Environmental Product Declaration

EPD of multiple products, based on the average results of the product group. Product variations can be up to 20 % environmental indicators (GWP-GHG). In accordance with ISO 14025:2006 and EN 15804:2012+A2:2019/AC:2021 for:

Norden storage series

from

Lekolar AB

Programme:	The International EPD® System, www.environdec.com
Programme operator:	EPD International AB
EPD registration number:	EPD-IES-0019892
Publication date:	2025-06-10
Valid until:	2030-06-09

An EPD should provide current information and may be updated if conditions change. The stated validity is therefore subject to the continued registration and publication at www.environdec.com

Programme information

Programme:	The International EPD® System
Address:	EPD International AB Box 210 60 SE-100 31 Stockholm Sweden
Website:	www.environdec.com
E-mail:	info@environdec.com

Accountabilities for PCR, LCA and independent, third-party verification
Product Category Rules (PCR)
PCR: *PCR 2019:14 Construction products, version 1.3.4, 2024-04-30 NPCR 026 Part B for Furniture and components of furniture (references to EN 15804+A2) version 3.0 UN CPC code: 38160 - Parts of furniture.*
PCR review was conducted by: *IVL Swedish Environmental Research Institute Secretariat of the International EPD® System*
Life Cycle Assessment (LCA)
LCA accountability: *Dr. Ing. Kaspars Zudrags, SIA BM Certification*
Third-party verification
Independent third-party verification of the declaration and data, according to ISO 14025:2006, via: ☒ EPD verification by individual verifier Third-party verifier: *Prof. Vladimír Kočí, PhD, LCA Studio, Czech Republic* Approved by: The International EPD® System
Procedure for follow-up of data during EPD validity involves third-party verifier: ☐ Yes ☒ No

The EPD owner has the sole ownership, liability, and responsibility for the EPD.

EPDs within the same product category but registered in different EPD programmes may not be comparable. For two EPDs to be comparable, they must be based on the same PCR (including the same version number) or be based on fully-aligned PCRs or versions of PCRs; cover products with identical functions, technical performances and use (e.g. identical declared/functional units); have equivalent system boundaries and descriptions of data; apply equivalent data quality requirements, methods of data collection, and allocation methods; apply identical cut-off rules and impact assessment methods (including the same version of characterisation factors); have equivalent content declarations; and be valid at the time of comparison. For further information about comparability, see ISO 14025.

Company information

Owner of the EPD:
Lekolar AB
Hanna Bremander,
Hallarydsvägen 8
SE – 283 36 Osby
+46 (0) 701 661936
Contact: hanna.bremander@lekolar.com
Description of the organisation: Lekolar is one of the largest suppliers of school furniture and toys to the Nordic market. Our headquarters are located at Osby, with the production site and warehouse in Osby in Skåne county. Lekolar is ISO certified according to ISO 9001/14001 and 45001, focusing on providing a circular and environmentally sustainable range.
For more information regarding the products or the organization, see EPD owner's website:
www.lekolar.se
Product-related or management system-related certifications: Möbelfakta Type 1 environmental label (ISO 14024), FSC certified, ISO 9001- and 14001-certificates.
Name and location of production site: Lekolar AB, Visiting address Hallarydsvägen 8, SE – 283 36 Osby

