

Environmental product declaration

in accordance with ISO 14025 and EN 15804+A2

Ava Family



Ava

Design – Böttcher & Kayser

JOHANSON

EPD-Global

Owner of the declaration:

Johanson Design AB

Product:

Ava Family

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-12734-12969

Issue date:

24.10.2025

Valid to:

24.10.2030

EPD software:

LCAno EPD generator ID:
1283190

General information

Product

Ava Family

Program operator:

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

Declaration number:

NEPD-12734-12969

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 Ava Family

Declared unit (cradle to gate) with option:

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

Functional unit:

The new AVA sofa series has been specially designed by Böttcher & Kayser to meet the ever-increasing demand for and interest in furnishings that lend a cosier, more domestic feel to public spaces. The key to success here lies in combining comfort and convenience with a high content of design – a specification that AVA meets in all respects. The appealing lines, soft yet supportive upholstery, modular seating units and loose backcushions all play their part in ensuring that users perceive a high level design and experience a high degree of comfort. The basis for the AVA series is a number of square and rectangular elements that make it possible to vary the size and shape of seating arrangements to meet differing needs in a variety of settings and spaces. Thanks to the flexibility of the manufacturing process and the expertise of the Johanson team, AVA can be covered in most types of textiles to meet the wishes of architects and interior designers. This helps ensure that AVA is at home in both conventionally furnished public spaces and in environments where the mood is more relaxed.

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

Owner of the declaration:

Johanson Design AB
Contact person: Lucas Carlsson
Phone: +46 (0) 433 725 00
e-mail: lucas@johansondesign.se

Manufacturer:

Johanson Design AB

Place of production:

Johanson Design AB
Anders Anderssons väg 7
285 35 Markaryd, Sweden

Management system:

ISO 14001

Organisation no:

SE556358520601

Issue date:

24.10.2025

Valid to:

24.10.2030

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: Lucas Carlsson

Reviewer of company-specific input data and EPD: Sandra Rube

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)

Approved:



Håkon Hauan, CEO EPD-Global

Product

Product description:

AVA is designed for versatile configurations — from compact seating groups to expansive lounge arrangements. Combine the square and rectangular modules to create linear or corner setups that suit the layout of any space. Its inviting comfort makes it ideal for lobbies, offices, waiting areas, and hospitality environments where users can meet, relax, or work comfortably. Simply arrange, connect, and accessorize with cushions or tables to match the desired atmosphere.

Product specification

This declaration focuses on an in-depth study of Ava Pouf 62

The table on page 12 of this declaration provides the key environmental indicators for the other models within the product family

Materials	kg	%	Recycled share in material (kg)	Recycled share in material (%)
Plastic - Polyurethane (PUR)	2,71	15,32	0,00	0,00
Textile - Polyester	1,69	9,55	0,05432	3,21
Textile - Recycled polyester	2,30	12,97	2,30	100,00
Wood - Plywood	11,00	62,15	0,00	0,00
Total	17,70	100,00	2,35	

Packaging	kg	%	Recycled share in material (kg)	Recycled share in material (%)
Packaging - Cardboard	1,46	50,00	0,00	0,00
Recycled cardboard	1,46	50,00	1,46	100,00
Total incl. packaging	20,62	100,00	3,81	

Technical data:

Volume 0.38 m³ - (excluding packaging)

Volume 0.5 m³ - (including packaging)

Total height 44 cm

Total width 93 cm

Total depth 93 cm

Seat height 44 cm

Seat width 93 cm

Seat depth 93 cm

Complied with technical standards:

EN 16139 Furniture - Strength, durability and safety - Requirements for non-domestic seating

Möbelfakta certified

You can find all certifications and test results here:

<https://johansondesign.com/downloads/certificate>

Market:

World wide

Reference service life, product

15 years (5 year warranty)

Reference service life, building

LCA: Calculation rules

Declared unit:

1 pcs Ava Family

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
Packaging - Cardboard	Modified ecoinvent 3.6	Database	2019
Plastic - Polyurethane (PUR)	ecoinvent 3.6	Database	2019
Recycled cardboard	Modified ecoinvent 3.6	Database	2019
Textile - Polyester	ecoinvent 3.6	Database	2019
Textile - Recycled polyester	SCS-EPD-08784	EPD	2020
Wood - Plywood	modified 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	X	X	X	MND	MND	MND	X	X	X	X	X

System boundary:

Fabric used in the calculation is Camira Oceanic, a 100% post-consumer recycled polyester

A3 Data Collection (Production Phase)

Data for the A3 module, encompassing the production phase, was collected in 2024. This data includes all relevant inputs and outputs associated with manufacturing processes.

