

# Environmental product declaration

In accordance with ISO 14025 and EN 15804 +A2

weber REP 975 V Concrete scratch repair (weber REP 975 V Tasoituslaasti KARKEA)



**Owner of the declaration:**

Saint-Gobain Finland Oy

**Declared unit:**

1 kg weber REP 975 V Concrete scratch repair (weber REP 975 V Tasoituslaasti KARKEA)

**Product Category:**

Technical-chemical building materials products

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

CEN Standard EN 15804:2012+A2:2019 serves as core PCR  
NPCR 009:2018 Part B for Technical - Chemical products in the building and construction industry

**Program operator:**

The Norwegian EPD Foundation

**Declaration number:**

NEPD-3597-2262-EN

**Registration number:**

NEPD-3597-2262-EN

**Issue date:** 30.06.2022

**Valid to:** 30.06.2027

**EPD Software:**

LCA.no EPD generator

**System ID:** 50136

## General information

### Product

weber REP 975 V Concrete scratch repair (weber REP 975 V Tasoituslaasti KARKEA)

### Program operator:

Post Box 5250 Majorstuen, 0303 Oslo, Norway  
The Norwegian EPD Foundation  
Phone: +47 23 08 80 00  
web: [post@epd-norge.no](mailto:post@epd-norge.no)

### Declaration number:

NEPD-3597-2262-EN

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

CEN Standard EN 15804:2012+A2:2019 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 weber REP 975 V Concrete scratch repair (weber REP 975 V Tasoituslaasti KARKEA)

### Declared unit with option:

A1,A2,A3,A4,A5,C1,C2,C3,C4,D

### Functional Unit

Not relevant

### 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 EPD Norway, and iii) the process is reviewed annually. See Appendix G of EPD-Norway's General Programme Instructions for further information on EPD tools.

### Verification:

Independent verification of data, other environmental information and the declaration according to ISO 14025:2010, § 8.1.3 and § 8.1.4

Third party verifier:

Anne Rønning, Norsus AS

(Independent verifier approved by EPD Norway)

### Owner of the declaration:

Saint-Gobain Finland Oy  
Contact person: Anne Kaiser  
Phone: +358400289933  
e-mail: [anne.kaiser@saint-gobain.com](mailto:anne.kaiser@saint-gobain.com)

### Manufacturer:

Saint-Gobain Finland Oy  
P.O. Box 70, FI-00381 Helsinki  
Finland

### Place of production:

Saint-Gobain Weber Parainen  
Parainen Premix plant, Kalkkitehtaan tie, 21600 Parainen  
Finland

### Management system:

ISO 9001:2015, ISO 14001:2015 and OHSAS 18001:2007

### Organisation no:

FI09515553

**Issue date:** 30.06.2022

**Valid to:** 30.06.2027

### Year of study:

2021

### Comparability:

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

### The EPD has been worked out by:

The declaration is created using EPD tool lca.tools ver EPD2021.09, developed by LCA.no. The EPD tool is integrated in the company's management system, and has been approved by EPD Norway.

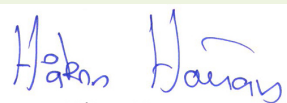
Developer of EPD:

Päivi Pesu

Reviewer of company-specific input data and EPD:

Helene Løvkvist Andersen

### Approved:

A handwritten signature in blue ink, reading 'Håkon Hauan'.

Håkon Hauan  
Managing Director of EPD-Norway

## Product

### Product description:

weber REP 975 V Concrete scratch repair is frost resistant, class R2 repair mortar designed for levelling concrete surfaces and applying even surface structure prior to coating. It is light in colour. Maximum grain size is 1.2 mm. The purpose of the product is to close pores that occur in concrete surfaces and to level uneven surfaces prior to coating according to concrete repair principles 3.1. and 3.3. It gives extra support to reinforcement by slowing down the penetration of humidity and carbon dioxide into the substrate. The product can be applied by spraying or manually. It is cement based and polymer-modified (PMC). Delivered in 20 kg bags. GTIN 6415910020767.

