

Environmental product declaration

in accordance with ISO 14025 and EN 15804+A2

Savo Soul Air





The Norwegian EPD Foundation

Owner of the declaration: EFG European Furniture Group AB

Product: Savo Soul Air

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:** The Norwegian EPD Foundation

Declaration number:

NEPD-8926-8582

Registration number:

NEPD-8926-8582

Issue date: 04.02.2025

Valid to: 04.02.2030

EPD software: LCAno EPD generator ID: 478822

General information

Product

Savo Soul Air

Program operator:

The Norwegian EPD Foundation Post Box 5250 Majorstuen, 0303 Oslo, Norway Phone: +47 977 22 020 web: www.epd-norge.no

Declaration number:

NEPD-8926-8582

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 Norway shall not be liable with respect to manufacturer information, life cycle assessment data and evidences.

Declared unit:

1 pcs Savo Soul Air

Declared unit (cradle to gate) with option:

A1-A3,A4,A5,B2,B3,B4,C1,C2,C3,C4,D

Functional unit:

Soul air incl. mesh fabric. For armrests and neckrest see options.

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-Norway'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-Norway, and iii) the process is reviewed annually by an independent third party verifier. See Appendix G of EPD-Norway'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 EPDNorway'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:

EFG European Furniture Group AB Contact person: Christer Johansson Phone: e-mail: christer.johansson@efg.se

Manufacturer:

EFG European Furniture Group AB

Place of production:

EFG European Furniture Group AB

, Norway

Management system: ISO 14001

Organisation no:

Issue date:

04.02.2025

Valid to: 04.02.2030

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 Norway.

Developer of EPD: Andreas Mattisson

Reviewer of company-specific input data and EPD: Christer Johansson

Approved:

Håkon Hauan Managing Director of EPD-Norway

Product

Product description:

Task chair, type A

Product specification

Task chair, type A

| Materials | kg | % | Recycled share in material (kg) | Recycled share in material (%) | |
|--|-------|--------|------------------------------------|-----------------------------------|--|
| Glass fibre | 0,73 | 5,64 | 0,00 | 0,00 | |
| Plastic - Nylon (PA) | 0,69 | 5,35 | 0,00 | 0,00 | |
| Plastic - Polyoxymethylene (POM) | 0,14 | 1,05 | 0,00 | 0,00 | |
| Plastic - Polypropylene (PP) | 6,24 | 48, 15 | 6,24 | 100,00 | |
| Polyester textile | 0,40 | 3,09 | 0,01 | 2,02 | |
| Metal - Aluminium | 1,09 | 8,39 | 1,09 | 100,00 | |
| Metal - Steel | 3,67 | 28,33 | 0,00 | 0,00 | |
| Total | 12,95 | 100,00 | 7,33 | | |
| Packaging | kg | % | Recycled share in | Recycled share in | |

| Packaging | kg | % | material (kg) | material (%) |
|--------------------------|-------|--------|---------------|--------------|
| Packaging - Cardboard | 2,76 | 98,71 | 0,99 | 36,00 |
| Packaging - Plastic | 0,04 | 1,29 | 0,00 | 0,00 |
| Total incl. packaging | 15,75 | 100,00 | 8,32 | |

Technical data:

Market:

Scandinavia

Reference service life, product

15 year

Reference service life, building

LCA: Calculation rules

Declared unit:

1 pcs Savo Soul Air

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.

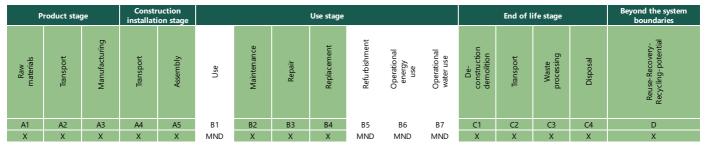
Data quality:

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.