A4 Data Collection (Transport to Customer)

Transport data for the A4 module was sourced from Trafa.se and reflects operations during the years 2021-2022. According to statistics from Trafikanalys, the average distance covered by a Swedish heavy-duty truck transporting furniture in domestic traffic was approximately 143 kilometers in 2022, with an average of 153 kilometers for the period 2012–2022. These values are based on representative industry conditions and account for the most recent data on logistics efficiency and route optimization.

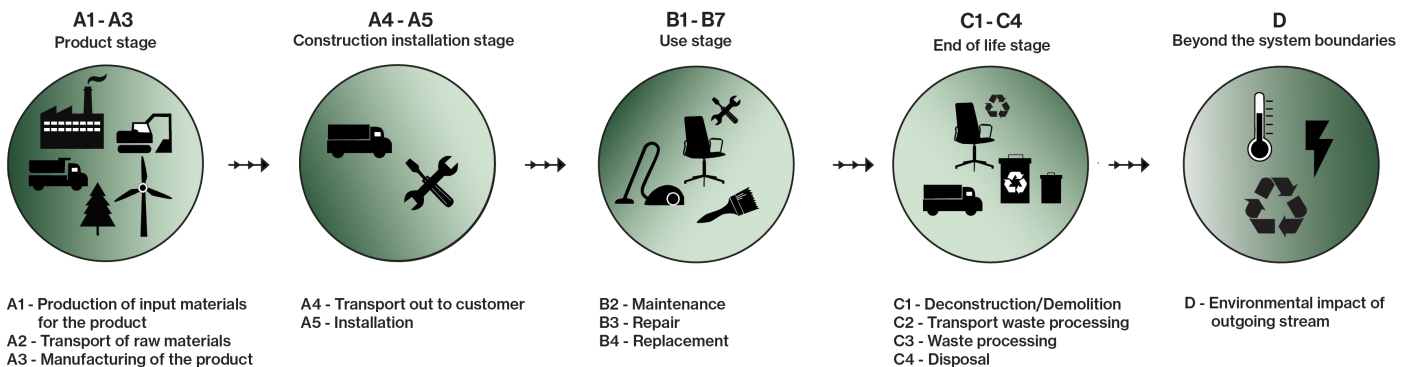
A5 Data (Packaging Disposal)

For the A5 module, it is assumed that packaging materials are automatically handled and disposed of in alignment with standard waste management practices at this stage. This assumption aligns with typical end-of-life scenarios for packaging in regulated waste systems.

Maintenance Data (B2 Module)

Maintenance requirements are calculated based on typical cleaning scenarios over the product's lifespan, assumed to be 15 years:

Vacuum cleaning: Energy consumption is calculated assuming a 900 W vacuum cleaner operating for 30 seconds per week over 15 years.



Additional technical information:

To achieve the best possible climate footprint, it's essential to take care of your furniture. The longer you maintain and care for your products, the better it is for the environment. Use our care instructions for optimal results.

You find it here:

<https://johansondesign.com/downloads>

Johanson Design is a company committed to sustainability and holds various certifications that underscore its dedication to environmental responsibility and quality.

Environmental Management System (ISO 14001):

Johanson has implemented an Environmental Management System (EMS) in accordance with ISO 14001 standards. This certification demonstrates the company's commitment to minimizing its environmental impact by systematically identifying, managing, and reducing its environmental footprint across all aspects of its operations.