### Product specification

| Materials         | %        |
|-------------------|----------|
| Binder            | 20-40    |
| Aggregate         | 50-80    |
| Additives         | 1-3      |
| Packaging, PE     | 0,004 kg |
| Packaging, pallet | 0,021 kg |

## LCA: Calculation rules

### Declared unit:

1 kg weber REP 975 V Concrete scratch repair (weber REP 975 V Tasoitustaasti KARKEA)

### 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. The data represent the production of the declared product and were collected for EPD development in the year of study. Background data is based on EPDs according to EN 15804 and different LCA databases. The data quality of the raw materials in A1 is presented in the table below.

| Materials | Source        | Data quality | Year |
|-----------|---------------|--------------|------|
| Additives | ecoinvent 3.6 | Database     | 2019 |
| Aggregate | ecoinvent 3.6 | Database     | 2019 |
| Binder    | ecoinvent 3.6 | Database     | 2019 |
| Filler    | ecoinvent 3.6 | Database     | 2019 |
| Packaging | ecoinvent 3.6 | Database     | 2019 |
| Additives | LCA.no        | Database     | 2021 |
| Cement    | Supplier      | EPD          | 2021 |

### Technical data:

weber REP 975 V Concrete scratch repair is produced according to the requirements of R2 class according to SFS-EN 1504-3:2006 (Product intended for non-structural repair of concrete as polymer-modified cementitious mortar for concrete repair according to principles 3.1 and 3.3).

Material consumption: approx. 2 kg/m<sup>2</sup>/mm  
 Recommended layer thickness: 3-10 mm  
 Recommended water content: approx. 3.2 l/20 kg  
 Mixed volume: approx. 13.6 l/20 kg

More information: [www.fi.weber/betonit/betonin-korjauslaasti/weber-rep-975-v-tasoitustaasti-karkea](http://www.fi.weber/betonit/betonin-korjauslaasti/weber-rep-975-v-tasoitustaasti-karkea)

### Market:

Nordic and Baltic countries

### Reference service life, product

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

### Reference service life, building

60 years

### 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.

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

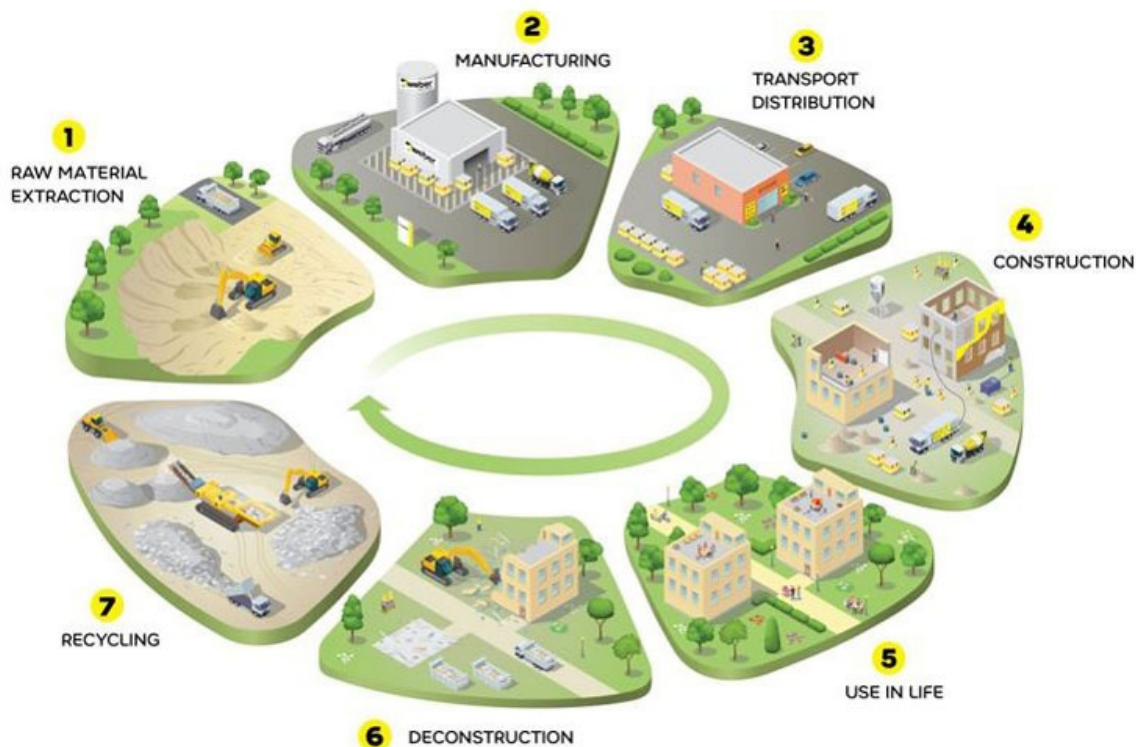
| Product stage |           |               | Construction installation stage | User stage |     |             |        |             |               |                        |                       | End of life stage          |           |                  |          | Beyond the system boundaries       |
|---------------|-----------|---------------|---------------------------------|------------|-----|-------------|--------|-------------|---------------|------------------------|-----------------------|----------------------------|-----------|------------------|----------|------------------------------------|
| 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          | MNR | MNR         | MNR    | MNR         | MNR           | MNR                    | MNR                   | X                          | X         | X                | X        | X                                  |