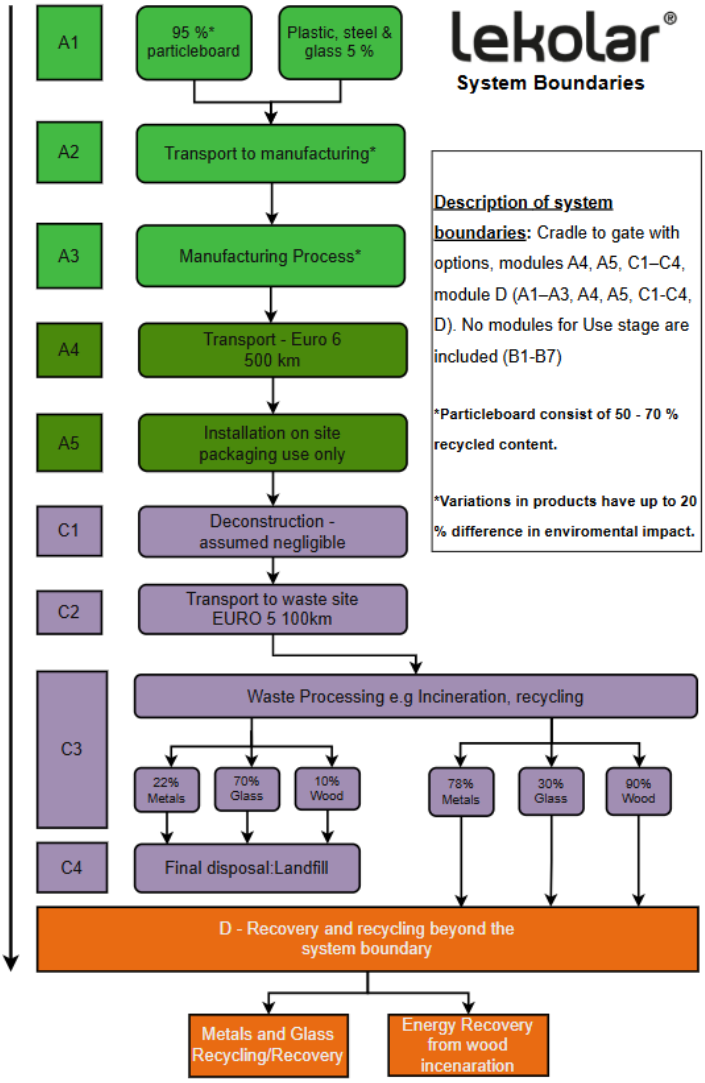
Product information

Product name: Norden storage series
Product identification: This EPD covers all products within the Norden storage series. Results for a 1 kg average of Norden are presented.
Product description: Lekolar's products are developed to facilitate a positive and educational environment for schools. The Norden storage series furniture is available in several models and sizes, such as custom-made material cabinets for specific storage needs. This makes them perfect for creating a cohesive look throughout the school or preschool. The frame is made of laminate and is combined with doors and drawers in either laminate or extra durable high-pressure laminate. The components are produced and packaged at the suppliers and then transported to Lekolar for assembly and repackaging. The finished Norden storage is distributed by truck to end-customers on the Nordic market.

UN CPC code: 38160 - Parts of furniture.
Geographical scope: Europe

LCA information

Functional unit / declared unit: 1 kg of furniture parts
Reference service life: 25 years
Time representativeness: 2024
Database(s) and LCA software used: One Click LCA, Ecoinvent 3.10.1.
System diagram:



Description of system boundaries Cradle to gate with options, modules A4, A5, C1–C4, module D (A1–A3, A4, A5, C1-C4, D). Variation in products have up to 20 % difference in environmental impact.
Excluded lifecycle stages: N.A
More information: All relevant inputs and outputs from each unit process that have available data are considered in the calculation. No single unit process is disregarded if it accounts for more than 1% of the total mass or energy flows. Additionally, the total neglected input and output flows for each module do not surpass 5% of the energy usage or mass.
EN 15804 reference package EF 3.1.
Target group: business-to-business.
Cut-off criteria: the <1% due to difficulties in attributing and minor environmental impacts.
Electricity climate impact: Residual electricity mix on the market - 0.535 kg CO2 eq./kWh.
Explanation of assumptions regarding modules A4, A5, C and D:
A4: Transport scenarios include EURO 6 truck transport for 500km. The transport scenarios included are currently in use and are representative of one of the most probable alternatives.

A5: The energy consumption of installation is considered negligible, and module A5 includes packaging utilisation.
C1: Deconstruction assumed negligible.
C2: Transport to waste treatment site after dismantling using a EURO 5 truck, average (100 km assumed).
C3: Assumed as 90% of the wood is incinerated with energy recovery. Metal 78% sends to recycling. Glass 30% of for recycling.
C4: Assumed as 10% of wood and 22% metal and 70% of glass goes to landfill.
D: Modelled as 90% of wood is incinerated with energy recovery.

