

# Environmental product declaration

in accordance with ISO 14025 and EN 15804+A2

## Frida springer



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**lekolar<sup>®</sup>**

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EPD-Global

**Owner of the declaration:**

Lekolar

**Product:**

Frida springer

**Declared unit:**

1 pcs

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

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

NPCR 026:2022 Part B for Furniture

**Program operator:**

EPD-Global

**Declaration number:**

NEPD-14175-14498

**Issue date:**

21.11.2025

**Valid to:**

21.11.2030

**EPD software:**

LCAno EPD generator ID: 1312442

## General information

### Product

Frida springer

### 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-14175-14498

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

CEN Standard EN 15804:2012+A2:2019 serves as core PCR  
NPCR 026:2022 Part B for Furniture

### 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 pcs Frida springer

### Declared unit (cradle to gate) with option:

A1-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. 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.

Third party verifier:

Elisabet Amat, GREENIZE projects

(no signature required)

### Owner of the declaration:

Lekolar  
Contact person: Hanna Bremander  
Phone: 0479-19900  
e-mail: [Hanna.Bremander@lekolar.com](mailto:Hanna.Bremander@lekolar.com)

### Manufacturer:

Lekolar

### Place of production:

Lekolar  
Hallarydsvägen 8  
283 36 Osby, Sweden

### Management system:

ISO 27001, ISO 9001:2015, ISO 45001:2018, ISO 14001:2015

### Organisation no:

556605-0646

### Issue date:

21.11.2025

### Valid to:

21.11.2030

### Year of study:

2024

### 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 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.

Developer of EPD: Frida Andersson

Reviewer of company-specific input data and EPD: Hanna Bremander

### Approved:



Håkon Hauan, CEO EPD-Global

## Product

### Product description:

A colorful spring rider designed as a horse. The spring rider encourages both movement and imaginative play. It is designed to promote children's balance and coordination through an exciting rocking and bouncing function. With easy-to-grip handles for both children and adults, it offers a safe and controlled play experience. Made of durable HDPE.

### Product specification

The product is suitable for outdoor installation and intended for use by children in playground environments.

| Materials                     | kg    | %      | Recycled share in material (kg) | Recycled share in material (%) |
|-------------------------------|-------|--------|---------------------------------|--------------------------------|
| Metal - Stainless steel       | 0.50  | 2.13   | 0.1092                          | 21.83                          |
| Metal - Steel                 | 15.52 | 66.04  | 0.00                            | 0.00                           |
| Plastic - Polyethylene (HDPE) | 7.00  | 29.79  | 0.00                            | 0.00                           |
| Powder coating                | 0.48  | 2.04   | 0.00                            | 0.00                           |
| Total                         | 23.50 | 100.00 | 0.11                            |                                |

| Packaging                  | kg    | %      | Recycled share in material (kg) | Recycled share in material (%) |
|----------------------------|-------|--------|---------------------------------|--------------------------------|
| Packaging - Paper          | 0.20  | 66.67  | 0.00                            | 0.00                           |
| Packaging - Plastic straps | 0.10  | 33.33  | 0.00                            | 0.00                           |
| Total incl. packaging      | 23.80 | 100.00 | 0.11                            |                                |

### Technical data:

The product is designed and manufactured for compliance with EN 1176 requirements for playground equipment.

### Market:

Nordic

### Reference service life, product

15 years

### Reference service life, building

## LCA: Calculation rules

### Declared unit:

1 pcs Frida springer

### 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 |
|-------------------------------|---------------|--------------|------|
| Metal - Stainless steel       | ecoinvent 3.6 | Database     | 2019 |
| Metal - Steel                 | ecoinvent 3.6 | Database     | 2019 |
| Packaging - Paper             | ecoinvent 3.6 | Database     | 2019 |
| Packaging - Plastic straps    | ecoinvent 3.6 | Database     | 2019 |
| Plastic - Polyethylene (HDPE) | ecoinvent 3.6 | Database     | 2019 |
| Powder coating                | ecoinvent 3.6 | Database     | 2019 |