### System boundary:

The analysis includes modules A1-A5, C1-C4 and D (cradle-to-gate with options). Processes from raw materials extraction to product transportation to the building site, assembly, as well as end of life stage and phases beyond the system boundary are included in the analysis.

The basic production process comprises of mixing raw materials together. Ready mixed product is then packed into small bags. At assembly phase, water is added according to the instructions and it is mixed. When building is demolished at the end-of-life, the structure with mortar integrated into concrete slab are crushed. 90% of crushed concrete is recycled and used to replace natural gravel in soil construction, remaining 10% being disposed to landfill.

System boundaries are illustrated in the picture below.



### Additional technical information:

The LCA calculation has been made taking into account the fact that during the manufacturing process 100% renewable electricity is used. This 100% renewable electricity bought is evidenced by Guarantee of Origin certificates (GOs) from LOS, valid for the study year (2021).

Unused product powder is classified as hazardous waste. Product hardens after adding water in 5 to 6 hours and can then be disposed as mixed construction waste.

## LCA: Scenarios and additional technical information

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

The results of stage A4 (transportation of product) in the table of this EPD refer to transportation in Finland (average distance 2021). This product may also be delivered to the countries in the table "Additional A4 information". In order to adapt the impact of transportation to these countries, A4 figures from this EPD shall be multiplied by the multiplication factors below. At installation stage, it is assumed that mixing is done by electric mixer. Electricity mix used is that of Finland. At end of life stage, it is assumed that all demolition waste is collected and 90% of crushed concrete is recycled and 10% is disposed into landfill. Transport distance to processing is estimated to be 30 km.

| Transport from production place to user (A4) | Capacity Utilization | Distance (km) | Fuel/Energy Consumption | Unit  | Value (L/t) |
|----------------------------------------------|----------------------|---------------|-------------------------|-------|-------------|
| Truck, over 32 tonnes, EURO 5 (km)           | 53,3 %               | 206           | 0,023                   | l/tkm | 4,74        |

| Additional A4 information                  | Unit/Range                   | Value |  |  |  |
|--------------------------------------------|------------------------------|-------|--|--|--|
| Tullinge, Sweden (truck / ferry 384 km)    | Multiplication factor GWP/A4 | 2,20  |  |  |  |
| Lillestrøm, Norway (truck / ferry 871 km)  | Multiplication factor GWP/A4 | 4,57  |  |  |  |
| Karlsunde, Denmark (truck / ferry 1033 km) | Multiplication factor GWP/A4 | 5,35  |  |  |  |
| Tallinn, Estonia (truck / ferry 271 km)    | Multiplication factor GWP/A4 | 1,41  |  |  |  |
| Riga, Latvia (truck / ferry 579 km)        | Multiplication factor GWP/A4 | 2,90  |  |  |  |
| Kaunas, Lithuania (truck / ferry 848 km)   | Multiplication factor GWP/A4 | 4,21  |  |  |  |

