



in accordance with ISO 14025 and EN 15804+A2

Ciao table



LAMMHULTS

Owner of the declaration: Lammhults Möbel AB

Product: Ciao table

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-11068-11015

Registration number: NEPD-11068-11015

Issue date: 16.05.2025

Valid to: 16.05.2030

EPD software: LCAno EPD generator ID: 927391

The Norwegian EPD Foundation

General information

Product

Ciao table

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-11068-11015

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 Ciao table

Declared unit (cradle to gate) with option:

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

Functional unit:

Ciao table H42, Ø 40 cm table top in HPL

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:

Lammhults Möbel AB Contact person: Alexandra Lidnert Phone: +46 732 52 94 03 e-mail: alexandra.lidnert@lammhults.se

Manufacturer:

Lammhults Möbel AB

Place of production:

Lammhults Möbel AB Växjövägen 41 SE-363 45 Lammhult, Sweden

Management system: ISO 14001, 9001, 45001

Organisation no:

556058-2602

Issue date:

16.05.2025

Valid to: 16.05.2030

Year of study:

2023

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: Lovisa Aiff

Reviewer of company-specific input data and EPD: Alexandra Lidnert

Approved:

Håkon Hauan, CEO EPD-Norge

Product

Product description:

Through its interplay of geometric shapes, the Ciao table, designed by Gunilla Allard, manages to balance expressiveness with lightness and crisp elegance. Ciao's expression is boldly cubist and monochrome. The dimensions are generous, bringing to mind one of Lammhult's iconic furniture pieces of the late 1960s. "It's a nod to Börge Lindau's and Bo Lindekrantz's S70 series," she acknowledges.

Product specification

Ciao is available in two different heights; 40cm and 50cm with a pillar base of Ø140 mm powder coated steel tubing, foot plate of 5 mm sheet steel. Felt glides. Table top of 16 mm MDF with high pressure laminate; Ø 40cm, Ø 50cm and Ø 80cm.

Materials	kg	%	Recycled share in material (kg)	Recycled share in material (%)
High Pressure Laminate	0,23	2,32	0,00	0,00
Metal - Steel	8,33	81,55	0,00	0,00
Plastic - Acrylonitrile butadiene styrene (ABS)	0,047	0,46	0,00	0,00
Plastic - Ethylene vinyl acetate (EVA)	0,24	2,34	0,00	0,00
Powder coating	0,060	0,58	0,00	0,00
Wood - Medium Density Fibreboard (MDF)	1,30	12,72	0,00	0,00
Total	10,21	100,00	0,00	

Packaging	kg	%	Recycled share in material (kg)	Recycled share in material (%)
Packaging - Cardboard	0,41	28,95	0,00	0,00
Packaging - Plastic straps	0,05	3,50	0,00	0,00
Recycled cardboard	0,97	67,55	0,97	100,00
Total incl. packaging	11,65	100,00	0,97	

Technical data:

Height: 42cm Width: Ø 40cm

Ciao table meets the requirements of EN 15372:2016 and Möbelfakta

Market:

Available world wide

Reference service life, product

15 years (warranty 5 years)

Reference service life, building

LCA: Calculation rules

Declared unit:

1 pcs Ciao table

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.

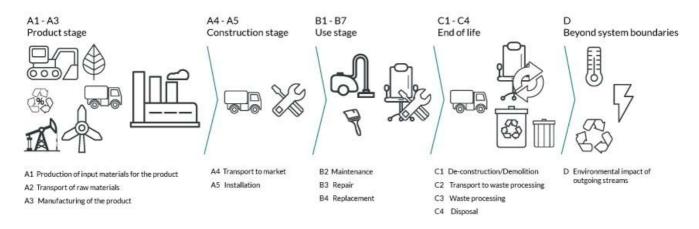
Materials	Source	Data quality	Year
High Pressure Laminate	S-P-06281	EPD	2022
Metal - Steel	ecoinvent 3.6	Database	2019
Packaging - Cardboard	Modified ecoinvent 3.6	Database	2019
Packaging - Plastic straps	ecoinvent 3.6	Database	2019
Plastic - Acrylonitrile butadiene styrene (ABS)	ecoinvent 3.6	Database	2019
Plastic - Ethylene vinyl acetate (EVA)	Product composition + ecoinvent 3.6	Supplier data + database	2019
Powder coating	ecoinvent 3.6	Database	2019
Recycled cardboard	Modified ecoinvent 3.6	Database	2019
Wood - Medium Density Fibreboard (MDF)	ecoinvent 3.6	Database	2019

