

ENVIRONMENTAL PRODUCT DECLARATION

in accordance with ISO 14025, ISO 21930 and EN 15804

Owner of the declaration:	Kinnarps AB
Program operator:	The Norwegian EPD Foundation
Publisher:	The Norwegian EPD Foundation
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Issue date:	30.06.2022
Valid to:	30.06.2027

Task Chair Claro

Kinnarps AB



www.epd-norge.no



General information

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Program operator: The Norwegian EPD Foundation Pb. 5250 Majorstuen, 0303 Oslo Phone: +47 23 08 80 00 e-mail: post@epd-norge.no	Manufacturer: Kinnarps AB
Declaration number: NEPD-3607-2538-EN	Place of production: Kinnarps AB Industrigatan 521 88 Kinnarp Sweden
ECO Platform reference number:	Management system: ISO 9001, ISO 14001, ISO 45001, FSC® (C010544)
This declaration is based on Product Category Rules: CEN Standard EN 15804:2012+A1:2013 serves as core PCR NPCR 026:2018 Part B for furniture	Organisation no: 556256-6736
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.	Issue date: 30.06.2022
Declared unit: 1 Pcs Task Chair Claro	Valid to: 30.06.2027
Declared unit with option: A1,A2,A3,A4	Year of study: 2022
Functional unit:	Comparability: EPDs from programmes other than the Norwegian EPD Foundation may not be comparable
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. Individual third party verification of each EPD is not required when the EPD tool is i) integrated into the company's environmental management system, ii) the procedures for use of the EPD tool are approved by EPDNorway, and iii) the process is reviewed annually. See Appendix G of EPD-Norway's General Programme Instructions for further information on EPD tools.	Development and verification of EPD: The declaration has been developed and verified using EPD tool lca.tools ver EPD2020.11, developed by LCA.no AS. The EPD tool is integrated into the company's environmental management system, and has been approved by EPD-Norway
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.	Developer of EPD: Isabell Vesterberg Reviewer of company-specific input data and EPD: Rickard Thil
Erik Svanes, Norsus AS (no signature required)	Approved: <div style="text-align: center;"> Sign  Håkon Hauan, CEO EPD-Norge </div>

Key environmental indicators	Unit	Cradle to gate A1 - A3
Global warming	kg CO2 eqv	72,67
Total energy use	MJ	1194,63
Amount of recycled materials	%	8,67

Product

Market:

Mainly Europe, but is available world wide.

Product description:

Claro task chair with mesh back, plastic starbase, seat depth adjustment and 100 % wool fabric. The data applies for castors made for soft floors as well as for hard floors.

Claro is the basic task chair offering a functional simplicity. With an ergonomic and contemporary design, it is easily applied in environments in need of flexible and durable solutions. Different backs and changeable upholstery offers a new twist on creativity and sustainability.

Link to product description:

<https://www.kinnarps.com/products/seating/task-chairs/claro/>.

Product specification

Claro is equipped with an ergonomic Synchrone mechanism for smooth tilting of the seat and back. The tilt resistance can be adjusted and the back can be locked into four different positions. When you select the fully upholstered option, the back height can also be adjusted.

Technical data:

Claro is certified to the following environmental and quality standards: GS, Möbelfakta, NF Environnement, NF OEC.

Fulfilled technical standards:

EN 1335-1 Dimensions
EN 1335-2 Safety requirements
EN 1335-3 Test methods

Fulfilled fire requirements:

EN 1021-1 Assessment of the ignitability of upholstered furniture – part 1: Ignition source smouldering cigarette, with Kinnarps standard fabrics.
EN 1021-2 Assessment of the ignitability of upholstered furniture – part 2: Ignition source match flame equivalent, with Kinnarps standard fabrics.

Reference service life, product

10 years (5 years warranty)

Reference service life, building

Materials	kg	%	Recycled share in material (kg)	Recycled share in material (%)
Metal - Aluminium	0,51	3,57	0,51	100,00
Metal - Steel	5,82	40,69	0,36	6,20
Textile - Nylon (PA)	0,68	4,77	0,00	0,00
Textile - Polyester (PE)	2,05	14,33	0,00	0,00
Textile - Wool	0,41	2,89	0,00	0,00
Glass fibre	0,37	2,58	0,37	100,00
Plastic - Polyurethane (PUR)	0,86	6,02	0,00	0,00
Plastic - Polypropylene (PP)	1,66	11,59	0,00	0,00
Plastic - Nylon (PA)	0,23	1,58	0,00	0,00
Plastic - Polyamide with glass fibre (PAGF30)	1,72	11,99	0,00	0,00
Total:	14,30		1,24	

LCA: Calculation rules

Declared unit:

1 Pcs Task Chair Claro

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.

Data quality:

