

# Environmental product declaration

in accordance with ISO 14025 and EN 15804+A2

StoPox SL 600 ZV



EPD-Global

**Owner of the declaration:**

Sto SE & Co. KGaA

**Product:**

StoPox SL 600 ZV

**Declared unit:**

1 kg

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

CEN Standard EN 15804:2012+A2:2019 serves as core PCR

NPCR 009:2021 Part B for Technical - Chemical products for building and construction industry

**Program operator:**

EPD-Global

**Declaration number:**

NEPD-11966-11942

**Issue date:**

08.08.2025

**Latest revision**

v1.0 Date: 05.08.2026

**Valid to:**

08.08.2030

**EPD software:**

LCAno EPD generator ID: 1702279

## General information

### Product

StoPox SL 600 ZV

### Program operator:

EPD-Global  
Post Box 5250 Majorstuen, 0303 Oslo, Norway  
Phone: +47 977 22 020  
web: [www.epd-global.com](http://www.epd-global.com)

### Declaration number:

NEPD-11966-11942

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

CEN Standard EN 15804:2012+A2:2019 serves as core PCR  
NPCR 009:2021 Part B for Technical - Chemical products for building  
and construction industry

### Statement of liability:

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

### Declared unit:

1 kg StoPox SL 600 ZV

### Declared unit with option:

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

### 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.  
Verification of each EPD is made according to EPD-Global's guidelines  
for verification and approval requiring that tools are i) integrated into  
the company's environmental management system, ii) the procedures  
for use of the EPD tool are approved by EPD-Global, and iii) the  
process is reviewed annually by an independent third party verifier.  
See Appendix G of EPD-Global'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 EPD-Global's procedures and  
guidelines for verification and approval of EPD tools. NEPD73

Third party verifier:

Elisabet Amat, GREENIZE projects

(no signature required)

### Owner of the declaration:

Sto SE & Co. KGaA  
Contact person: Linus Kaltenbach  
Phone: +49 7744571010  
e-mail: [l.kaltenbach@sto.com](mailto:l.kaltenbach@sto.com)

### Manufacturer:

Sto SE & Co. KGaA  
Ehrenbachstraße 1  
79780 Stühlingen, Germany

### Place of production:

Rüsselsheim  
Eisenstraße 38  
65428 Rüsselsheim, Germany

### Management system:

ISO 14001; ISO 50001; ISO 9001

### Organisation no:

DE142834082

### Issue date:

08.08.2025

### Valid to:

08.08.2030

### Year of study:

2023

### Comparability:

EPDs of construction products may not be comparable if they do not  
comply with EN 15804 and are not viewed in a building context.

### Development and verification of EPD:

The declaration is created using EPD tool lca.tools ver EPD2022.03,  
developed by LCA.no. The EPD tool is integrated in the company's  
management system, and has been approved by EPD-Global.  
NEPD73

Developer of EPD: Linus Kaltenbach

Reviewer of company-specific input data and EPD: Angelica Hultin

### Approved:



Håkon Hauan, CEO EPD-Global

## Product

### Product description:

StoPox SL 600 ZV is a pigmented self-levelling epoxy flooring system designed for interior applications where exceptionally low VOC emissions are required, such as in BREEAM-NOR certified buildings. The system is suitable for floor surfaces in industrial and commercial environments and provides a durable, seamless finish with a high-gloss appearance.

StoPox SL 600 ZV is delivered in two components, StoPox SL 600 LY/ZV(1500/2500)Komp. A and StoPox SL 600 ZV Komp. B, which have to be mixed as stated in the technical data sheet before use. This EPD calculates the environmental impact of the correctly mixed components at the construction site.

For various applications, a Component C can be used. This includes:

StoQuarz SL 1500

StoQuarz SL 2500

StoQuarz Comp

Further Components might be available on request.

### Product specification

The composition of the mixed product is stated in the following table:

| Materials       | Value | Unit |
|-----------------|-------|------|
| Binder, organic | < 70  | %    |
| Filler          | < 20  | %    |
| Additive        | < 3   | %    |
| Pigment         | < 10  | %    |

### Technical data:

Information on the technical data of StoPox SL 600 ZV as well as the mixing and application process can be found in the Technical Data Sheet on [www.sto.no](http://www.sto.no).

| Criterion            | Standard/Test specification | Value                                                            |
|----------------------|-----------------------------|------------------------------------------------------------------|
| Density as a 3-comp. | EN ISO 2811                 | 1.6 g/cm <sup>3</sup> (SL 1500); 1.7 g/cm <sup>3</sup> (SL 2500) |
| Density as a 2-comp. | EN ISO 2811                 | 1.26 g/cm <sup>3</sup>                                           |
| Tensile strength     | EN 1542                     | > 2.0 MPa                                                        |

### Market:

The main market is Scandinavia.