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

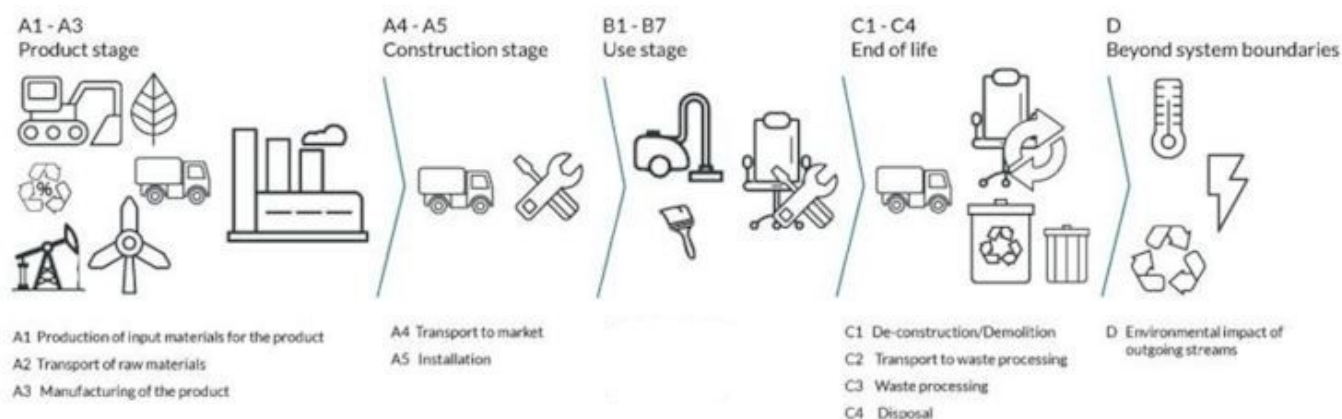
| Product stage |           |               | Construction installation stage |          | Use stage |             |        |             |               |                        |                       |  | End of life stage          |           |                  |          | Beyond the system boundaries       |
|---------------|-----------|---------------|---------------------------------|----------|-----------|-------------|--------|-------------|---------------|------------------------|-----------------------|--|----------------------------|-----------|------------------|----------|------------------------------------|
| 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:

This EPD covers the product stage (A1–A3) and packaging-related impacts in A5. The flowchart illustrates the system boundaries for the analysis.

Modules A1–A3 include the extraction and processing of raw materials, transport to the production site, and manufacturing of the finished product. Module A5 includes end-of-life treatment of packaging materials only. These impacts are calculated automatically based on predefined assumptions. As this EPD represents only the production stage (A1–A3), the use-stage modules (B1–B7) are not declared.

For the End-of-life stage (C1-C4 and D), no activity for the deconstruction of the product is considered. After disassembly, the product is transported to a waste collection facility. The scenario for End-of-life treatment is solely based on default assumptions and generic datasets. Burdens associated with incineration and recycling are allocated to Module C3, whereas burdens associated with landfilling are allocated to Module C4.



### Additional technical information:

## LCA: Scenarios and additional technical information

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

This EPD declares only the product stage (A1–A3) and packaging-related impacts in A5.

No installation, use-stage, maintenance, or replacement scenarios are included.

A1–A3 Product stage:

Raw materials are extracted and processed (A1), transported to the manufacturing facility (A2), and assembled into the final product (A3). Energy and ancillary materials used in production are included. In A3, the energy use covers waste, manufacturing, heating of facilities, and packaging of the product.

A4 – Transport to site (assumed):

Transport to the customer is based on generic data of 300 km.

A5 (Packaging waste):

Only end-of-life treatment of packaging materials is considered. Packaging is assumed to be sorted and managed according to generic treatment pathways, and impacts are modeled based on assumptions. The EU pallet used for transport is assumed to be reused rather than treated as waste.

C1–C4 and D (Assumed only):

End-of-life scenarios are modeled using generic datasets and default assumptions. In C1, the product is assumed to undergo deconstruction or dismantling according to standard end-of-life practices for the product type. C2 includes transport to waste handling facilities, based on typical transport distances and commonly used vehicle types in generic datasets. In C3, materials are assumed to be sorted and processed following typical waste management procedures, which may include separation, shredding, or preparation for recycling or energy recovery. C4 covers final disposal processes, such as landfilling or incineration, depending on material characteristics and standard treatment pathways.