LCA: Scenarios and additional technical information














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

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 %	143,00	0,043	l/tkm	6,15
Assembly (A5)					
	Unit	Value			
Waste, packaging, corrugated board box, 0 % recycled, to average treatment (kg)	kg	1,46			
Waste, packaging, cardboard, 100 % recycled, to average treatment (kg)	kg	1,46			
Maintenance (B2)					
	Unit	Value			
Electricity, Sweden (kWh)	kWh	1,35			
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)					
	Unit	Value			
Waste treatment per kg Textile, incineration with fly ash extraction (kg)	kg	3,99			
Waste treatment per kg Polyurethane (PU), incineration (kg)	kg	2,71			
Waste treatment per kg Wood, incineration with fly ash extraction (kg)	kg	11,00			
Disposal (C4)					
	Unit	Value			
Landfilling of ashes from incineration of Textile, soiled, process per kg ashes and residues (kg)	kg	0,2002			
Landfilling of ashes from incineration of Polyurethane (PU), process per kg ashes and residues - C4 (kg)	kg	0,1028			
Landfilling of ashes from incineration of Wood, process per kg ashes and residues (kg)	kg	0,1265			
Benefits and loads beyond the system boundaries (D)					
	Unit	Value			
Substitution of electricity, in Norway (MJ)	MJ	15,07			
Substitution of thermal energy, district heating, in Norway (MJ)	MJ	228,06			

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	B2	B3	
 GWP-total	kg CO ₂ -eq	2.44E+01	4.82E-01	5.00E+00	7.42E-02	0	
 GWP-fossil	kg CO ₂ -eq	4.71E+01	4.81E-01	4.72E-02	6.83E-02	0	
 GWP-biogenic	kg CO ₂ -eq	-2.28E+01	1.99E-04	4.96E+00	1.39E-03	0	
 GWP-luluc	kg CO ₂ -eq	1.43E-01	1.71E-04	1.56E-05	4.44E-03	0	
 ODP	kg CFC11 -eq	3.91E-06	1.09E-07	9.97E-09	3.35E-08	0	
 AP	mol H+ -eq	2.72E-01	1.38E-03	2.24E-04	4.45E-04	0	
 EP-FreshWater	kg P -eq	4.67E-03	3.85E-06	3.88E-07	4.62E-06	0	
 EP-Marine	kg N -eq	6.14E-02	2.74E-04	7.40E-05	7.58E-05	0	
 EP-Terrestrial	mol N -eq	6.25E-01	3.06E-03	8.01E-04	9.98E-04	0	
 POCP	kg NMVOC -eq	1.96E-01	1.17E-03	2.30E-04	2.27E-04	0	
 ADP-minerals&metals ¹	kg Sb-eq	5.14E-04	1.33E-05	1.15E-06	2.74E-06	0	
 ADP-fossil ¹	MJ	7.84E+02	7.28E+00	6.61E-01	8.01E+00	0	
 WDP ¹	m ³	4.41E+03	7.04E+00	8.37E-01	8.13E+02	0	

Indicator	Unit	B4	C1	C2	C3	C4	D
 GWP-total	kg CO ₂ -eq	0	0	2.86E-01	3.16E+01	1.48E-02	-1.37E+00
 GWP-fossil	kg CO ₂ -eq	0	0	2.86E-01	7.48E+00	1.48E-02	-1.32E+00
 GWP-biogenic	kg CO ₂ -eq	0	0	1.18E-04	2.42E+01	3.20E-05	-2.73E-03
 GWP-luluc	kg CO ₂ -eq	0	0	1.02E-04	6.77E-05	2.17E-06	-4.55E-02
 ODP	kg CFC11 -eq	0	0	6.48E-08	5.06E-08	1.46E-09	-9.63E-02
 AP	mol H+ -eq	0	0	8.22E-04	8.57E-03	4.96E-05	-1.09E-02
 EP-FreshWater	kg P -eq	0	0	2.29E-06	5.02E-06	2.02E-07	-1.17E-04
 EP-Marine	kg N -eq	0	0	1.63E-04	4.63E-03	1.53E-05	-3.56E-03
 EP-Terrestrial	mol N -eq	0	0	1.82E-03	4.54E-02	1.75E-04	-3.85E-02
 POCP	kg NMVOC -eq	0	0	6.97E-04	1.08E-02	4.80E-05	-1.06E-02
 ADP-minerals&metals ¹	kg Sb-eq	0	0	7.90E-06	1.98E-06	7.52E-08	-1.32E-05
 ADP-fossil ¹	MJ	0	0	4.33E+00	4.33E+00	1.25E-01	-1.89E+01
 WDP ¹	m ³	0	0	4.18E+00	9.64E+00	1.42E+00	-2.35E+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