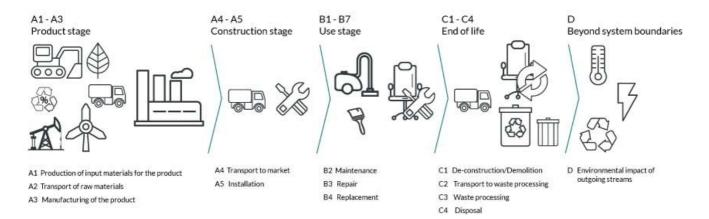
| Materials | Source | Data quality | Year |
|----------------------------------|------------------------|--------------|------|
| Glass fibre | ecoinvent 3.6 | Database | 2019 |
| Metal - Aluminium | ecoinvent 3.6 | Database | 2019 |
| Metal - Steel | ecoinvent 3.6 | Database | 2019 |
| Packaging - Cardboard | ecoinvent 3.6 | Database | 2019 |
| Packaging - Plastic | ecoinvent 3.6 | Database | 2019 |
| Plastic - Nylon (PA) | ecoinvent 3.6 | Database | 2019 |
| Plastic - Polyoxymethylene (POM) | ecoinvent 3.6 | Database | 2019 |
| Plastic - Polypropylene (PP) | Modified ecoinvent 3.6 | Database | 2019 |
| Polyester textile | ecoinvent 3.6 | Database | 2019 |

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



System boundary:



Additional technical information:

LCA: Scenarios and additional technical information

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

Check out www.savo.se for caring instructions

| 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 5 (km) | 36,7 % | 300 | 0,044 | l/tkm | 13,20 |
| Assembly (A5) | Unit | Value | | | |
| Waste, packaging, plastic film (LDPE), to average treatment - A5 (kg) | kg | 0,036 | | | |
| Waste, packaging, corrugated board box, to average treatment (kg) | kg | 2,75 | | | |
| Maintenance (B2) | Unit | Value | | | |
| Wastewater, average treatment (m3) | m3 | 0,0010 | | | |
| Household detergent, 5% soap solution (kg) | kg/DU | 1,00000000 | | | |
| Transport to waste processing (C2) | Capacity utilisation (incl. return) % | Distance (km) | Fuel/Energy Consumption | Unit | Value (Liter/tonne) |
| Truck, 16-32 tonnes, EURO 5 (km) | 36,7 % | 85 | 0,044 | l/tkm | 3,74 |
| Waste processing (C3) | Unit | Value | | | |
| Waste treatment per kg Scrap aluminium, incineration with fly ash extraction (kg) | kg | 1,087 | | | |
| Waste treatment per kg Polypropylene (PP), incineration with fly ash extraction - C3 (kg) | kg | 6,23 | | | |
| Waste treatment per kg Polyoxymethylene (POM), incineration with fly ash extraction (kg) - CH - C3 | kg | 0,13 | | | |
| Waste, materials to recycling (kg) | kg | 1,35 | | | |
| Waste treatment per kg Non-hazardous waste, incineration with fly ash extraction - C3 (kg) | kg | 0,40 | | | |
| Waste treatment per kg Scrap steel, incineration with fly ash extraction (kg) | kg | 3,66 | | | |
| Waste treatment per kg Plastics, Mixture, municipal incineration with fly ash extraction (kg) | kg | 1,42 | | | |
| Disposal (C4) | Unit | Value | | | |
| Landfilling of ashes from incineration of Non- hazardous waste, process per kg ashes and residues - C4 (kg) | kg | 0,094 | | | |
| Landfilling of ashes from incineration of Polyoxymethylene (POM), process per kg ashes and residues (kg) - CH - C4 | kg | 0,0030 | | | |
| Landfilling of ashes from incineration of Polypropylene, PP, process per kg ashes and residues - C4 (kg) | kg | 0,18 | | | |
| Landfilling of ashes and residues from incineration of Scrap steel (kg) | kg | 2,42 | | | |
| Landfilling of ashes from incineration of Plastics, Mixture, municipal incineration with fly ash extraction, process per kg ashes and residues - C4 (kg) | kg | 0,049 | | | |
| Landfilling of ashes and residues from incineration of Scrap aluminium (kg) | kg | 0,97 | | | |
| Benefits and loads beyond the system boundaries (D) | Unit | Value | | | |
| Substitution of thermal energy, district heating, in Norway (MJ) | MJ | 192,42 | | | |
| Substitution of electricity, in Norway (MJ) | MJ | 12,71 | | | |
| Substitution of primary steel with net scrap (kg) | kg | 1,24 | | | |