### Reference service life, product

A reference service life (RSL) as per ISO 15686-1, -2, -7, and -8 is not declared.

In this LCA an estimated service life of 60 years has been declared, equal to the useful life of the building, since the product is incorporated into the building structure. The assumed service life of a building might differ between countries and should be defined by a case on case basis.

### Reference service life, building

60 years.

## LCA: Calculation rules

### Declared unit:

1 kg StoPox SL 600 ZV

### 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. 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.

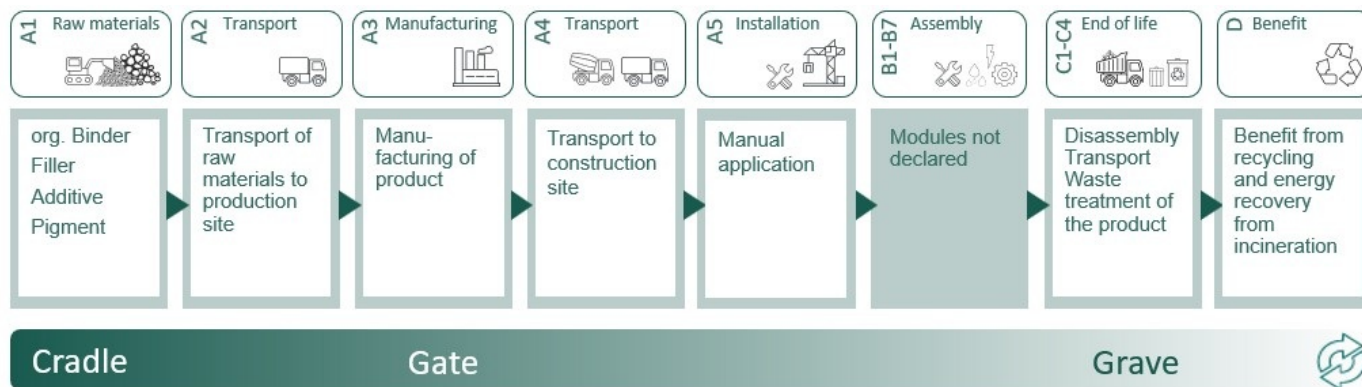
| Materials            | Source                | Data quality | Year |
|----------------------|-----------------------|--------------|------|
| Binder               | CEPE RM Database v3.0 | Database     | 2016 |
| Binder               | ecoinvent 3.6         | Database     | 2020 |
| Binders and Resins   | Ecoinvent 3.6         | Database     | 2019 |
| Binders and Resins   | Supplier              | EPD          | 2021 |
| Defoamer             | ecoinvent 3.6         | Database     | 2019 |
| Packaging            | ecoinvent 3.6         | Database     | 2019 |
| Pigments             | CEPE RM Database v3.0 | Database     | 2016 |
| Pigments and Fillers | CEPE RM Database v3.0 | Database     | 2016 |
| Thickener            | CEPE RM Database v3.0 | Database     | 2016 |
| Wetting agent        | ecoinvent 3.6         | Database     | 2020 |

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

| Product stage |           |               | Construction installation stage |          | Use 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                   |  | X                          | X         | X                | X        | X                                   |

### System boundary:

The scope of this EPD is cradle to gate with options, modules C1-C4 and module D. No actions are necessary during User stage.



### Additional technical information:

When used as recommended, the waste code can be selected according to the code of the European Waste Catalogue (EWC), category 17.09 "Other Construction and Demolition Waste".

The waste code for unused product is 08 01 11\* Paint and varnish waste containing organic solvents or other dangerous substances which is hazardous waste in terms of the European directive 2008/98/EG.

## LCA: Scenarios and additional technical information

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

A4 (Transport to market/building site): Since the distance to the construction site can vary strongly, a distance of 1600 km has been chosen, which is approximately the distance from the production plant to Stockholm, Sweden. An additional distance of 300 km is assumed for the transport to the construction site. The environmental impact in A4 can be scaled linearly, depending on the distance between the production plant and the project specific construction site.