Module D reports potential benefits and loads beyond the system boundary, based on assumed recovery of materials or energy in accordance with established substitution principles.

| 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 (km)                                                                           | 36.7 %                                | 300.00        | 0.043                   | l/tkm | 12.90               |
| Assembly (A5)                                                                                              |                                       |               |                         |       |                     |
| Waste, packaging, kraft paper, unbleached, to average treatment (kg)                                       | Unit                                  | Value         |                         |       |                     |
| Waste, packaging, PET straps, to average treatment - A5 (kg)                                               | kg                                    | 0.20          |                         |       |                     |
|                                                                                                            | kg                                    | 0.10          |                         |       |                     |
| Transport to waste processing (C2)                                                                         | Capacity utilisation (incl. return) % | Distance (km) | Fuel/Energy Consumption | Unit  | Value (Liter/tonne) |
| Truck, 16-32 tonnes, EURO 6 (km)                                                                           | 36.7 %                                | 85.00         | 0.043                   | l/tkm | 3.66                |
| Waste processing (C3)                                                                                      |                                       |               |                         |       |                     |
| Waste, materials to recycling (kg)                                                                         | Unit                                  | Value         |                         |       |                     |
| Waste, materials to recycling (kg)                                                                         | kg                                    | 5.44          |                         |       |                     |
| Waste treatment per kg Scrap steel, incineration with fly ash extraction (kg)                              | kg                                    | 16.02         |                         |       |                     |
| Waste treatment per kg Non-hazardous waste, incineration with fly ash extraction - C3 (kg)                 | kg                                    | 0.48          |                         |       |                     |
| Waste treatment per kg Polyethylene, PE, incineration with fly ash extraction - C3 (kg)                    | kg                                    | 7.00          |                         |       |                     |
| Disposal (C4)                                                                                              |                                       |               |                         |       |                     |
| Landfilling of ashes and residues from incineration of Scrap steel (kg)                                    | Unit                                  | Value         |                         |       |                     |
| Landfilling of ashes and residues from incineration of Scrap steel (kg)                                    | kg                                    | 10.58         |                         |       |                     |
| Landfilling of ashes from incineration of Non-hazardous waste, process per kg ashes and residues - C4 (kg) | kg                                    | 0.1139        |                         |       |                     |
| Landfilling of ashes from incineration of Polyethylene, PE, process per kg ashes and residues - C4 (kg)    | kg                                    | 0.2467        |                         |       |                     |
| Benefits and loads beyond the system boundaries (D)                                                        |                                       |               |                         |       |                     |
| Substitution of primary steel with net scrap (kg)                                                          | Unit                                  | Value         |                         |       |                     |
| Substitution of primary steel with net scrap (kg)                                                          | kg                                    | 1.85          |                         |       |                     |
| Substitution of electricity, in Norway (MJ)                                                                | MJ                                    | 13.86         |                         |       |                     |
| Substitution of thermal energy, district heating, in Norway (MJ)                                           | MJ                                    | 209.68        |                         |       |                     |

## 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-A3    | A4       | A5       | C1 | C2       | C3       | C4       | D         |
|  | GWP-total                        | kg CO <sub>2</sub> -eq | 1.83E+02 | 1.17E+00 | 3.60E-01 | 0  | 3.31E-01 | 2.23E+01 | 1.28E-01 | -3.29E+00 |
|  | GWP-fossil                       | kg CO <sub>2</sub> -eq | 1.82E+02 | 1.17E+00 | 1.12E-02 | 0  | 3.30E-01 | 2.23E+01 | 1.27E-01 | -3.25E+00 |
|  | GWP-biogenic                     | kg CO <sub>2</sub> -eq | 1.04E+00 | 4.83E-04 | 3.49E-01 | 0  | 1.37E-04 | 1.75E-03 | 9.35E-05 | -3.63E-03 |
|  | GWP-luluc                        | kg CO <sub>2</sub> -eq | 1.47E-01 | 4.15E-04 | 1.68E-06 | 0  | 1.18E-04 | 6.57E-05 | 3.72E-05 | -4.28E-02 |
|  | ODP                              | kg CFC11 -eq           | 2.04E-05 | 2.64E-07 | 1.16E-09 | 0  | 7.49E-08 | 3.08E-08 | 3.78E-08 | -8.86E-02 |
|  | AP                               | mol H <sup>+</sup> -eq | 8.77E+00 | 3.35E-03 | 2.51E-05 | 0  | 9.50E-04 | 3.36E-03 | 8.72E-04 | -2.01E-02 |
|  | EP-FreshWater                    | kg P -eq               | 1.02E-02 | 9.32E-06 | 4.29E-08 | 0  | 2.64E-06 | 4.88E-06 | 1.30E-06 | -2.33E-04 |
|  | EP-Marine                        | kg N -eq               | 3.87E-01 | 6.63E-04 | 1.40E-05 | 0  | 1.88E-04 | 1.54E-03 | 3.10E-04 | -5.36E-03 |
|  | EP-Terrestrial                   | mol N -eq              | 3.63E+01 | 7.42E-03 | 8.99E-05 | 0  | 2.10E-03 | 1.66E-02 | 3.43E-03 | -5.68E-02 |
|  | POCP                             | kg NMVOC -eq           | 6.22E-01 | 2.84E-03 | 2.73E-05 | 0  | 8.05E-04 | 4.12E-03 | 9.86E-04 | -1.99E-02 |
|  | ADP-minerals&metals <sup>1</sup> | kg Sb-eq               | 4.70E-03 | 3.22E-05 | 1.21E-07 | 0  | 9.13E-06 | 1.54E-06 | 2.11E-06 | -4.72E-05 |
|  | ADP-fossil <sup>1</sup>          | MJ                     | 2.91E+03 | 1.76E+01 | 7.79E-02 | 0  | 5.00E+00 | 2.34E+00 | 2.80E+00 | -3.45E+01 |
|  | WDP <sup>1</sup>                 | m <sup>3</sup>         | 1.04E+04 | 1.71E+01 | 1.73E-01 | 0  | 4.83E+00 | 2.56E+00 | 6.17E+00 | -1.11E+02 |