Construct Use stage End of life stage Product stage oounda Manufacturing Recycling-potential Refurbishment Reuse-Recovery-Mainten an ce Replacement perational Operational use rocessing Raw ransport Transport iransport Disposal Waste Repair energy Use ISe vater De A1 A3 B4 C1 C2 C3 C4 D A2 A4 A5 B1 B2 B3 B5 B6 Β7 X MND MND MND MND Y X Y Х х Х х X х X Х х

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

System boundary:

The analysis is a cradle-to-cradle, A1-D, where some B-stages that were assumed to be neglectable are not included. The A1-A4 stages includes the extraction and production of raw materials, transportation to the production site, the production process itself, and an estimated transport distance to the market. A5 includes the generated waste from the packaging of the product after the assembly at the customer. The only B-stage that is assumed to be relevant is B2, which includes assumptions on how the customer takes care of the product according to Lammhults' care instructions. The C- and D-stages includes the use of materials and energy for deconstruction, the transport to waste management, the waste processes, disposal of materials that cannot be processed, and the potential of reuse, recovery, and recycling of the product.



Additional technical information:

https://www.lammhults.se/products/tables-trolleys/ciao

Lammhults Care & Maintenance: https://issuu.com/lammhults/docs/lammhultscaremaintenance2205

LCA: Scenarios and additional technical information

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

Some assumptions have been made regarding the products lifetime after leaving the factory gates. The product is assumed to be transported to the capitol of each country sold/delivered to. An average distance (A4) to the customer has been calculated through this data. In the A5 phase, the packaging of the product becomes waste, and the impacts are added automatically according to assumptions made in the EPD tool on waste handling on-site. In the use stage, the assumption is that the customer takes care of the product by cleaning the product with a dry cloth or a slightly damp cloth with a few drops of very mild cleaning detergent. For the end-of-life stage of the product, it has been assumed that there is a 50 km distance from the customer to a waste terminal. The rest of the values are automatically filled in by the tool. For the D-stage, automatic values are filled in, according to generic data.