	Product stage			Construction process stage		Use stage							End of life stage				Resource recovery stage
	Raw material supply	Transport	Manufacturing	Transport	Construction installation	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-construction demolition	Transport	Waste processing	Disposal	Reuse-Recovery-Recycling-potential
Module	**A1**	**A2**	**A3**	**A4**	**A5**	**B1**	**B2**	**B3**	**B4**	**B5**	**B6**	**B7**	**C1**	**C2**	**C3**	**C4**	**D**
Modules declared	X	X	X	X	X	ND	ND	ND	ND	ND	ND	ND	X	X	X	X	X
Geography	EU												EU				EU
Specific data used	>62%			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Variation – products	20% deviation in GWP-GHG			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Variation – sites	0%			-	-	-	-	-	-	-	-	-	-	-	-	-	-

Content declaration

Product

Product components	Weight, kg	%	Environmental / hazardous properties
Particleboard	0.95	0.95	
Plastics	0.01	0.01	
Steel	0.02	0.02	
Glass	0.01	0.01	
Other	0.01	0.01	

Total	1		

The product does not contain substances that can be included in the “Candidate List of Substances of Very High Concern for Authorisation”.

Packaging

Distribution packaging: EUR pallets.
Consumer packaging: Cardboard, plastic.

Recycled material

Provenience of recycled materials (pre-consumer or post-consumer) in the product: Particleboard consist of 50-70% recycled content.

Results of the environmental performance indicators

Impact category indicators

Results per functional or declared unit									
Indicator	**Unit**	**A1-A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-total	kg CO_2 eq.	-3.80E-01	6.44E-02	1.10E-01	0.00E+00	1.08E-02	1.83E+00	2.03E-01	1.57E+00
GWP-fossil	kg CO_2 eq.	1.64E+00	6.44E-02	4.96E-03	0.00E+00	1.08E-02	1.21E-02	1.91E-04	-1.32E+00
GWP-biogenic	kg CO_2 eq.	-2.02E+00	1.41E-05	1.05E-01	0.00E+00	2.44E-06	1.82E+00	2.02E-01	2.90E+00
GWP-luluc	kg CO_2 eq.	5.75E-03	2.51E-05	2.75E-06	0.00E+00	4.82E-06	2.14E-05	1.12E-07	-4.56E-04
ODP	kg CFC 11 eq.	8.82E-08	1.34E-09	2.84E-11	0.00E+00	1.59E-10	1.91E-10	5.34E-12	-2.12E-08
AP	mol H^+ eq.	1.26E-02	1.52E-04	1.25E-05	0.00E+00	3.67E-05	7.95E-05	1.34E-06	-8.42E-03
EP-freshwater	kg P eq.	5.41E-04	4.50E-06	7.52E-07	0.00E+00	8.39E-07	6.18E-06	1.66E-08	-6.19E-04
EP-marine	kg N eq.	2.52E-03	3.99E-05	5.69E-06	0.00E+00	1.21E-05	2.67E-05	5.12E-07	-1.47E-03
EP-terrestrial	mol N eq.	2.89E-02	4.31E-04	3.65E-05	0.00E+00	1.31E-04	2.78E-04	5.58E-06	-1.64E-02
POCP	kg NMVOC eq.	8.24E-03	2.64E-04	1.22E-05	0.00E+00	5.42E-05	8.47E-05	1.98E-06	-6.13E-03
ADP-minerals& metals*	kg Sb eq.	5.12E-06	1.84E-07	2.70E-08	0.00E+00	3.01E-08	2.06E-08	3.40E-10	-3.97E-06
ADP-fossil*	MJ	1.55E+01	9.67E-01	3.18E-02	0.00E+00	1.56E-01	2.24E-01	4.54E-03	-2.05E+01
WDP*	m^3	1.18E+00	4.95E-03	7.61E-04	0.00E+00	7.72E-04	4.35E-03	1.54E-05	-4.83E-01
Acronyms	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								

** Disclaimer: The results of this environmental impact indicator shall be used with care, as the uncertainties of these results are high or as there is limited experience with the indicator.*
The estimated impact results are only relative statements, which do not indicate the endpoints of the impact categories, exceeding threshold values, safety margins and/or risks
The results of the impact categories abiotic depletion of minerals and metals, land use, human toxicity (cancer), human toxicity, noncancer and ecotoxicity (freshwater) may be highly uncertain in LCAs that include capital goods/infrastructure in generic datasets, in case infrastructure/capital goods contribute greatly to the total results. This is because the LCI data of infrastructure/capital goods used to quantify these indicators in currently available generic datasets sometimes lack temporal, technological and geographical representativeness. Caution should be exercised when using the results of these indicators for decision-making purposes.
The results for modules A1-A3 represent 'cradle-to-gate' impacts only. For a complete life cycle assessment, module C (end-of-life) results must be considered.