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

## Additional environmental impact indicators

| Indicator                                                                                             | Unit              | A1-A3    | A4       | A5       | C1 | C2       | C3       | C4       | D         |
|-------------------------------------------------------------------------------------------------------|-------------------|----------|----------|----------|----|----------|----------|----------|-----------|
|  PM                  | Disease incidence | 6.26E-05 | 7.14E-08 | 4.02E-10 | 0  | 2.02E-08 | 3.89E-08 | 1.58E-08 | -7.76E-07 |
|  IRP <sup>2</sup>    | kgBq U235 -eq     | 8.91E+00 | 7.71E-02 | 3.41E-04 | 0  | 2.18E-02 | 5.33E-03 | 1.13E-02 | -1.04E-01 |
|  ETP-fw <sup>1</sup> | CTUe              | 8.21E+03 | 1.31E+01 | 9.15E-02 | 0  | 3.70E+00 | 1.32E+01 | 1.75E+00 | -2.08E+02 |
|  HTP-c <sup>1</sup>  | CTUh              | 5.73E-07 | 0.00E+00 | 3.00E-12 | 0  | 0.00E+00 | 1.31E-09 | 6.50E-11 | -1.15E-08 |
|  HTP-nc <sup>1</sup> | CTUh              | 6.77E-06 | 1.43E-08 | 1.05E-10 | 0  | 4.05E-09 | 2.34E-08 | 1.80E-09 | 1.22E-07  |
|  SQP <sup>1</sup>    | dimensionless     | 8.04E+02 | 1.23E+01 | 8.74E-02 | 0  | 3.49E+00 | 3.99E-01 | 6.12E+00 | -1.18E+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 =  $9.0 \cdot 10^{-3}$  = 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-A3    | A4       | A5        | C1 | C2       | C3        | C4       | D         |
|  | PERE  | MJ             | 2.44E+02 | 2.52E-01 | 1.57E-03  | 0  | 7.15E-02 | 9.77E-02  | 5.51E-02 | -1.09E+02 |
|  | PERM  | MJ             | 2.82E+00 | 0.00E+00 | -2.82E+00 | 0  | 0.00E+00 | 0.00E+00  | 0.00E+00 | 0.00E+00  |
|  | PERT  | MJ             | 2.47E+02 | 2.52E-01 | -2.82E+00 | 0  | 7.15E-02 | 9.77E-02  | 5.51E-02 | -1.09E+02 |
|  | PENRE | MJ             | 2.61E+03 | 1.76E+01 | 7.79E-02  | 0  | 5.00E+00 | 2.39E+00  | 2.80E+00 | -3.45E+01 |
|  | PENRM | MJ             | 3.00E+02 | 0.00E+00 | -2.30E+00 | 0  | 0.00E+00 | -2.97E+02 | 0.00E+00 | 0.00E+00  |
|  | PENRT | MJ             | 2.91E+03 | 1.76E+01 | -2.22E+00 | 0  | 5.00E+00 | -2.95E+02 | 2.80E+00 | -3.45E+01 |
|  | SM    | kg             | 1.09E-01 | 0.00E+00 | 0.00E+00  | 0  | 0.00E+00 | 0.00E+00  | 0.00E+00 | 0.00E+00  |
|  | RSF   | MJ             | 1.05E+01 | 9.03E-03 | 4.63E-05  | 0  | 2.56E-03 | 2.35E-03  | 1.45E-03 | 5.46E-02  |
|  | NRSF  | MJ             | 4.07E+01 | 3.23E-02 | 1.59E-04  | 0  | 9.15E-03 | 0.00E+00  | 8.53E-02 | -4.23E+00 |
|  | FW    | m <sup>3</sup> | 1.91E+00 | 1.89E-03 | 3.86E-05  | 0  | 5.34E-04 | 5.04E-03  | 2.53E-03 | -1.34E-01 |