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 %	548	0,043	l/tkm	23,56
Assembly (A5)	Unit	Value			
Waste, packaging, cardboard, 100 % recycled, to average treatment (kg)	kg	0,96			
Waste, packaging, corrugated board box, 0 % recycled, to average treatment (kg)	kg	0,41			
Waste, packaging, PET straps, to average treatment - A5 (kg)	kg	0,050			
Maintenance (B2)	Unit	Value			
Water, tap water (m3)	m3	0,0030			
Wastewater, average treatment (m3)	m3	0,000020			
Household detergent, 5% soap solution (kg)	kg	0,0020			
Transport to waste processing (C2)	Capacity utilisation (incl. return) %	Distance (km)	Fuel/Energy Consumption	Unit	Value (Liter/tonne)
Truck, over 32 tonnes, EURO 6 (km)	53,3 %	50	0,023	l/tkm	1,15
Waste processing (C3)	Unit	Value			
Waste, materials to recycling (kg)	kg	2,82			
Waste treatment per kg Non-hazardous waste, incineration with fly ash extraction - C3 (kg)	kg	0,29			
Waste treatment per kg Scrap steel, incineration with fly ash extraction (kg)	kg	8,33			
Waste treatment per kg Wood, incineration with fly ash extraction (kg)	kg	1,30			
Waste treatment per kg Plastics, Mixture, municipal incineration with fly ash extraction (kg)	kg	0,047			
Waste treatment per kg Polyethylene, PE, incineration with fly ash extraction - C3 (kg)	kg	0,24			
Disposal (C4)	Unit	Value			
Landfilling of ashes from incineration of Polyethylene, PE, process per kg ashes and residues - C4 (kg)	kg	0,0084			
Landfilling of ashes from incineration of Wood, process per kg ashes and residues (kg)	kg	0,014			
Landfilling of ashes from incineration of Non- hazardous waste, process per kg ashes and residues - C4 (kg)	kg	0,070			
Landfilling of ashes and residues from incineration of Scrap steel (kg)	kg	5,50			
Landfilling of ashes from incineration of Plastics, Mixture, municipal incineration with fly ash extraction, process per kg ashes and residues - C4 (kg)	kg	0,0016			
Benefits and loads beyond the system boundaries (D)	Unit	Value			
Substitution of electricity, in Norway (MJ)	MJ	1,61			
Substitution of thermal energy, district heating, in Norway (MJ)	MJ	24,49			
Substitution of primary steel with net scrap (kg)	kg	2,82			