| Assembly (A5)                                                | Unit   | Value |  |  |  |
|--------------------------------------------------------------|--------|-------|--|--|--|
| Waste, plastic packaging, mixture, to average treatment (kg) | kg     | 0,00  |  |  |  |
| Waste, wood packaging, average treatment (kg)                | kg     | 0,02  |  |  |  |
| Water, tap water (L)                                         | kg/DU  | 0,16  |  |  |  |
| Electricity, Finland (kWh)                                   | kWh/DU | 0,00  |  |  |  |

| C1 Deconstruction demolition               | Unit  | Value |  |  |  |
|--------------------------------------------|-------|-------|--|--|--|
| Demolition of building per kg product (kg) | kg/DU | 1,00  |  |  |  |

| Transport to waste processing (C2) | Capacity Utilization | Distance (km) | Fuel/Energy Consumption | Unit  | Value (L/t) |
|------------------------------------|----------------------|---------------|-------------------------|-------|-------------|
| Truck, over 32 tonnes, EURO 5 (km) | 53,3 %               | 30            | 0,023                   | l/tkm | 0,69        |

| C3 Waste Processing                              | Unit | Value |  |  |  |
|--------------------------------------------------|------|-------|--|--|--|
| Waste treatment of product after demolition (kg) | kg   | 0,90  |  |  |  |

| C4 Disposal                          | Unit | Value |  |  |  |
|--------------------------------------|------|-------|--|--|--|
| Disposal of product in landfill (kg) | kg   | 0,10  |  |  |  |

| D Reuse-Recovery Recycling potential                                         | Unit | Value |  |  |  |
|------------------------------------------------------------------------------|------|-------|--|--|--|
| Substitution of primary aggregates with crushed recycled inert products (kg) | kg   | 0,90  |  |  |  |

## LCA: Results

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

| Environmental impact                                                                |                            |                         |           |          |          |          |          |          |          |           |
|-------------------------------------------------------------------------------------|----------------------------|-------------------------|-----------|----------|----------|----------|----------|----------|----------|-----------|
| Parameter                                                                           |                            | Unit                    | A1-A3     | A4       | A5       | C1       | C2       | C3       | C4       | D         |
|    | GWP-total                  | kg CO <sub>2</sub> -eq. | 4,33E-01  | 1,87E-02 | 1,50E-03 | 4,00E-03 | 2,73E-03 | 6,48E-04 | 8,22E-04 | -2,10E-03 |
|                                                                                     | GWP-fossil                 | kg CO <sub>2</sub> -eq. | 4,39E-01  | 1,87E-02 | 1,49E-03 | 4,00E-03 | 2,73E-03 | 6,39E-04 | 8,20E-04 | -2,06E-03 |
|                                                                                     | GWP-biogenic               | kg CO <sub>2</sub> -eq. | -8,60E-03 | 7,68E-06 | 5,96E-06 | 7,50E-07 | 1,12E-06 | 5,52E-06 | 9,58E-07 | -4,11E-05 |
|                                                                                     | GWP-luluc                  | kg CO <sub>2</sub> -eq. | 1,82E-03  | 5,47E-06 | 6,06E-06 | 3,15E-07 | 7,96E-07 | 8,84E-07 | 2,02E-07 | -1,39E-06 |
|    | ODP                        | kg CFC11-eq.            | 1,93E-08  | 4,33E-09 | 1,87E-10 | 8,64E-10 | 6,30E-10 | 1,26E-10 | 3,09E-10 | -3,76E-10 |
|    | AP                         | mol H+ -eq.             | 2,08E-03  | 7,87E-05 | 7,57E-06 | 4,19E-05 | 1,15E-05 | 5,17E-06 | 7,30E-06 | -1,85E-05 |
|    | EP-FreshWater <sup>3</sup> | kg P-eq.                | 6,35E-05  | 1,43E-07 | 3,50E-08 | 1,46E-08 | 2,08E-08 | 4,04E-08 | 9,30E-09 | -5,48E-08 |
|                                                                                     | EP-Marine                  | kg N-eq.                | 3,34E-04  | 2,37E-05 | 2,74E-06 | 1,85E-05 | 3,45E-06 | 1,52E-06 | 2,71E-06 | -6,43E-06 |
|                                                                                     | EP-Terrestrial             | mol N-eq.               | 3,50E-03  | 2,62E-04 | 2,74E-05 | 2,00E-04 | 3,81E-05 | 1,75E-05 | 2,99E-05 | -7,56E-05 |
|    | POCP                       | kg NMVOC-eq.            | 1,45E-03  | 8,41E-05 | 7,18E-06 | 5,57E-05 | 1,23E-05 | 4,68E-06 | 8,56E-06 | -2,00E-05 |
|    | ADPE <sup>1</sup>          | kg Sb-eq.               | 3,08E-06  | 3,20E-07 | 1,67E-08 | 6,14E-09 | 4,66E-08 | 8,11E-09 | 7,39E-09 | -1,83E-07 |
|   | ADPF <sup>1</sup>          | MJ                      | 5,41E+00  | 2,91E-01 | 2,50E-02 | 5,51E-02 | 4,24E-02 | 1,98E-02 | 2,26E-02 | -3,49E-02 |
|  | WDP <sup>1</sup>           | m <sup>3</sup>          | 5,71E+00  | 2,23E-01 | 9,21E-01 | 1,17E-02 | 3,25E-02 | 2,19E+00 | 1,39E-01 | -1,63E+00 |