LCA: Results

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

| Environme | ental impact | | | | | | | | |
|-----------------------|--|---|---|---|--|--|--|--|---|
| | Indicator | | Unit | | A1-A3 | A4 | A5 | B2 | B3 |
| F | GWP-total | | kg CO ₂ -eo | q | 4,20E+01 | 6,51E-01 | 4,73E+00 | 3,19E-01 | 0 |
| Ø | GWP-fossil | | kg CO ₂ -eq | | 4,63E+01 | 6,50E-01 | 4,75E-02 | 1,11E-01 | 0 |
| Ø | GWP-biogenic | | kg CO ₂ -eo | q | -4,48E+00 | 2,65E-04 | 4,68E+00 | 5,16E-02 | 0 |
| Ø | GWP-luluc | | kg CO ₂ -eo | q | 1,25E-01 | 2,27E-04 | 1,50E-05 | 1,56E-01 | 0 |
| Ò | ODP | l | kg CFC11 - | eq | 3,54E-06 | 1,48E-07 | 9,59E-09 | 1,86E-08 | 0 |
| Ê | АР | | mol H+ -e | q | 1,98E-01 | 2,66E-03 | 2,15E-04 | 1,31E-03 | 0 |
| ÷ | EP-FreshWater | | kg P -eq | | 2,12E-03 | 5,11E-06 | 3,72E-07 | 7,99E-04 | 0 |
| ÷ | EP-Marine | | kg N -eq | | 4,17E-02 | 7,88E-04 | 7,31E-05 | 1,34E-03 | 0 |
| ÷ | EP-Terrestial | | mol N -ec | 9 | 4,46E-01 | 8,72E-03 | 7,69E-04 | 4,40E-03 | 0 |
| | POCP | k | g NMVOC · | -eq | 1,50E-01 | 2,67E-03 | 2,22E-04 | 7,47E-04 | 0 |
| A | ADP-minerals&metals ¹ | | kg Sb-eq | | 5,34E-03 | 1,76E-05 | 1,10E-06 | 6,77E-06 | 0 |
| B | ADP-fossil ¹ | | MJ | | 6,63E+02 | 9,80E+00 | 6,36E-01 | 1,21E+00 | 0 |
| | | m ³ | | | | | | | |
| 6 | WDP ¹ | | m ³ | | 9,21E+03 | 9,35E+00 | 8,33E-01 | 2,57E+00 | 0 |
| <u>%</u> | WDP ¹ Indicator | Unit | m ³ | B4 | 9,21E+03 C1 | 9,35E+00 C2 | 8,33E-01 C3 | 2,57E+00 C4 | 0 D |
| ¢ | | Unit kg CO ₂ -eo | | B4 0 | | | | | |
| | Indicator | | 7 | | C1 | C2 | C3 | C4 | D |
| P | Indicator GWP-total | kg CO ₂ -eo | а а | 0 | C1 0 | C2 1,84E-01 | C3 2,05E+01 | C4 4,74E-02 | D -2,53E+00 |
| P | Indicator GWP-total GWP-fossil | kg CO ₂ -eo | a a a | 0 0 | C1 0 0 | C2 1,84E-01 1,84E-01 | C3 2,05E+01 2,05E+01 | C4 4,74E-02 4,73E-02 | D -2,53E+00 -2,49E+00 |
| P P P | Indicator GWP-total GWP-fossil GWP-biogenic | kg CO ₂ -eo kg CO ₂ -eo kg CO ₂ -eo | a a a | 0 0 0 | C1 0 0 | C2 1,84E-01 1,84E-01 7,51E-05 | C3 2,05E+01 2,05E+01 6,59E-04 | C4 4,74E-02 4,73E-02 3,33E-05 | D -2,53E+00 -2,49E+00 -3,06E-03 |
| P P P | Indicator GWP-total GWP-fossil GWP-biogenic GWP-luluc | kg CO ₂ -eo kg CO ₂ -eo kg CO ₂ -eo kg CO ₂ -eo | a a a a a a a | 0 0 0 0 | C1 0 0 0 0 | C2 1,84E-01 1,84E-01 7,51E-05 6,44E-05 | C3 2,05E+01 2,05E+01 6,59E-04 5,65E-05 | C4 4,74E-02 4,73E-02 3,33E-05 1,29E-05 | D -2,53E+00 -2,49E+00 -3,06E-03 -3,90E-02 |
| P P P P | Indicator GWP-total GWP-fossil GWP-biogenic GWP-luluc ODP | kg CO ₂ -ec kg CO ₂ -ec kg CO ₂ -ec kg CO ₂ -ec kg CFC11 -c | a a a a a a a | 0 0 0 0 | C1 0 0 0 0 0 | C2 1,84E-01 1,84E-01 7,51E-05 6,44E-05 4,20E-08 | C3 2,05E+01 2,05E+01 6,59E-04 5,65E-05 2,88E-08 | C4 4,74E-02 4,73E-02 3,33E-05 1,29E-05 1,28E-08 | D -2,53E+00 -2,49E+00 -3,06E-03 -3,90E-02 -8,13E-02 |