LCA: Results

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

	nental impact							
	Indicator	Unit			A4	A5	B2	B3
P	GWP-total	kg CO ₂ ·	eq	4,00E+01	1,04E+00	2,37E+00	1,61E-03	0
P	GWP-fossil	kg CO ₂ ·	kg CO ₂ -eq		1,04E+00	2,63E-02	1,25E-03	0
P	GWP-biogenic	kg CO ₂ -	eq	-3,03E+00	4,32E-04	2,34E+00	4,83E-05	0
P	GWP-luluc	kg CO ₂ -	eq	8,84E-02	3,71E-04	7,69E-06	3,13E-04	0
Ò	ODP	kg CFC11	-eq	3,71E-06	2,36E-07	4,95E-09	1,28E-10	0
(АР	mol H+	-eq	2,35E-01	3,00E-03	1,11E-04	8,61E-06	0
	EP-FreshWater	kg P -e	q	3,02E-03	8,33E-06	1,91E-07	1,68E-06	0
÷	EP-Marine	kg N -e	р	5,05E-02	5,93E-04	3,94E-05	3,62E-06	0
	EP-Terrestial	mol N -	eq	5,55E-01	6,63E-03	3,96E-04	1,99E-05	0
	РОСР	kg NMVO	C -eq	1,94E-01	2,54E-03	1,15E-04	4,97E-06	0
* \$	ADP-minerals&metals ¹	kg Sb-e	eq	8,99E-04	2,88E-05	5,64E-07	4,23E-08	0
Ð	ADP-fossil ¹	MJ		6,20E+02	1,58E+01	3,29E-01	2,00E-02	0
6	WDP ¹	m ³		1,24E+04	1,53E+01	4,54E-01	3,20E-01	0
	Indicator	Unit	B4	64	62	60		-
		Unit	D4	C1	C2	C3	C4	D
P	GWP-total	kg CO ₂ -eq	0	0	5,08E-02	4,12E+00	C4 6,03E-02	D -3,26E+00
P								
	GWP-total	kg CO ₂ -eq	0	0	5,08E-02	4,12E+00	6,03E-02	-3,26E+00
P	GWP-total GWP-fossil	kg CO ₂ -eq kg CO ₂ -eq	0 0	0 0	5,08E-02 5,07E-02	4,12E+00 1,59E+00	6,03E-02 6,03E-02	-3,26E+00 -3,25E+00
P	GWP-total GWP-fossil GWP-biogenic	kg CO ₂ -eq kg CO ₂ -eq kg CO ₂ -eq	0 0 0	0 0 0	5,08E-02 5,07E-02 2,17E-05	4,12E+00 1,59E+00 2,53E+00	6,03E-02 6,03E-02 4,55E-05	-3,26E+00 -3,25E+00 -2,01E-03
P	GWP-total GWP-fossil GWP-biogenic GWP-luluc	kg CO ₂ -eq kg CO ₂ -eq kg CO ₂ -eq kg CO ₂ -eq	0 0 0	0 0 0 0	5,08E-02 5,07E-02 2,17E-05 1,55E-05	4,12E+00 1,59E+00 2,53E+00 2,68E-05	6,03E-02 6,03E-02 4,55E-05 1,85E-05	-3,26E+00 -3,25E+00 -2,01E-03 -6,28E-03
P P P	GWP-total GWP-fossil GWP-biogenic GWP-luluc ODP	kg CO ₂ -eq kg CO ₂ -eq kg CO ₂ -eq kg CO ₂ -eq kg CFC11 -eq	0 0 0 0 0	0 0 0 0 0	5,08E-02 5,07E-02 2,17E-05 1,55E-05 1,22E-08	4,12E+00 1,59E+00 2,53E+00 2,68E-05 1,05E-08	6,03E-02 6,03E-02 4,55E-05 1,85E-05 1,90E-08	-3,26E+00 -3,25E+00 -2,01E-03 -6,28E-03 -1,03E-02
P P D C	GWP-total GWP-fossil GWP-biogenic GWP-luluc ODP AP	kg CO ₂ -eq kg CO ₂ -eq kg CO ₂ -eq kg CO ₂ -eq kg CFC11 -eq mol H+ -eq	0 0 0 0 0 0	0 0 0 0 0 0	5,08E-02 5,07E-02 2,17E-05 1,55E-05 1,22E-08 1,63E-04	4,12E+00 1,59E+00 2,53E+00 2,68E-05 1,05E-08 7,05E-04	6,03E-02 6,03E-02 4,55E-05 1,85E-05 1,90E-08 4,33E-04	-3,26E+00 -3,25E+00 -2,01E-03 -6,28E-03 -1,03E-02 -1,66E-02
 	GWP-total GWP-fossil GWP-biogenic GWP-luluc ODP AP EP-FreshWater	kg CO ₂ -eq kg CO ₂ -eq kg CO ₂ -eq kg CO ₂ -eq kg CFC11 -eq mol H+ -eq kg P -eq	0 0 0 0 0 0 0	0 0 0 0 0 0 0	5,08E-02 5,07E-02 2,17E-05 1,55E-05 1,22E-08 1,63E-04 4,04E-07	4,12E+00 1,59E+00 2,53E+00 2,68E-05 1,05E-08 7,05E-04 2,11E-06	6,03E-02 6,03E-02 4,55E-05 1,85E-05 1,90E-08 4,33E-04 5,95E-07	-3,26E+00 -3,25E+00 -2,01E-03 -6,28E-03 -1,03E-02 -1,66E-02 -2,04E-04