Additional environmental impact indicators

Indicator	Unit	A1-A3	A4	A5	B2	B3
 PM	Disease incidence	5.50E-06	2.95E-08	3.30E-09	3.21E-09	0
 IRP ²	kgBq U235 -eq	2.25E+00	3.18E-02	2.83E-03	2.75E-01	0
 ETP-fw ¹	CTUe	1.53E+03	5.40E+00	8.81E-01	4.23E+00	0
 HTP-c ¹	CTUh	6.31E-08	0.00E+00	2.60E-11	1.22E-10	0
 HTP-nc ¹	CTUh	5.36E-07	5.89E-09	1.11E-09	2.93E-09	0
 SQP ¹	dimensionless	2.80E+03	5.09E+00	4.43E-01	3.55E+00	0

Indicator	Unit	B4	C1	C2	C3	C4	D
 PM	Disease incidence	0	0	1.75E-08	4.35E-08	5.90E-10	-6.60E-07
 IRP ²	kgBq U235 -eq	0	0	1.89E-02	7.07E-03	6.06E-04	-1.21E-01
 ETP-fw ¹	CTUe	0	0	3.21E+00	2.14E+01	2.49E-01	-1.03E+02
 HTP-c ¹	CTUh	0	0	0.00E+00	9.70E-10	1.20E-11	-1.88E-09
 HTP-nc ¹	CTUh	0	0	3.50E-09	4.54E-08	4.65E-10	-9.86E-08
 SQP ¹	dimensionless	0	0	3.03E+00	5.17E-01	3.84E-01	-1.26E+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.




Resource use								
Indicator		Unit	A1-A3	A4	A5	B2	B3	
	PERE	MJ	5.51E+02	1.04E-01	1.09E-02	3.85E+00	0	
	PERM	MJ	1.93E+02	0.00E+00	-3.18E+01	0.00E+00	0	
	PERT	MJ	7.43E+02	1.04E-01	-3.18E+01	3.85E+00	0	
	PENRE	MJ	6.82E+02	7.28E+00	6.61E-01	8.03E+00	0	
	PENRM	MJ	2.44E+02	0.00E+00	0.00E+00	0.00E+00	0	
	PENRT	MJ	9.26E+02	7.28E+00	6.61E-01	8.03E+00	0	
	SM	kg	3.81E+00	0.00E+00	0.00E+00	0.00E+00	0	
	RSF	MJ	4.25E-01	3.73E-03	3.61E-04	1.49E-02	0	
	NRSF	MJ	1.15E+00	1.33E-02	1.49E-03	4.71E-02	0	
	FW	m ³	7.96E-01	7.78E-04	3.12E-04	8.74E-03	0	



Indicator		Unit	B4	C1	C2	C3	C4	D
	PERE	MJ	0	0	6.19E-02	1.24E-01	7.89E-03	-1.17E+02
	PERM	MJ	0	0	0.00E+00	-1.61E+02	0.00E+00	0.00E+00
	PERT	MJ	0	0	6.19E-02	-1.61E+02	7.89E-03	-1.17E+02
	PENRE	MJ	0	0	4.33E+00	4.39E+00	1.26E-01	-1.89E+01
	PENRM	MJ	0	0	0.00E+00	-2.44E+02	0.00E+00	0.00E+00
	PENRT	MJ	0	0	4.33E+00	-2.40E+02	1.26E-01	-1.89E+01
	SM	kg	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	RSF	MJ	0	0	2.22E-03	2.97E-03	1.96E-04	-2.05E-02
	NRSF	MJ	0	0	7.92E-03	0.00E+00	4.97E-02	-6.92E+00
	FW	m ³	0	0	4.63E-04	1.38E-02	1.15E-04	-1.41E-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*10⁻³ = 0,009"

*INA Indicator Not Assessed






End of life - Waste								
Indicator		Unit	A1-A3	A4	A5	B2	B3	
	HWD	kg	1.26E+01	3.75E-04	0.00E+00	4.19E-04	0	
	NHWD	kg	6.28E+00	3.54E-01	2.92E+00	2.64E-02	0	
	RWD	kg	5.15E-02	4.96E-05	0.00E+00	1.21E-04	0	






