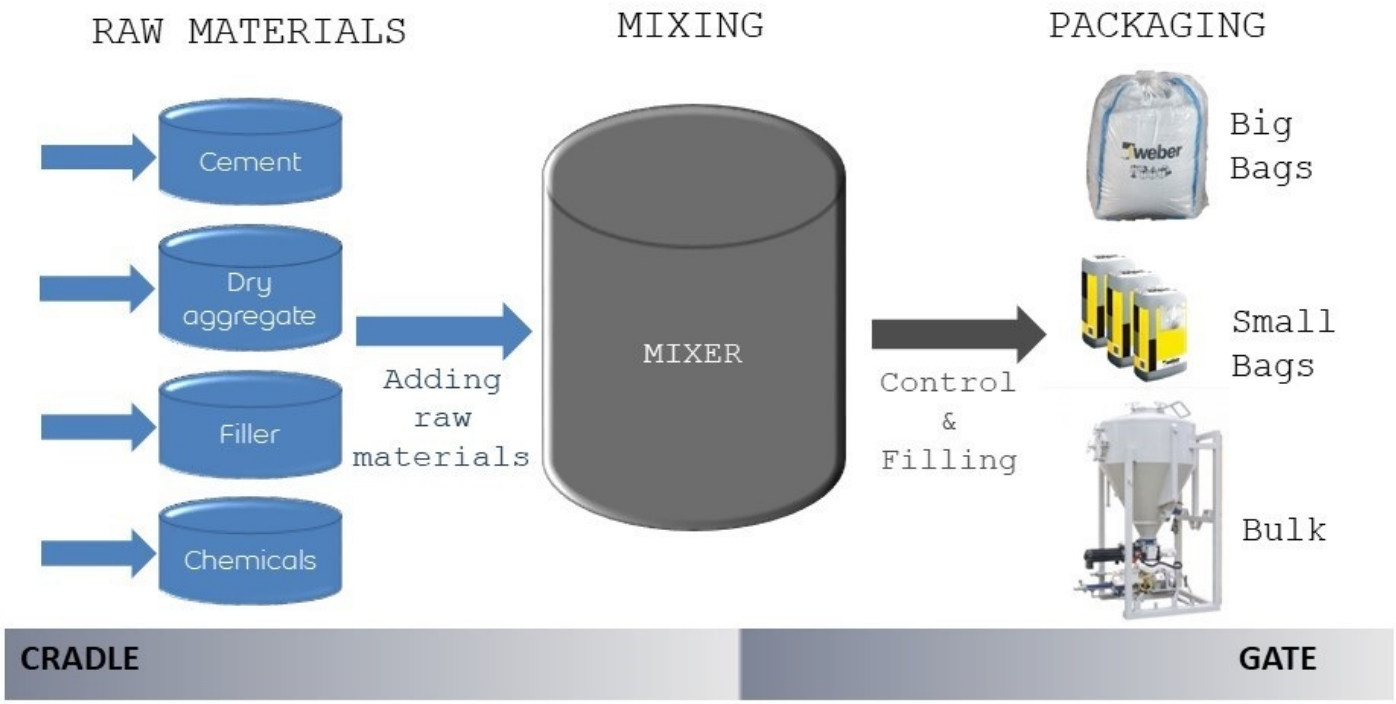
Data quality:

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
Cement	Supplier	EPD	2012
Binder	EPD-BVG-20140073-IAG1-EN	EPD	2014
Cement	Supplier	EPD	2014
Additives	ecoinvent 3.4	Database	2017
Aggregate	ecoinvent 3.4	Database	2017
Filler	ecoinvent 3.4	Database	2017
Cement	Supplier	EPD	2018

System boundary:

All processes from raw material extraction to product transport to the construction site and assembly are included in the analysis (A1-A5). The flow chart below illustrates the system boundaries for the A1 to A3 part of the analysis.



Additional technical information:

The consumption of the product is 1,7 kg / m² / mm.

The remaining powder and cured material may be disposed as construction waste to disposal or recycling.

LCA: Scenarios and additional technical information

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

Transport to market (A4) is calculated based on the default distance of 300 km from NPCR 011

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	300	0,022823	l/tkm	6,85
Railway					l/tkm	
Boat					l/tkm	
Other Transportation					l/tkm	

Assembly (A5)

.	Unit	Value
Auxiliary	kg	
Water consumption	m^3	0,0002
Electricity consumption	kWh	0,0021
Other energy carriers	MJ	
Material loss	kg	
Output materials from waste treatment	kg	0,0000
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 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
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_2 -eq	2,21E-01	2,62E-02	1,62E-04
ODP	kg CFC11 -eq	2,10E-08	5,10E-09	1,06E-10
POCP	kg C_2H_4-eq	5,23E-05	4,23E-06	4,66E-08
AP	kg SO_2 -eq	9,15E-04	8,51E-05	8,67E-07
EP	kg PO_4^{3-} -eq	1,28E-04	1,43E-05	1,65E-07
ADPM	kg Sb -eq	2,13E-05	5,91E-08	1,43E-09
ADPE	MJ	2,68E+00	4,11E-01	1,52E-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*10-3 = 0,009
*INA Indicator Not Assessed

Resource use

Parameter	Unit	A1-A3	A4	A5
RPEE	MJ	3,41E-01	7,42E-03	5,94E-03
RPEM	MJ	0,00E+00	0,00E+00	0,00E+00
TPE	MJ	3,41E-01	7,42E-03	5,94E-03
NRPE	MJ	3,14E+00	4,23E-01	1,43E-02
NRPM	MJ	0,00E+00	0,00E+00	0,00E+00
TRPE	MJ	3,14E+00	4,23E-01	1,43E-02
SM	kg	6,07E-02	0,00E+00	0,00E+00
RSF	MJ	1,58E-02	0,00E+00	5,60E-06
NRSF	MJ	4,87E-01	0,00E+00	0,00E+00
W	m^3	4,65E-03	9,98E-05	2,37E-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*10-3 = 0,009
*INA Indicator Not Assessed

End of life - Waste

Parameter	Unit	A1-A3	A4	A5
HW	kg	8,44E-06	2,25E-07	7,94E-09
NHW	kg	5,02E-02	3,84E-02	1,69E-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*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	0,00E+00	0,00E+00	0,00E+00
MER	kg	3,00E-04	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*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.

Name	CASNo	Amount
Portland Cement	65997-15-1	2-5%

Indoor environment

Bibliography

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