| P P P P 0 | Indicator GWP-total GWP-fossil GWP-biogenic GWP-luluc ODP AP | kg CO ₂ - ec kg CO ₂ - ec kg CO ₂ - ec kg CO ₂ - ec kg CFC11 - e mol H+ - e | a a a a a a a | 0 0 0 0 0 | C1 0 0 0 0 0 0 0 | C2 1,84E-01 1,84E-01 7,51E-05 6,44E-05 4,20E-08 7,53E-04 | C3 2,05E+01 2,05E+01 6,59E-04 5,65E-05 2,88E-08 3,17E-03 | C4 4,74E-02 4,73E-02 3,33E-05 1,29E-05 1,28E-08 3,03E-04 | D -2,53E+00 -2,49E+00 -3,06E-03 -3,90E-02 -8,13E-02 -1,60E-02 |
| | Indicator GWP-total GWP-fossil GWP-biogenic GWP-luluc ODP AP EP-FreshWater | kg CO2 - ea kg CO2 - ea kg CO2 - ea kg CO2 - ea kg CPC 11 - a mol H+ - ea kg P - eq | a a a a a a a a a a a a a a a a a a a | 0 0 0 0 0 0 | C1 0 0 0 0 0 0 0 0 | C2 1,84E-01 1,84E-01 7,51E-05 6,44E-05 4,20E-08 7,53E-04 1,45E-06 | C3 2,05E+01 2,05E+01 6,59E-04 5,65E-05 2,88E-08 3,17E-03 3,38E-06 | C4 4,74E-02 4,73E-02 3,33E-05 1,29E-05 1,28E-08 3,03E-04 5,04E-07 | D -2,53E+00 -2,49E+00 -3,06E-03 -3,90E-02 -8,13E-02 -1,60E-02 -1,83E-04 |
| | Indicator GWP-total GWP-fossil GWP-biogenic GWP-luluc ODP AP EP-FreshWater EP-Marine | kg CO2 - ea kg CO2 - ea kg CO2 - ea kg CO2 - ea kg CFC11 - a mol H+ - ea kg P - eq kg N - eq | a a a a a a a a a a a a a a a a a a a | 0 0 0 0 0 0 0 | C1 0 0 0 0 0 0 0 0 0 0 | C2 1,84E-01 1,84E-01 7,51E-05 6,44E-05 4,20E-08 7,53E-04 1,45E-06 2,23E-04 | C3 2,05E+01 2,05E+01 6,59E-04 5,65E-05 2,88E-08 3,17E-03 3,38E-06 1,49E-03 | C4 4,74E-02 4,73E-02 3,33E-05 1,29E-05 1,28E-08 3,03E-04 5,04E-07 1,06E-04 | D -2,53E+00 -2,49E+00 -3,06E-03 -3,90E-02 -8,13E-02 -1,60E-02 -1,83E-04 -4,41E-03 |
| | IndicatorGWP-totalGWP-fossilGWP-biogenicGWP-lulucODPAPEP-FreshWaterEP-MarineEP-Terrestial | kg CO ₂ - ec kg CO ₂ - ec kg CO ₂ - ec kg CO ₂ - ec kg CFC11 - c mol H+ - ec kg P - eq kg N - eq mol N - ec | a a a a a a a a a a a a a a a a a a a | 0 0 0 0 0 0 0 0 | C1 0 0 0 0 0 0 0 0 0 0 0 | C2 1,84E-01 1,84E-01 7,51E-05 6,44E-05 4,20E-08 7,53E-04 1,45E-06 2,23E-04 2,23E-04 | C3 2,05E+01 2,05E+01 6,59E-04 5,65E-05 2,88E-08 3,17E-03 3,38E-06 1,49E-03 1,59E-02 | C4 4,74E-02 4,73E-02 3,33E-05 1,29E-05 1,28E-08 3,03E-04 5,04E-07 1,06E-04 1,18E-03 | D -2,53E+00 -2,49E+00 -3,06E-03 -3,90E-02 -8,13E-02 -1,60E-02 -1,83E-04 -4,41E-03 -4,69E-02 |
| | Indicator GWP-total GWP-fossil GWP-biogenic GWP-luluc ODP AP EP-FreshWater EP-Marine EP-Terrestial POCP | kg CO ₂ -ec kg CO ₂ -ec kg CO ₂ -ec kg CFC11 -c mol H+ -ec kg P -eq kg N -eq mol N -ec kg NMVOC - | a a a a a a a a a a a a a a a a a a a | 0 0 0 0 0 0 0 0 0 | C1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | C2 1,84E-01 1,84E-01 7,51E-05 6,44E-05 4,20E-08 7,53E-04 1,45E-06 2,23E-04 2,47E-03 7,56E-04 | C3 2,05E+01 2,05E+01 6,59E-04 5,65E-05 2,88E-08 3,17E-03 3,38E-06 1,49E-03 1,59E-02 3,86E-03 | C4 4,74E-02 4,73E-02 3,33E-05 1,29E-05 1,28E-08 3,03E-04 5,04E-07 1,06E-04 1,18E-03 3,39E-04 | D -2,53E+00 -2,49E+00 -3,06E-03 -3,90E-02 -3,90E-02 -1,60E-02 -1,83E-04 -4,41E-03 -4,69E-02 -1,58E-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*10-3 = 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