GWP total Global Warming Potential total; GWP fossil Global Warming Potential fossil fuels ; GWP biogenic Global Warming Potential biogenic; GWP luluc Global W Potential 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; ADPE Abiotic Depletion Potential minerals and metals; ADPF Abiotic Depletion Potential fossil fuels; WDP Water Depletion Potential

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

\*INA Indicator Not Assessed

1. The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator

3. Eutrophication aquatic freshwater shall be in kg P-eq., there is a typo in EN 15804:2012+A2:2019 regarding this unit. Eutrophication calculated as PO<sub>4</sub>-eq is presented on page 11

## Additional environmental impact indicators

| Parameter                                                                                             | Unit              | A1-A3    | A4       | A5       | C1       | C2       | C3       | C4       | D         |
|-------------------------------------------------------------------------------------------------------|-------------------|----------|----------|----------|----------|----------|----------|----------|-----------|
|  PM                  | Disease incidence | 1,03E-08 | 1,65E-09 | 7,60E-11 | 5,07E-09 | 2,40E-10 | 8,30E-11 | 1,55E-10 | -3,95E-10 |
|  IRP <sup>2</sup>    | kgBq U235-eq.     | 8,01E-03 | 1,27E-03 | 4,31E-04 | 2,40E-04 | 1,85E-04 | 3,33E-04 | 1,03E-04 | -3,20E-04 |
|  ETP-fw <sup>1</sup> | CTUe              | 2,90E+00 | 2,13E-01 | 2,11E-02 | 3,01E-02 | 3,10E-02 | 1,41E-02 | 1,23E-02 | -3,59E-02 |
|  HTP-c <sup>1</sup>  | CTUh              | 1,54E-10 | 0,00E+00 | 1,00E-12 | 1,00E-12 | 0,00E+00 | 1,00E-12 | 0,00E+00 | -2,00E-12 |
|  HTP-nc <sup>1</sup> | CTUh              | 2,81E-09 | 2,06E-10 | 5,10E-11 | 2,80E-11 | 3,00E-11 | 1,20E-11 | 9,00E-12 | -4,40E-11 |
|  SQP <sup>1</sup>    | Pt                | 1,57E+00 | 3,34E-01 | 1,62E-02 | 6,69E-03 | 4,86E-02 | 1,12E-02 | 8,69E-02 | 7,91E-02  |

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 (dimensionless)