	GWP-total GWP-fossil GWP-biogenic GWP-luluc ODP AP EP-FreshWater EP-Marine	kg CO ₂ -eq kg CO ₂ -eq kg CO ₂ -eq kg CO ₂ -eq kg CFC11 -eq mol H+ -eq kg P -eq kg N -eq	0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0	5,08E-02 5,07E-02 2,17E-05 1,55E-05 1,22E-08 1,63E-04 4,04E-07 3,58E-05	4,12E+00 1,59E+00 2,53E+00 2,68E-05 1,05E-08 7,05E-04 2,11E-06 2,97E-04	6,03E-02 6,03E-02 4,55E-05 1,85E-05 1,90E-08 4,33E-04 5,95E-07 1,55E-04	-3,26E+00 -3,25E+00 -2,01E-03 -6,28E-03 -1,03E-02 -1,66E-02 -2,04E-04 -3,58E-03
	GWP-total GWP-fossil GWP-biogenic GWP-luluc ODP AP EP-FreshWater EP-Marine EP-Terrestial	kg CO ₂ -eq kg CO ₂ -eq kg CO ₂ -eq kg CO ₂ -eq kg CFC11 -eq mol H+ -eq kg P -eq kg N -eq mol N -eq	0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0	5,08E-02 5,07E-02 2,17E-05 1,55E-05 1,22E-08 1,63E-04 4,04E-07 3,58E-05 3,99E-04	4,12E+00 1,59E+00 2,53E+00 2,68E-05 1,05E-08 7,05E-04 2,11E-06 2,97E-04 3,16E-03	6,03E-02 6,03E-02 4,55E-05 1,85E-05 1,90E-08 4,33E-04 5,95E-07 1,55E-04 1,71E-03	-3,26E+00 -3,25E+00 -2,01E-03 -6,28E-03 -1,03E-02 -1,66E-02 -2,04E-04 -3,58E-03 -3,68E-02
	GWP-total GWP-fossil GWP-biogenic GWP-luluc ODP AP EP-FreshWater EP-Marine EP-Terrestial POCP	kg CO ₂ -eq kg CO ₂ -eq kg CO ₂ -eq kg CO ₂ -eq kg CFC11 -eq mol H+ -eq kg P -eq kg N -eq mol N -eq kg NMVOC -eq	0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0	5,08E-02 5,07E-02 2,17E-05 1,55E-05 1,22E-08 1,63E-04 4,04E-07 3,58E-05 3,99E-04 1,57E-04	4,12E+00 1,59E+00 2,53E+00 2,68E-05 1,05E-08 7,05E-04 2,11E-06 2,97E-04 3,16E-03 8,45E-04	6,03E-02 6,03E-02 4,55E-05 1,85E-05 1,90E-08 4,33E-04 5,95E-07 1,55E-04 1,71E-03 4,93E-04	-3,26E+00 -3,25E+00 -2,01E-03 -6,28E-03 -1,03E-02 -1,66E-02 -2,04E-04 -3,58E-03 -3,68E-02 -1,67E-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 er	Iditional environmental impact indicators							
	Indicator	Unit		A1-A3	A4	A5	B2	B3
	PM	Disease incidence		4,25E-06	6,38E-08	1,65E-09	8,70E-11	0
	IRP ²	kgBq U235 -eq		5,33E+00	6,89E-02	1,41E-03	1,30E-04	0
	ETP-fw ¹	CTUe		1,94E+03	1,17E+01	4,32E-01	3,96E-02	0
44.* ****	HTP-c ¹	CTUh		2,17E-07	0,00E+00	1,30E-11	4,00E-12	0
4 <u>8</u>	HTP-nc ¹	CTUh		1,36E-06	1,28E-08	5,38E-10	7,50E-11	0
٢	SQP ¹	dimensionless	dimensionless		1,10E+01	2,38E-01	1,75E-02	0
Ir	dicator	Unit	B4	C1	C2	C3	C4	D
	РМ	Disease incidence	0	0	4,66E-09	1,75E-08	7,97E-09	-3,29E-07
	IRP ²	kgBq U235 -eq	0	0	3,60E-03	2,00E-03	5,62E-03	-1,81E-03
	ETP-fw ¹	CTUe	0	0	6,03E-01	5,65E+00	8,11E-01	-1,84E+02
40.* ****	HTP-c ¹	CTUh	0	0	0,00E+00	5,18E-10	2,80E-11	-1,52E-08
88 E	HTP-nc ¹	CTUh	0	0	5,83E-10	6,29E-09	7,49E-10	3,14E-07
	SQP ¹	dimensionless	0	0	9,45E-01	1,51E-01	3,04E+00	-1,55E+01