A5 (Installation): The product is applied according to the specifications in the technical data sheet at the construction site. For application, machinery in accordance with the Technical Data Sheet should be used. Outputs are small amounts of waste from the product itself (assumed to be a maximum of 5%) and waste from packaging materials.

C1 (De-construction, demolition): It is assumed that StoPox SL 600 ZV is dismantled using machinery.

C2 (Transport end of life): This stage includes the transportation effects of demolished waste to a waste processing area. The distance between the demolishing area and a waste processing area is assumed to be quite short (less than 100 km). The distance varies depending on the type of waste processing.

C3, C4 (Waste processing): Hardened epoxy coating is not classified as hazardous waste and treated as mixed construction waste. A typical End of life scenario for construction waste is a mix of recycling and landfill. The End-of-life scenario is declared according to the PCR with 90% landfill and 10% recycling.

D (Environmental costs and benefits of recycling and reuse): Energy credit related to energy recovery from the incineration is included in module D.

| Transport from production place to user (A4)                                        | Capacity utilisation (incl. return) % | Distance (km) | Fuel/Energy Consumption | Unit  | Value (Liter/tonne) |
|-------------------------------------------------------------------------------------|---------------------------------------|---------------|-------------------------|-------|---------------------|
| Truck, 16-32 tonnes, EURO 6 (kgkm)                                                  | 36.7 %                                | 1900.00       | 0.043                   | l/tkm | 81.70               |
| Assembly (A5)                                                                       | Unit                                  | Value         |                         |       |                     |
| Electricity, Nordic (kWh)                                                           | kWh                                   | 0.013         |                         |       |                     |
| Material loss, including waste treatment (psc)                                      | Units                                 | 0.05          |                         |       |                     |
| Waste, packaging, metal, average treatment (kg)                                     | kg                                    | 0.05          |                         |       |                     |
| De-construction demolition (C1)                                                     | Unit                                  | Value         |                         |       |                     |
| Diesel (L)                                                                          | L                                     | 0.0000756     |                         |       |                     |
| Demolition of building per kg of cement-based product, C1 (kg)                      | kg                                    | 1.00          |                         |       |                     |
| Transport to waste processing (C2)                                                  | Capacity utilisation (incl. return) % | Distance (km) | Fuel/Energy Consumption | Unit  | Value (Liter/tonne) |
| Truck, 16-32 tonnes, EURO 6 (kgkm)                                                  | 36.7 %                                | 100.00        | 0.043                   | l/tkm | 4.30                |
| Waste processing (C3)                                                               | Unit                                  | Value         |                         |       |                     |
| Waste treatment of cement-based product after demolition to recycling (kg)          | kg                                    | 0.10          |                         |       |                     |
| Disposal (C4)                                                                       | Unit                                  | Value         |                         |       |                     |
| Waste, inert waste, to landfill (kg)                                                | kg                                    | 0.90          |                         |       |                     |
| Benefits and loads beyond the system boundaries (D)                                 | Unit                                  | Value         |                         |       |                     |
| Substitution of primary aggregates with crushed recycled cement-based products (kg) | kg                                    | 0.10          |                         |       |                     |