Remarks to environmental impacts

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| Additional environmental impact indicators | | | | | | | | |
|--|---------------------|-------------------|---------------|----------|----------|----------|----------|------------|
| | Indicator | Unit | | A1-A3 | A4 | A5 | B2 | B3 |
| | PM | Disease incidence | | 2,20E-06 | 4,68E-08 | 3,18E-09 | 1,85E-08 | 0 |
| (**) 2 | IRP ² | kgBq U235 -eq | | 3,53E+00 | 4,28E-02 | 2,72E-03 | 4,37E-03 | 0 |
| | ETP-fw ¹ | CTUe | | 1,11E+03 | 7,22E+00 | 8,44E-01 | 1,03E+01 | 0 |
| 44.* **** | HTP-c ¹ | CTUh | | 9,43E-08 | 0,00E+00 | 2,50E-11 | 2,60E-10 | 0 |
| 48 E | HTP-nc ¹ | CTUh | | 7,00E-07 | 7,80E-09 | 1,06E-09 | 6,02E-09 | 0 |
| è | SQP ¹ | dimensionless | dimensionless | | 6,76E+00 | 4,39E-01 | 6,31E+00 | 0 |
| Ir | ndicator | Unit | B4 | C1 | C2 | C3 | C4 | D |
| | PM | Disease incidence | 0 | 0 | 1,33E-08 | 2,18E-08 | 5,35E-09 | -6,71E-07 |
| (m) B | IRP ² | kgBq U235 -eq | 0 | 0 | 1,21E-02 | 4,40E-03 | 3,90E-03 | -9,70E-02 |
| | ETP-fw ¹ | CTUe | 0 | 0 | 2,05E+00 | 1,97E+01 | 6,71E-01 | -1,63E+02 |
| 40.** ***** | HTP-c ¹ | CTUh | 0 | 0 | 0,00E+00 | 8,41E-10 | 2,60E-11 | -8, 18E-09 |
| 88 E | HTP-nc ¹ | CTUh | 0 | 0 | 2,21E-09 | 2,58E-08 | 7,79E-10 | 6,00E-08 |
| | SQP ¹ | dimensionless | 0 | 0 | 1,91E+00 | 3,15E-01 | 2,12E+00 | -1,08E+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*10-3 = 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.