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
er D	PERE		MJ	3,14E+02	2,26E-01	5,55E-03	5,36E-03	0
A A A A A A A A A A A A A A A A A A A	PERM		MJ	2,76E+01	0,00E+00	-1,22E+01	0,00E+00	0
÷.	PERT		MJ	3,42E+02	2,26E-01	-1,22E+01	5,36E-03	0
B	PENRE		MJ	6,46E+02	1,58E+01	3,29E-01	2,04E-02	0
.Ås	PENRM		MJ	1,13E+01	0,00E+00	-1,15E+00	0,00E+00	0
IA	PENRT		MJ	6,57E+02	1,58E+01	-8,19E-01	2,04E-02	0
	SM		kg	9,66E-01	0,00E+00	0,00E+00	0,00E+00	0
2	RSF		MJ	1,83E+00	8,08E-03	1,81E-04	1,95E-04	0
J.	NRSF	MJ		3,18E+00	2,89E-02	7,31E-04	1,94E-04	0
6	FW		m ³	4,73E-01	1,69E-03	1,56E-04	3,05E-03	0
	ndicator	Unit	B4	C1	C2	C3	C4	D
। ूट छि	ndicator PERE	Unit MJ	B4 0	C1 0	C2 1,04E-02	C3 3,80E-02	C4 2,54E-02	D -1,47E+01
i I	PERE	MJ	0	0	1,04E-02	3,80E-02	2,54E-02	-1,47E+01
in the second se	PERE	MJ	0	0 0	1,04E-02 0,00E+00	3,80E-02 -1,54E+01	2,54E-02 0,00E+00	-1,47E+01 0,00E+00
्र मि ्रि	PERE PERM PERT	MJ MJ	0	0 0 0	1,04E-02 0,00E+00 1,04E-02	3,80E-02 -1,54E+01 -1,54E+01	2,54E-02 0,00E+00 2,54E-02	-1,47E+01 0,00E+00 -1,47E+01
	PERE PERM PERT PENRE	M) MJ	0 0 0	0 0 0 0	1,04E-02 0,00E+00 1,04E-02 8,24E-01	3,80E-02 -1,54E+01 -1,54E+01 7,39E-01	2,54E-02 0,00E+00 2,54E-02 1,41E+00	-1,47E+01 0,00E+00 -1,47E+01 -2,82E+01
	PERE PERM PERT PENRE PENRM	MJ MJ MJ	0 0 0 0 0	0 0 0 0 0	1,04E-02 0,00E+00 1,04E-02 8,24E-01 0,00E+00	3,80E-02 -1,54E+01 -1,54E+01 7,39E-01 -1,02E+01	2,54E-02 0,00E+00 2,54E-02 1,41E+00 0,00E+00	-1,47E+01 0,00E+00 -1,47E+01 -2,82E+01 0,00E+00
	PERE PERM PERT PENRE PENRM PENRT	KM KM MJ MJ MJ	0 0 0 0 0 0	0 0 0 0 0 0	1,04E-02 0,00E+00 1,04E-02 8,24E-01 0,00E+00 8,24E-01	3,80E-02 -1,54E+01 -1,54E+01 7,39E-01 -1,02E+01 -9,42E+00	2,54E-02 0,00E+00 2,54E-02 1,41E+00 0,00E+00 1,41E+00	-1,47E+01 0,00E+00 -1,47E+01 -2,82E+01 0,00E+00 -2,82E+01
	PERE PERM PERT PENRE PENRM PENRT SM	MJ MJ MJ MJ MJ kg	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0	1,04E-02 0,00E+00 1,04E-02 8,24E-01 0,00E+00 8,24E-01 0,00E+00	3,80E-02 -1,54E+01 -1,54E+01 7,39E-01 -1,02E+01 -9,42E+00 0,00E+00	2,54E-02 0,00E+00 2,54E-02 1,41E+00 0,00E+00 1,41E+00 0,00E+00	-1,47E+01 0,00E+00 -1,47E+01 -2,82E+01 0,00E+00 -2,82E+01 0,00E+00