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

\*INA Indicator Not Assessed

1. The results of this environmental impact 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

| Parameter                                                                               | Unit           | A1-A3    | A4       | A5       | C1        | C2       | C3        | C4       | D         |
|-----------------------------------------------------------------------------------------|----------------|----------|----------|----------|-----------|----------|-----------|----------|-----------|
|  PERE  | MJ             | 3,20E-01 | 3,67E-03 | 5,28E-03 | 3,00E-04  | 5,34E-04 | 1,02E-02  | 8,08E-04 | -8,16E-03 |
|  PERM  | MJ             | 2,89E-01 | 0,00E+00 | 0,00E+00 | 0,00E+00  | 0,00E+00 | 0,00E+00  | 0,00E+00 | 0,00E+00  |
|  PERT  | MJ             | 6,09E-01 | 3,67E-03 | 5,28E-03 | 3,00E-04  | 5,34E-04 | 1,02E-02  | 8,08E-04 | -8,16E-03 |
|  PENRE | MJ             | 3,04E+00 | 2,91E-01 | 2,55E-02 | 5,51E-02  | 4,24E-02 | 1,99E-02  | 2,26E-02 | -3,68E-02 |
|  PENRM | MJ             | 1,02E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00  | 0,00E+00 | 0,00E+00  | 0,00E+00 | 0,00E+00  |
|  PENRT | MJ             | 4,06E+00 | 2,91E-01 | 2,55E-02 | 5,51E-02  | 4,24E-02 | 1,99E-02  | 2,26E-02 | -3,68E-02 |
|  SM    | kg             | 9,32E-04 | 0,00E+00 | 6,54E-06 | 2,70E-05  | 0,00E+00 | 1,71E-05  | 9,79E-06 | -7,05E-05 |
|  RSF   | MJ             | 5,39E-03 | 1,28E-04 | 7,32E-05 | 7,33E-06  | 1,87E-05 | 2,07E-04  | 1,68E-05 | -1,67E-04 |
|  NRSF  | MJ             | 1,58E-03 | 4,30E-04 | 2,43E-04 | -1,10E-04 | 6,26E-05 | -1,28E-05 | 3,62E-05 | -1,71E-04 |
|  FW    | m <sup>3</sup> | 1,99E-03 | 3,32E-05 | 1,82E-04 | 2,83E-06  | 4,83E-06 | 3,40E-05  | 2,78E-05 | -1,28E-03 |

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 materials; RSF Use of renewable secondary fuels; NRSF Use of non renewable secondary fuels; FW Use of net fresh water

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

\*INA Indicator Not Assessed

## End of life - Waste

| Parameter                                                                              | Unit | A1-A3    | A4       | A5       | C1       | C2       | C3       | C4       | D         |
|----------------------------------------------------------------------------------------|------|----------|----------|----------|----------|----------|----------|----------|-----------|
|  HWD  | kg   | 6,57E-03 | 1,59E-05 | 2,16E-04 | 1,62E-06 | 2,32E-06 | 1,98E-06 | 1,59E-06 | -8,40E-06 |
|  NHWD | kg   | 1,25E-01 | 2,53E-02 | 2,59E-03 | 6,52E-05 | 3,69E-03 | 6,26E-05 | 1,00E-01 | -2,55E-04 |
|  RWD  | kg   | 8,04E-06 | 1,99E-06 | 2,31E-07 | 3,82E-07 | 2,90E-07 | 2,10E-07 | 1,47E-07 | -2,76E-07 |

HWD Hazardous waste disposed; NHWD Non-hazardous waste disposed; RWD Radioactive waste disposed;