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| Resource use | | | | | | | | |
|--|---|----------------------------------|--|--|--|---|--|---|
| | Indicator | | Unit | A1-A3 | A4 | A5 | B2 | B3 |
| i S | PERE | | MJ | 7,78E+01 | 1,38E-01 | 1,06E-02 | 1,69E+00 | 0 |
| N. C. | PERM | | MJ | 2,26E+01 | 0,00E+00 | -2,26E+01 | 0,00E+00 | 0 |
| ~~ ~ 1 | PERT | | MJ | 1,00E+02 | 1,38E-01 | -2,26E+01 | 1,69E+00 | 0 |
| Ð | PENRE | | MJ | 3,34E+02 | 9,80E+00 | 6,36E-01 | 1,43E+00 | 0 |
| eş. | PENRM | | MJ | 2,69E+02 | 0,00E+00 | -1,53E+00 | 0,00E+00 | 0 |
| IA | PENRT | | MJ | 6,03E+02 | 9,80E+00 | -8,93E-01 | 1,43E+00 | 0 |
| | SM | | kg | 8,37E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0 |
| | RSF | | MJ | 2,19E+00 | 4,95E-03 | 3,49E-04 | 1,80E-03 | 0 |
| 1. Ale and the second s | NRSF | | MJ | 5,05E-01 | 1,77E-02 | 1,43E-03 | 2,55E-03 | 0 |
| ۲ | FW | m ³ | | C 005 01 | 1 025 02 | 3,01E-04 | 1,63E-02 | 0 |
| () | 1.00 | | m³ | 6,09E-01 | 1,03E-03 | 3,01E-04 | 1,03E-02 | 0 |
| Ir | ndicator | Unit | m ³ B4 | 6,09E-01 | C2 | C3 | C4 | D |
| | | Unit MJ | | | | | | |
| Ir | ndicator | | B4 | C1 | C2 | C3 | C4 | D |
| । ूट्र िष्ठ | ndicator PERE | MJ | B4 0 | C1 0 | C2 3,92E-02 | C3 8,65E-02 | C4 2,11E-02 | D -9,95E+01 |
| in Co Do | ndicator PERE PERM | MJ | B4 0 0 | C1 0 0 | C2 3,92E-02 0,00E+00 | C3 8,65E-02 -1,62E-02 | C4 2,11E-02 0,00E+00 | D -9,95E+01 0,00E+00 |
| in S | ndicator PERE PERM PERT | M) LM | B4 0 0 0 | C1 0 0 0 | C2 3,92E-02 0,00E+00 3,92E-02 | C3 8,65E-02 -1,62E-02 7,02E-02 | C4 2,11E-02 0,00E+00 2,11E-02 | D -9,95E+01 0,00E+00 -9,95E+01 |
| in Second | ndicator PERE PERM PERT PENRE | MJ MJ MJ | B4 0 0 0 0 0 0 0 | C1 0 0 0 0 | C2 3,92E-02 0,00E+00 3,92E-02 2,78E+00 | C3 8,65E-02 -1,62E-02 7,02E-02 2,03E+00 | C4 2,11E-02 0,00E+00 2,11E-02 9,59E-01 | D -9,95E+01 0,00E+00 -9,95E+01 -2,75E+01 |
| In Second Second | ndicator PERE PERM PERT PENRE PENRM | MJ MJ MJ | B4 0 0 0 0 0 0 0 0 0 0 | C1 0 0 0 0 0 | C2 3,92E-02 0,00E+00 3,92E-02 2,78E+00 0,00E+00 | C3 8,65E-02 -1,62E-02 7,02E-02 2,03E+00 -2,66E+02 | C4 2,11E-02 0,00E+00 2,11E-02 9,59E-01 0,00E+00 | D -9,95E+01 0,00E+00 -9,95E+01 -2,75E+01 0,00E+00 |