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 excluding non-renewable primary energy resources; SENRE = Use of secondary materials; PENRT = Total 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									
	Indicator		Unit		A1-A3	A4	A5	B2	B3
Â	HWD	HWD		kg		8,13E-04	0,00E+00	3,56E-05	0
Ū	NHWD		k	g	1,33E+01	7,67E-01	1,43E+00	3,06E-04	0
æ	RWD	kg		3,38E-03	1,07E-04	0,00E+00	1,13E-07	0	
In	dicator		Unit	B4	C1	C2	C3	C4	D
A	HWD		kg	0	0	4,51E-05	0,00E+00	5,55E+00	-1,63E-02
Ī	NHWD		kg	0	0	7,16E-02	2,98E-01	4,86E-02	-1,32E+00
8	RWD		kg	0	0	5,63E-06	0,00E+00	8,71E-06	-2,06E-06

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											
Indi	cator		Unit		A1-A3	A4	A5	B2	B3		
¢	CRU		kg		0,00E+00	0,00E+00	0,00E+00	0,00E+00	0		
\$\$	MFR		kg		6,50E-01	0,00E+00	1,31E+00	0,00E+00	0		
DF	MER		kg		9,61E-01	0,00E+00	4,38E-06	0,00E+00	0		
۶D	EEE		МЈ		4,74E-01	0,00E+00	7,89E-02	0,00E+00	0		
DØ	EET		МЈ		7,16E+00	0,00E+00	1,19E+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		
\$\$D	MFR	kg		0	0	0,00E+00	2,83E+00	0,00E+00	0,00E+00		
DF	MER	kg		0	0	0,00E+00	1,02E+01	0,00E+00	0,00E+00		
50	EEE	MJ		0	0	0,00E+00	1,67E+00	0,00E+00	0,00E+00		
DI	EET	MJ		0	0	0,00E+00	2,53E+01	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	6,91E-01					
Biogenic carbon content in accompanying packaging	kg C	6,39E-01					

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	39,98	1,04	47,63	44,37
Total energy consumption	MJ	965,21	16,03	984,69	944,48
Amount of recycled materials	%	4,21			

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		4,47E+01	1,04E+00	2,63E-02	1,61E-03	0
Indicator	Unit	B4	C1	C2	C3	C4	D
GWPIOBC	kg CO ₂ -eq	0	0	5,08E-02	1,27E+00	6,12E-02	-4,80E+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 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 (%)		
Ciao table Ø40 H52	12,20	42,55	1015,78	7,92		
Ciao table Ø50 H42	13,28	39,79	1058,22	11,15		
Ciao table Ø50 H52	13,83	42,37	1108,81	10,70		
Ciao table Ø80 H42	22,89	62,17	1769,30	9,47		
Ciao table Ø80 H52	23,44	64,74	1819,87	9,25		

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.

and norga	Program operator and publisher	Phone:	+47 977 22 020
C epd-norge	The Norwegian EPD Foundation	e-mail:	post@epd-norge.no
Global program operatør	Post Box 5250 Majorstuen, 0303 Oslo, Norway	web:	www.epd-norge.no
	Owner of the declaration:	Phone:	+46 732 52 94 03
LAMMHULTS	Lammhults Möbel AB	e-mail:	alexandra.lidnert@lammhults.se
	Växjövägen 41, SE-363 45 Lammhult, Sweden	web:	https://www.lammhults.se/
LCA	Author of the Life Cycle Assessment	Phone:	+47 916 50 916
	LCA.no AS	e-mail:	post@lca.no
	Dokka 6A, 1671 Kråkerøy, Norway	web:	www.lca.no
	Developer of EPD generator	Phone:	+47 916 50 916
	LCA.no AS	e-mail:	post@lca.no
	Dokka 6A, 1671 Kråkerøy, Norway	web:	www.lca.no
ECO PLATFORM	ECO Platform	web:	www.eco-platform.org
	ECO Portal	web:	ECO Portal