## LCA: Results

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

| Environmental impact                                                              |                                  |                        |           |          |          |          |          |          |          |          |          |           |
|-----------------------------------------------------------------------------------|----------------------------------|------------------------|-----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|
| Indicator                                                                         |                                  | Unit                   | A1        | A2       | A3       | A4       | A5       | C1       | C2       | C3       | C4       | D         |
|  | GWP-total                        | kg CO <sub>2</sub> -eq | 3.93E+00  | 6.23E-02 | 2.24E-02 | 3.26E-01 | 2.24E-01 | 2.67E-04 | 1.72E-02 | 7.33E-02 | 7.39E-03 | -2.34E-04 |
|  | GWP-fossil                       | kg CO <sub>2</sub> -eq | 3.94E+00  | 6.22E-02 | 2.00E-02 | 3.26E-01 | 2.21E-01 | 2.67E-04 | 1.72E-02 | 7.10E-05 | 7.38E-03 | -2.29E-04 |
|  | GWP-biogenic                     | kg CO <sub>2</sub> -eq | -4.90E-02 | 2.58E-05 | 7.27E-04 | 1.35E-04 | 1.29E-03 | 5.01E-08 | 7.10E-06 | 7.32E-02 | 8.62E-06 | -4.57E-06 |
|  | GWP-luluc                        | kg CO <sub>2</sub> -eq | 3.80E-02  | 2.21E-05 | 1.67E-03 | 1.16E-04 | 2.09E-03 | 2.11E-08 | 6.10E-06 | 9.83E-08 | 1.81E-06 | -1.55E-07 |
|  | ODP                              | kg CFC11-eq            | 9.53E-06  | 1.41E-08 | 2.49E-09 | 7.38E-08 | 4.82E-07 | 5.80E-11 | 3.89E-09 | 1.40E-11 | 2.80E-09 | -4.20E-11 |
|  | AP                               | mol H <sup>+</sup> -eq | 1.96E-02  | 1.79E-04 | 2.38E-05 | 9.37E-04 | 1.05E-03 | 2.80E-06 | 4.93E-05 | 5.75E-07 | 6.57E-05 | -2.06E-06 |
|  | EP-FreshWater                    | kg P -eq               | 5.08E-04  | 4.97E-07 | 1.11E-07 | 2.60E-06 | 2.57E-05 | 9.73E-10 | 1.37E-07 | 4.49E-09 | 8.37E-08 | -6.09E-09 |
|  | EP-Marine                        | kg N -eq               | 5.90E-03  | 3.54E-05 | 6.07E-06 | 1.85E-04 | 3.10E-04 | 1.23E-06 | 9.75E-06 | 1.68E-07 | 2.44E-05 | -7.15E-07 |
|  | EP-Terrestrial                   | mol N -eq              | 3.95E-02  | 3.96E-04 | 6.03E-05 | 2.07E-03 | 2.15E-03 | 1.35E-05 | 1.09E-04 | 1.94E-06 | 2.69E-04 | -8.40E-06 |
|  | POCP                             | kg NMVOC-eq            | 1.19E-02  | 1.52E-04 | 2.02E-05 | 7.94E-04 | 6.55E-04 | 3.72E-06 | 4.18E-05 | 5.20E-07 | 7.71E-05 | -2.22E-06 |
|  | ADP-minerals&metals <sup>1</sup> | kg Sb-eq               | 6.24E-04  | 1.72E-06 | 8.20E-08 | 9.00E-06 | 3.18E-05 | 4.10E-10 | 4.74E-07 | 9.01E-10 | 6.65E-08 | -2.03E-08 |
|  | ADP-fossil <sup>1</sup>          | MJ                     | 7.51E+01  | 9.41E-01 | 2.74E-01 | 4.93E+00 | 4.15E+00 | 3.68E-03 | 2.59E-01 | 2.21E-03 | 2.03E-01 | -3.87E-03 |
|  | WDP <sup>1</sup>                 | m <sup>3</sup>         | 8.21E+01  | 9.10E-01 | 1.45E+01 | 4.77E+00 | 8.90E+00 | 7.81E-04 | 2.51E-01 | 2.43E-01 | 1.25E+00 | -1.82E-01 |

GWP-total = Global Warming Potential total; 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

"Reading example: 9.0 E-03 = 9.0\*10<sup>-3</sup> = 0.009"

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

## Remarks to environmental impacts

Not relevant

### Additional environmental impact indicators

| Indicator                                                                                             | Unit              | A1       | A2       | A3        | A4       | A5       | C1       | C2       | C3       | C4       | D         |
|-------------------------------------------------------------------------------------------------------|-------------------|----------|----------|-----------|----------|----------|----------|----------|----------|----------|-----------|
|  PM                  | Disease incidence | 2.08E-07 | 3.81E-09 | 1.54E-10  | 2.00E-08 | 1.18E-08 | 7.40E-11 | 1.05E-09 | 9.00E-12 | 1.40E-09 | -4.40E-11 |
|  IRP <sup>2</sup>    | kgBq U235 -eq     | 5.35E+01 | 4.11E-03 | 1.61E-04  | 2.15E-02 | 2.68E+00 | 1.58E-05 | 1.13E-03 | 3.70E-05 | 9.27E-04 | -3.55E-05 |
|  ETP-fw <sup>1</sup> | CTUe              | 1.36E+02 | 6.98E-01 | 1.04E-01  | 3.65E+00 | 7.10E+00 | 2.01E-03 | 1.92E-01 | 1.56E-03 | 1.11E-01 | -3.99E-03 |
|  HTP-c <sup>1</sup>  | CTUh              | 9.12E-09 | 0.00E+00 | 7.00E-12  | 0.00E+00 | 4.58E-10 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.00E-12 | 0.00E+00  |
|  HTP-nc <sup>1</sup> | CTUh              | 7.02E-07 | 7.61E-10 | 1.11E-10  | 3.99E-09 | 3.54E-08 | 2.00E-12 | 2.10E-10 | 1.00E-12 | 8.00E-11 | -5.00E-12 |
|  SQP <sup>1</sup>    | dimensionless     | 6.49E+00 | 6.58E-01 | -2.87E-02 | 3.45E+00 | 6.20E-01 | 4.67E-04 | 1.81E-01 | 1.25E-03 | 7.82E-01 | 8.79E-03  |