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

\*INA Indicator Not Assessed

## End of life - Output flow

| Parameter                                                                             | Unit | A1-A3    | A4       | A5       | C1       | C2       | C3       | C4       | D         |
|---------------------------------------------------------------------------------------|------|----------|----------|----------|----------|----------|----------|----------|-----------|
|  CRU | kg   | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00  |
|  MFR | kg   | 1,87E-03 | 0,00E+00 | 2,26E-03 | 2,66E-05 | 0,00E+00 | 9,00E-01 | 8,92E-06 | -1,65E-06 |
|  MER | kg   | 2,02E-04 | 0,00E+00 | 6,31E-07 | 8,23E-08 | 0,00E+00 | 2,07E-06 | 1,68E-07 | -6,17E-05 |
|  EEE | MJ   | 6,95E-03 | 0,00E+00 | 1,45E-02 | 2,82E-07 | 0,00E+00 | 3,55E-06 | 1,39E-05 | -1,49E-05 |
|  EET | MJ   | 1,05E-01 | 0,00E+00 | 2,19E-01 | 4,27E-06 | 0,00E+00 | 5,38E-05 | 2,10E-04 | -2,25E-04 |

CRU Components for re-use; MFR Materials for recycling; MER Materials for energy recovery; EEE Exported electrical energy; EET Exported energy Thermal

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

\*INA Indicator Not Assessed

## Biogenic Carbon Content

| Indicator                                         | Unit | At the factory gate |
|---------------------------------------------------|------|---------------------|
| Biogenic carbon content in product                | kg C | 0,00E+00            |
| Biogenic carbon content in accompanying packaging | kg C | 8,60E-03            |

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

## 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 Saint-Gobain, based on 100% hydro power, with Guarantee of Origin from LOS 2021 (kWh) | ecoinvent 3.6 | 4,26   | g CO <sub>2</sub> -eq/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 | 25-50% |

### Indoor environment

Not relevant

## Additional Environmental Information

### Environmental impact indicators EN 15804+A1 and NPCR Part A v2.0

| Parameter | Unit                                  | A1-A3    | A4       | A5       | C1       | C2       | C3       | C4       | D         |
|-----------|---------------------------------------|----------|----------|----------|----------|----------|----------|----------|-----------|
| GWP       | kg CO <sub>2</sub> -eq.               | 4,29E-01 | 1,85E-02 | 1,60E-03 | 3,95E-03 | 2,70E-03 | 6,30E-04 | 8,04E-04 | -2,20E-03 |
| ODP       | kg CFC11-eq.                          | 1,72E-08 | 3,50E-09 | 2,04E-10 | 6,86E-10 | 5,10E-10 | 1,55E-10 | 2,48E-10 | -3,39E-10 |
| POCP      | kg C <sub>2</sub> H <sub>4</sub> -eq. | 1,19E-04 | 2,42E-06 | 2,65E-07 | 6,09E-07 | 3,52E-07 | 1,40E-07 | 1,89E-07 | -4,59E-07 |
| AP        | kg SO <sub>2</sub> -eq.               | 1,74E-03 | 3,74E-05 | 5,13E-06 | 5,84E-06 | 5,44E-06 | 2,37E-06 | 2,23E-06 | -5,39E-06 |
| EP        | kg PO <sub>4</sub> <sup>3-</sup> -eq. | 3,20E-04 | 4,08E-06 | 1,24E-06 | 6,50E-07 | 5,94E-07 | 3,13E-07 | 2,64E-07 | -6,32E-07 |
| ADPM      | kg Sb-eq.                             | 2,95E-06 | 3,20E-07 | 1,67E-08 | 6,14E-09 | 4,66E-08 | 8,11E-09 | 7,39E-09 | -1,83E-07 |
| ADPE      | MJ                                    | 5,39E+00 | 2,86E-01 | 2,52E-02 | 5,47E-02 | 4,16E-02 | 7,62E-03 | 2,16E-02 | -3,49E-02 |
| GWPIOBC   | kg CO <sub>2</sub> -eq.               | 4,22E-01 | 1,87E-02 | 7,59E-04 | 5,37E+00 | 2,73E-03 | 0,00E+00 | 0,00E+00 | -2,20E-03 |
| GWPPBC    | kg CO <sub>2</sub> -eq.               | 3,39E-05 | 5,56E-07 | 2,45E-08 | 0,00E+00 | 8,09E-08 | 0,00E+00 | 0,00E+00 | 0,00E+00  |

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