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 =  $9.0 \cdot 10^{-3}$  = 0.009"

**End of life - Waste**

| Indicator                                                                              | Unit | A1-A3    | A4       | A5       | C1 | C2       | C3       | C4       | D         |
|----------------------------------------------------------------------------------------|------|----------|----------|----------|----|----------|----------|----------|-----------|
|  HWD  | kg   | 8.63E-01 | 9.09E-04 | 0.00E+00 | 0  | 2.58E-04 | 0.00E+00 | 1.08E+01 | -1.14E-02 |
|  NHWD | kg   | 3.89E+01 | 8.58E-01 | 3.00E-01 | 0  | 2.43E-01 | 4.80E-01 | 1.90E-01 | -1.24E+00 |
|  RWD  | kg   | 8.54E-03 | 1.20E-04 | 0.00E+00 | 0  | 3.40E-05 | 0.00E+00 | 1.73E-05 | -8.54E-05 |

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-A3    | A4       | A5       | C1 | C2       | C3       | C4       | D        |
|---------------------------------------------------------------------------------------|------|----------|----------|----------|----|----------|----------|----------|----------|
|  CRU | kg   | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0  | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
|  MFR | kg   | 0.00E+00 | 0.00E+00 | 2.37E-01 | 0  | 0.00E+00 | 5.44E+00 | 0.00E+00 | 0.00E+00 |
|  MER | kg   | 0.00E+00 | 0.00E+00 | 1.40E-02 | 0  | 0.00E+00 | 2.35E+01 | 0.00E+00 | 0.00E+00 |
|  EEE | MJ   | 0.00E+00 | 0.00E+00 | 1.14E-02 | 0  | 0.00E+00 | 1.40E+01 | 0.00E+00 | 0.00E+00 |
|  EET | MJ   | 0.00E+00 | 0.00E+00 | 1.73E-01 | 0  | 0.00E+00 | 2.12E+02 | 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 | 0.00E+00            |
| Biogenic carbon content in accompanying packaging | kg C | 9.48E-02            |

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, Denmark (kWh) | ecoinvent 3.6 | 338.20 | g CO <sub>2</sub> -eq/kWh |

### Dangerous substances

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

### Indoor environment

## Additional Environmental Information

### Key Environmental Indicators

| Key environmental performance indicators | Unit                   | Product stage | Construction stage |      | End-of-life |      |       |      | Net benefits and loads from reuse, recovery, and/or recycling |
|------------------------------------------|------------------------|---------------|--------------------|------|-------------|------|-------|------|---------------------------------------------------------------|
|                                          |                        | A1-A3         | A4                 | A5   | C1          | C2   | C3    | C4   | D                                                             |
| GWPtotal                                 | kg CO <sub>2</sub> -eq | 183.04        | 1.17               | 0.36 | 0.00        | 0.33 | 22.32 | 0.13 | -3.29                                                         |
| Total energy consumption                 | MJ                     | 2908.50       | 17.93              | 0.08 | 0.00        | 5.08 | 2.49  | 2.95 | -147.41                                                       |
| Share of recycled materials              | %                      | 0.46          |                    |      |             |      |       |      |                                                               |

### Additional environmental impact indicators required in NPCR Part A for construction products

| Indicator | Unit                   | A1-A3    | A4       | A5       | C1 | C2       | C3       | C4       | D         |
|-----------|------------------------|----------|----------|----------|----|----------|----------|----------|-----------|
| GWPIOBC   | kg CO <sub>2</sub> -eq | 1.85E+02 | 1.17E+00 | 1.12E-02 | 0  | 3.31E-01 | 2.23E+01 | 1.29E-01 | -3.28E+00 |

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.

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