Indicator		Unit	B4	C1	C2	C3	C4	D
	HWD	kg	0	0	2.23E-04	0.00E+00	1.77E-01	-8.89E-04
	NHWD	kg	0	0	2.10E-01	0.00E+00	1.18E-01	-4.47E-01
	RWD	kg	0	0	2.95E-05	0.00E+00	6.95E-07	-9.90E-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								
Indicator		Unit	A1-A3	A4	A5	B2	B3	
	CRU	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0	
	MFR	kg	1.99E-01	0.00E+00	2.72E+00	0.00E+00	0	
	MER	kg	4.32E-01	0.00E+00	3.98E-06	0.00E+00	0	
	EEE	MJ	2.83E-01	0.00E+00	1.67E-01	0.00E+00	0	
	EET	MJ	4.29E+00	0.00E+00	2.53E+00	0.00E+00	0	

Indicator		Unit	B4	C1	C2	C3	C4	D
	CRU	kg	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	MFR	kg	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	MER	kg	0	0	0.00E+00	1.77E+01	0.00E+00	0.00E+00
	EEE	MJ	0	0	0.00E+00	1.42E+01	0.00E+00	0.00E+00
	EET	MJ	0	0	0.00E+00	2.15E+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 Content		
Indicator	Unit	At the factory gate
Biogenic carbon content in product	kg C	5.00E+00
Biogenic carbon content in accompanying packaging	kg C	1.35E+00

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 CO ₂ -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		Use stage			End-of-life				Net benefits and loads from reuse, recovery, and/or recycling
		A1-A3	A4	A5	B2	B3	B4	C1	C2	C3	C4	D
GWPtotal	kg CO ₂ -eq	24,45	0,48	5,00	0,07	0,00	0,00	0,00	0,29	31,64	0,01	-1,37
Total energy consumption	MJ	1234,01	7,40	0,67	11,94	0,00	0,00	0,00	4,40	4,52	0,18	-142,63
Share of recycled materials	%	18,48										

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	4.75E+01	4.82E-01	4.73E-02	7.41E-02	0

Indicator	Unit	B4	C1	C2	C3	C4	D
GWPIOBC	kg CO ₂ -eq	0	0	2.86E-01	1.40E+01	2.73E-02	-1.35E+00

GWPI-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 environmental indicators (A1-A3) for variants of this EPD

Variants	Weight (kg)	GWPtotal (kg CO ₂ -eq)	Total energy consumption (MJ)	Amount of recycled materials (%)
Ava Pouf 62	20,61	24,45	1234,01	18,48
Ava Pouf 93	27,31	36,94	1662,94	17,65
Ava Sofa 93	34,34	34,50	2044,46	14,69
Ava Sofa 124	40,07	35,22	2273,40	17,62
Ava open end 124 Left	49,53	62,02	2954,95	15,10
Ava open end 124 Right	49,53	62,02	2954,95	15,10
Ava Corner 93	30,52	93,23	3089,78	10,86
Ava Corner 124 Left	51,55	69,92	3108,81	15,32
Ava Corner 124 Right	51,55	69,92	3108,81	15,32
Ava Table S-H29	18,57	-1,49	845,49	10,52
Ava table S-H40	24,69	-6,86	1176,35	8,24
Ava table M-H29	25,97	-7,47	1107,34	7,13
Ava table M-H40	31,46	-9,66	1406,14	6,85
Ava table L-H29	36,84	-16,07	1455,55	7,96
Ava table L-H40	41,26	-16,57	1701,10	8,54

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
 NPCR Part A: Construction products and services. Ver. 2.0. March 2021, EPD-Norge.
 NPCR 026 Part B for Furniture. Ver. 2.0 March 2022, EPD-Norge.

 Powered by EPD-Norway	Program operator and publisher EPD-Global Post Box 5250 Majorstuen, 0303 Oslo, Norway	Phone: +47 977 22 020 e-mail: post@epd-norge.no web: www.epd-global.com
	Owner of the declaration: Johanson Design AB Anders Anderssons väg 7, 285 35 Markaryd, Sweden	Phone: +46 (0) 433 725 00 e-mail: lucas@johansondesign.se web: johansondesign.com
	Author of the Life Cycle Assessment LCA.no AS Dokka 6A, 1671 Kråkerøy, Norway	Phone: +47 916 50 916 e-mail: post@lca.no web: www.lca.no
	Developer of EPD generator LCA.no AS Dokka 6A, 1671 Kråkerøy, Norway	Phone: +47 916 50 916 e-mail: post@lca.no web: www.lca.no
	ECO Platform ECO Portal	web: www.eco-platform.org web: ECO Portal