Resource use indicators

Results per functional or declared unit									
Indicator	**Unit**	**A1-A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PERE	MJ	1.22E+01	1.57E-02	-1.00E+00	0.00E+00	2.14E-03	3.70E-02	4.98E-05	-1.27E+01
PERM	MJ	1.21E+01	0.00E+00	-3.57E+00	0.00E+00	0.00E+00	-7.68E+00	-8.53E-01	1.67E+00
PERT	MJ	2.43E+01	1.57E-02	-4.57E+00	0.00E+00	2.14E-03	-7.64E+00	-8.53E-01	-1.10E+01
PENRE	MJ	2.18E+01	9.67E-01	-5.42E-01	0.00E+00	1.56E-01	1.79E-01	4.30E-03	-1.91E+01
PENRM	MJ	2.39E+00	0.00E+00	-8.85E-01	0.00E+00	0.00E+00	-1.36E+00	-1.51E-01	-1.35E+00
PENRT	MJ	2.42E+01	9.67E-01	3.18E-02	0.00E+00	1.56E-01	-1.18E+00	-1.47E-01	-2.05E+01
SM	kg	3.38E-01	4.18E-04	8.85E-05	0.00E+00	6.66E-05	9.86E-05	1.28E-06	-1.01E-01
RSF	MJ	4.09E+00	5.28E-06	5.96E-07	0.00E+00	8.45E-07	2.06E-07	2.56E-08	-1.51E+00
NRSF	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
FW	m^3	1.33E-02	1.43E-04	1.46E-05	0.00E+00	2.31E-05	1.35E-04	-1.51E-05	-1.69E-02
Acronyms	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 re-sources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Use of net fresh water								

Waste indicators

Results per functional or declared unit									
Indicator	**Unit**	**A1-A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
HW	kg	1.44E-01	1.40E-03	3.42E-04	0.00E+00	2.65E-04	5.71E-04	5.86E-06	-8.86E-02
NHW	kg	4.18E+00	2.80E-02	1.08E-02	0.00E+00	4.90E-03	3.30E-02	2.50E-02	-2.78E+00
RW	kg	3.69E-05	2.88E-07	5.84E-08	0.00E+00	3.33E-08	1.12E-06	7.79E-10	-4.56E-05
Acronyms	HW = Hazardous waste disposed; NHW = Non-hazardous waste disposed; RW = Radioactive waste disposed								

Output flow indicators

Results per functional or declared unit									
Indicator	**Unit**	**A1-A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
Material for recycling	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.86E-02	0.00E+00	0.00E+00
Materials for energy recovery	kg	0.00E+00	0.00E+00	8.48E-02	0.00E+00	0.00E+00	8.80E-01	0.00E+00	0.00E+00
Exported energy, electricity	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.49E+00	0.00E+00	0.00E+00
Exported energy, thermal	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.37E+00	0.00E+00	0.00E+00
Components for re-use	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

Other environmental performance indicators

Indicator	**Unit**	**A1-A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-GHG[1]	kg CO_2 eq.	1.65E+00	6.44E-02	4.96E-03	0.00E+00	1.08E-02	1.21E-02	1.91E-04	-1.32E+00

[1] This indicator accounts for all greenhouse gases except biogenic carbon dioxide uptake and emissions and biogenic carbon stored in the product. As such, the indicator is identical to GWP-total except that the CF for biogenic CO_2 is set to zero.

References

General Programme Instructions of the International EPD® System. Version 4.0.
PCR 2019:14 Construction products, version 1.3.4, 2024-04-30
NPCR 026 Part B for Furniture and components of furniture (references to EN 15804+A2) version 3.0
ISO 14020:2023 Environmental statements and programmes for products. Principles and general requirements.
ISO 14025:2010 Environmental labels and declarations – Type III environmental declarations. Principles and procedures.
ISO 14040:2006 Environmental management. Life cycle assessment. Principles and frameworks.
ISO 14044:2006 Environmental management. Life cycle assessment. Requirements and guidelines.
EN 15804:2012+A2:2019 Sustainability of construction works - Environmental product declarations - Core rules for the product category of construction products.
EN 16449:2014 Wood and wood-based products - Calculation of the biogenic carbon content of wood and conversion to carbon dioxide.
EN 16485:2014 Round and sawn timber. Environmental Product Declarations. Product category rules for wood and wood-based products for use in construction.
LCA background report 10.04.2025.

EPD®

www.environdec.com