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 = Potential Soil Quality Index (dimensionless)

"Reading example: 9.0 E-03 =  $9.0 \cdot 10^{-3}$  = 0.009"

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                                                                      |       |                |          |          |          |          |          |          |          |           |          |           |
|-----------------------------------------------------------------------------------|-------|----------------|----------|----------|----------|----------|----------|----------|----------|-----------|----------|-----------|
| Indicator                                                                         |       | Unit           | A1       | A2       | A3       | A4       | A5       | C1       | C2       | C3        | C4       | D         |
|  | PERE  | MJ             | 6.51E+00 | 1.35E-02 | 1.66E-01 | 7.05E-02 | 3.86E-01 | 1.99E-05 | 3.71E-03 | 1.14E-03  | 7.27E-03 | -9.07E-04 |
|  | PERM  | MJ             | 6.91E-01 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | -6.91E-01 | 0.00E+00 | 0.00E+00  |
|  | PERT  | MJ             | 7.20E+00 | 1.35E-02 | 1.66E-01 | 7.05E-02 | 3.86E-01 | 1.99E-05 | 3.71E-03 | -6.90E-01 | 7.27E-03 | -9.07E-04 |
|  | PENRE | MJ             | 6.85E+01 | 9.41E-01 | 2.74E-01 | 4.93E+00 | 3.81E+00 | 3.68E-03 | 2.59E-01 | 2.21E-03  | 2.03E-01 | -4.09E-03 |
|  | PENRM | MJ             | 1.04E+01 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | -1.04E+01 | 0.00E+00 | 0.00E+00  |
|  | PENRT | MJ             | 7.88E+01 | 9.41E-01 | 2.74E-01 | 4.93E+00 | 3.81E+00 | 3.68E-03 | 2.59E-01 | -1.04E+01 | 2.03E-01 | -4.09E-03 |
|  | SM    | kg             | 9.25E-03 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.63E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00  | 0.00E+00 | 0.00E+00  |
|  | RSF   | MJ             | 8.29E-02 | 4.82E-04 | 7.56E-05 | 2.52E-03 | 4.79E-03 | 4.89E-07 | 1.33E-04 | 0.00E+00  | 1.51E-04 | -1.85E-05 |
|  | NRSF  | MJ             | 5.67E-02 | 1.72E-03 | 2.76E-04 | 9.02E-03 | 3.45E-03 | 7.20E-06 | 4.75E-04 | 0.00E+00  | 3.26E-04 | -1.91E-05 |
|  | FW    | m <sup>3</sup> | 4.78E-02 | 1.01E-04 | 1.27E-03 | 5.27E-04 | 2.71E-03 | 1.89E-07 | 2.77E-05 | 3.78E-06  | 2.50E-04 | -1.42E-04 |

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 = Net use of fresh water

"Reading example: 9.0 E-03 = 9.0\*10<sup>-3</sup> = 0.009"

| End of life - Waste                                                               |      |    |          |          |          |          |          |          |          |          |          |           |
|-----------------------------------------------------------------------------------|------|----|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|
| Indicator                                                                         | Unit | A1 | A2       | A3       | A4       | A5       | C1       | C2       | C3       | C4       | D        |           |
|  | HWD  | kg | 1.16E-02 | 4.85E-05 | 1.89E-03 | 2.54E-04 | 6.97E-04 | 1.08E-07 | 1.34E-05 | 2.20E-07 | 0.00E+00 | -9.34E-07 |
|  | NHWD | kg | 5.73E-01 | 4.58E-02 | 2.07E-03 | 2.40E-01 | 1.39E-01 | 4.35E-06 | 1.26E-02 | 6.96E-06 | 9.00E-01 | -2.83E-05 |
|  | RWD  | kg | 7.38E-04 | 6.41E-06 | 2.22E-07 | 3.36E-05 | 3.95E-05 | 2.55E-08 | 1.77E-06 | 2.33E-08 | 0.00E+00 | -3.07E-08 |