| | ndicator PERE PERM PERT PENRE PENRM PENRT | MJ MJ MJ MJ MJ | B4 0 0 0 0 0 0 0 0 0 0 0 0 0 | C1 0 0 0 0 0 0 0 | C2 3,92E-02 0,00E+00 3,92E-02 2,78E+00 0,00E+00 2,78E+00 | C3 8,65E-02 -1,62E-02 7,02E-02 2,03E+00 -2,66E+02 -2,64E+02 | C4 2,11E-02 0,00E+00 2,11E-02 9,59E-01 0,00E+00 9,59E-01 | D -9,95E+01 0,00E+00 -9,95E+01 -2,75E+01 0,00E+00 -2,75E+01 |
| | ndicator PERE PERM PERT PENRE PENRM PENRT SM | MJ MJ MJ MJ MJ Kg | B4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | C1 0 0 0 0 0 0 0 0 | C2 3,92E-02 0,00E+00 3,92E-02 2,78E+00 0,00E+00 2,78E+00 0,00E+00 | C3 8,65E-02 -1,62E-02 7,02E-02 2,03E+00 -2,66E+02 -2,64E+02 0,00E+00 | C4 2,11E-02 0,00E+00 2,11E-02 9,59E-01 0,00E+00 9,59E-01 0,00E+00 | D -9,95E+01 0,00E+00 -9,95E+01 -2,75E+01 0,00E+00 -2,75E+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; SENRE = Use of non renewable primary energy resources; SENRE = Use of non renewable primary energy resources; SENRE = Use of non renewable primary energy resources; SM = Use of secondary materials; RSF = Use of 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*10-3 = 0,009" *INA Indicator Not Assessed

| End of life - Waste | End of life - Waste | | | | | | | | |
|---------------------|---------------------|-----|------|-----|----------|----------|----------|----------|-----------|
| | Indicator | | U | nit | A1-A3 | A4 | A5 | B2 | B3 |
| Â | HWD | HWD | | g | 3,45E-01 | 5,00E-04 | 0,00E+00 | 1,61E-02 | 0 |
| Ū | NHWD | | k | g | 1,09E+01 | 4,69E-01 | 2,80E+00 | 4,64E-02 | 0 |
| | RWD | | k | g | 2,68E-03 | 6,68E-05 | 0,00E+00 | 4,78E-06 | 0 |
| In | dicator | | Unit | B4 | C1 | C2 | C3 | C4 | D |
| A | HWD | | kg | 0 | 0 | 1,42E-04 | 0,00E+00 | 3,63E+00 | -7,87E-03 |
| Ū | NHWD | | kg | 0 | 0 | 1,33E-01 | 4,00E-01 | 1,21E-01 | -9,37E-01 |
| 8 | RWD | | kg | 0 | 0 | 1,89E-05 | 0,00E+00 | 6,00E-06 | -7,97E-05 |

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

"Reading example: 9,0 E-03 = 9,0*10-3 = 0,009" *INA Indicator Not Assessed

| End of life - Output flow | End of life - Output flow | | | | | | | | | |
|---------------------------|---------------------------|------|------|----------|----------|----------|----------|----------|--|--|
| Indi | cator | Ur | Unit | | A4 | A5 | B2 | B3 | | |
| $\otimes \triangleright$ | CRU | kg | | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0 | | |
| \$\$ | MFR | k | g | 1,20E+00 | 0,00E+00 | 2,58E+00 | 0,00E+00 | 0 | | |
| DFZ | MER | k | g | 5,23E-04 | 0,00E+00 | 1,93E-01 | 0,00E+00 | 0 | | |
| ₹Þ | EEE | N | МЈ | | 0,00E+00 | 1,58E-01 | 0,00E+00 | 0 | | |
| DØ | EET | M | n | 2,95E-02 | 0,00E+00 | 2,39E+00 | 0,00E+00 | 0 | | |
| Indicato | r | Unit | B4 | C1 | C2 | C3 | C4 | D | | |
| \otimes | CRU | kg | 0 | 0 | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 | | |
| | MFR | kg | 0 | 0 | 0,00E+00 | 1,36E+00 | 0,00E+00 | 0,00E+00 | | |
| DF | MER | kg | 0 | 0 | 0,00E+00 | 1,30E+01 | 0,00E+00 | 0,00E+00 | | |
| 50 | EEE | MJ | 0 | 0 | 0,00E+00 | 1,26E+01 | 0,00E+00 | 0,00E+00 | | |
| DÐ | EET | MJ | 0 | 0 | 0,00E+00 | 1,91E+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*10-3 = 0,009" *INA Indicator Not Assessed

Biogenic Carbon Conten

| Indicator | Unit | At the factory gate | | | | | |
|---|------|---------------------|--|--|--|--|--|
| Biogenic carbon content in product | kg C | 0,00E+00 | | | | | |
| Biogenic carbon content in accompanying packaging | kg C | 1,28E+00 | | | | | |
| | 5 - | | | | | | |

Note: 1 kg biogenic carbon is equivalent to 44/12 kg CO2

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, Sweden (kWh) | ecoinvent 3.6 | 54,94 | g CO2-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 indicators | Unit | A1-A3 | A4 | A1-C4 | A1-D |
|------------------------------|------------------------|--------|------|--------|--------|
| GWPtotal | kg CO ₂ -eq | 41,96 | 0,65 | 68,39 | 65,87 |
| Total energy consumption | MJ | 414,48 | 9,96 | 434,18 | 302,86 |
| Amount of recycled materials | % | 52,86 | | | |

| Additional environmental impact indicators required in NPCR Part A for construction products | | | | | | | |
|--|------------------------|----|----------|----------|----------|----------|-----------|
| Indicator | Unit | | A1-A3 | A4 | A5 | B2 | B3 |
| GWPIOBC | kg CO ₂ -eq | | 3,95E+01 | 6,51E-01 | 0,00E+00 | 6,13E-01 | 0 |
| Indicator | Unit | B4 | C1 | C2 | C3 | C4 | D |
| GWPIOBC | kg CO ₂ -eq | 0 | 0 | 1,84E-01 | 2,00E+01 | 5,27E-02 | -3,19E+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.

Variants and Options

| Key environmenta | al indicators (A1 | I-A3) for options for this E | PD | |
|------------------|-------------------|-----------------------------------|-------------------------------|----------------------------------|
| Options | Weight (kg) | GWPtotal (kg CO ₂ -eq) | Total energy consumption (MJ) | Amount of recycled materials (%) |
| Armrest 0030 4D | 2,35 | 6,90 | 126,41 | 80,85 |

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, 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 Ruud et al., (2023) EPD generator for NPCR026 Part B for Furniture - Background information for EPD generator application and LCA data, LCA.no report number 01.23

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