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

"Reading example: 9.0 E-03 =  $9.0 \times 10^{-3}$  = 0.009"

| End of life - Output flow                                                         |      |    |          |          |          |          |          |          |          |          |          |          |
|-----------------------------------------------------------------------------------|------|----|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Indicator                                                                         | Unit | A1 | A2       | 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 | 0.00E+00 | 0.00E+00 |
|  | MFR  | kg | 0.00E+00 | 0.00E+00 | 4.10E-04 | 0.00E+00 | 5.50E-02 | 0.00E+00 | 0.00E+00 | 1.00E-01 | 0.00E+00 | 0.00E+00 |
|  | MER  | kg | 0.00E+00 | 0.00E+00 | 3.95E-03 | 0.00E+00 | 1.97E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
|  | EEE  | MJ | 0.00E+00 | 0.00E+00 | 2.06E-03 | 0.00E+00 | 1.03E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
|  | EET  | MJ | 0.00E+00 | 0.00E+00 | 3.12E-02 | 0.00E+00 | 1.56E-03 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |

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

"Reading example: 9.0 E-03 =  $9.0 \times 10^{-3}$  = 0.009"

| Biogenic Carbon Content                           |      |                     |
|---------------------------------------------------|------|---------------------|
| Indicator                                         | Unit | At the factory gate |
| Biogenic carbon content in product                | kg C | 2.00E-02            |
| Biogenic carbon content in accompanying packaging | kg C | 0.00E+00            |

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

## Additional 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                                                                         | Source                 | Amount | Unit                      |
|-----------------------------------------------------------------------------------------|------------------------|--------|---------------------------|
| Electricity, low voltage, 100% hydro, certificate, 01.01.2023-31.12.2023, Germany (kWh) | Modified ecoinvent 3.6 | 60.95  | g CO <sub>2</sub> -eq/kWh |

### Dangerous substances

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

### Indoor environment

Information on ingredients and emissions for certification in accordance with BREEAM, LEED, EU taxonomy, etc. can be found in the corresponding Sustainability Data Sheets.

## Additional Environmental Information

| Additional environmental impact indicators required in NPCR Part A for construction products |                        |          |          |          |          |          |          |          |          |          |           |
|----------------------------------------------------------------------------------------------|------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|
| Indicator                                                                                    | Unit                   | A1       | A2       | A3       | A4       | A5       | C1       | C2       | C3       | C4       | D         |
| GWPIOBC                                                                                      | kg CO <sub>2</sub> -eq | 3.97E+00 | 6.23E-02 | 2.17E-02 | 3.26E-01 | 2.23E-01 | 2.67E-04 | 1.72E-02 | 7.11E-05 | 7.39E-03 | -2.45E-04 |

GWP-IOBC: Global warming potential calculated according to the principle of instantaneous oxidation. In order to increase the transparency of biogenic carbon contribution to climate impact, the indicator GWP-IOBC is required as it declares climate impacts calculated according to the principle of instantaneous oxidation. GWP-IOBC is also referred to as GWP-GHG in context to Swedish public procurement legislation.

## 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+A2:2019 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.

ecoinvent v3, (2019) Allocation, cut-off by classification, Swiss Centre of Life Cycle Inventories.

Iversen et al., (2021) eEPD v2021.09 Background information for EPD generator tool system verification, LCA.no Report number: 07.21

Graafland, J. and Ruttenborg, M. (2023) EPD generator for NPCR009:2021, Part B for Technical - Chemical products (non-cement based products), Background information for EPD generator application and LCA data, LCA.no report number: 12.23.

NPCR Part A: Construction products and services. Ver. 2.0, 24.03.2021 EPD Norway.

NPCR 009 Part B for Technical - Chemical products for building and construction industry, Ver. 3.0, 06.10.2021, EPD Norway.

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