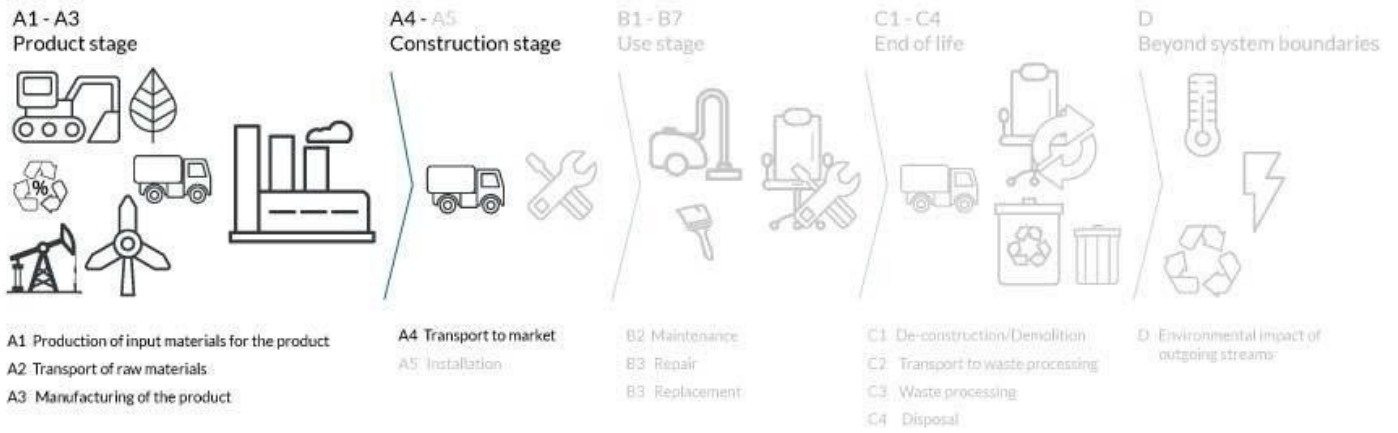
Specific data for the product composition are provided by the manufacturer. They represent the production of the declared product and were collected for EPD development in the year of study. Background data is based on registered EPDs according to EN 15804, Ostfold Research databases, ecoinvent and other LCA databases. The data quality of the raw materials in A1 is presented in the table below.

Specific data for the manufacturing processes (product stage A3) refers to the year 2020. All other specific data is from year of study.

Materials	Source	Data quality	Year
Plastic - Polypropylene (PP)	ecoinvent 3.4	Database	2015
Plastic - Polyurethane (PUR)	ecoinvent 3.4	Database	2015
Metal - Steel	EPD-Norge	EPD	2015
Metal - Steel	ecoinvent 3.3	Database	2016
Glass fibre	ecoinvent 3.4	Database	2017
Metal - Aluminium	ecoinvent 3.4	Database	2017
Metal - Steel	ecoinvent 3.4	Database	2017
Plastic - Polyamide with glass fibre (PAGF30)	ecoinvent 3.4	Database	2017
Textile - Nylon (PA)	ecoinvent 3.4	Database	2017
Textile - Wool	ecoinvent 3.4	Database	2017
Plastic - Nylon (PA)	ecoinvent 3.6	Database	2019
Textile - Polyester (PE)	ecoinvent 3.6	Database	2019

System boundary:

The upholstery is manufactured at Kinnarps' production site in Skillingaryd, where the fabric is also processed. The steel and plastic components are purchased as premanufactured components. Final assembly of the product is done at Kinnarps' production site in Kinnarp.



Additional technical information:

LCA: Scenarios and additional technical information

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

The product is shipped to consumer in Kinnarps' trucks with blankets and cardboard sheets as packaging material which is returned to the factory after delivery and reused. This method saves 270 kg of packaging material per container and enables 50% more products to be transported in each truck. Kinnarps' trucks have a load efficiency of over 90% and are run on diesel with renewable content. For more information about sustainability at Kinnarps, visit <https://www.kinnarps.com/about-kinnarps/sustainability/>.

Transport from production place to user (A4)

Type	Capacity utilisation (incl. return) %	Type of vehicle	Distance km	Fuel/Energy consumption	Unit	Value (l/t)
Truck	36,7 %	Truck, 16-32 tonnes, HVO, EURO 6 (kgkm) - RER	300	0,043113	l/tkm	12,93
Railway					l/tkm	
Boat					l/tkm	
Other Transportation					l/tkm	

Assembly (A5)

	Unit	Value
Auxiliary	kg	
Water consumption	m ³	
Electricity consumption	kWh	
Other energy carriers	MJ	
Material loss	kg	
Output materials for waste treatment	kg	
Dust in the air	kg	
VOC emissions	kg	

Use (B1)

	Unit	Value

Maintenance (B2)/Repair (B3)

	Unit	Value
Maintenance cycle*		
Auxiliary		
Other resources		
Water consumption	m ³	
Electricity consumption	kWh	
Other energy carriers	MJ	
Material loss	kg	
VOC emissions	kg	

Replacement (B4)/Refurbishment (B5)

	Unit	Value
Replacement cycle*		
Electricity consumption	kWh	
Replacement of worn parts		

* Described above if relevant

Operational energy (B6) and water consumption (B7)

	Unit	Value
Water consumption	m ³	
Electricity consumption	kWh	
Other energy carriers	MJ	
Power output of equipment	kW	

End of Life (C1, C2)

	Unit	Value
Hazardous waste disposed	kg	
Collected as mixed construction waste	kg	
Reuse	kg	
Recycling		
Energy recovery		
To landfill	kg	

Transport to waste processing (C2)

Type	Capacity utilisation (incl. return) %	Type of vehicle	Distance km	Fuel/Energy consumption	Unit	Value (l/t)
Truck					l/tkm	
Railway					l/tkm	
Boat					l/tkm	
Other Transportation					l/tkm	

LCA: Results

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

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

Product stage				Construction installation stage	User 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	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	

Environmental impact

Parameter	Unit	A1	A2	A3	A4
GWP	kg CO ₂ -eq	6,75E+01	4,27E+00	8,57E-01	1,60E-01
ODP	kg CFC11 -eq	2,44E-06	7,61E-07	6,34E-08	2,57E-08
POCP	kg C ₂ H ₄ -eq	2,01E-02	2,25E-03	2,09E-03	5,83E-05
AP	kg SO ₂ -eq	3,21E-01	6,76E-02	5,71E-03	6,48E-04
EP	kg PO ₄ ³⁻ -eq	6,02E-02	6,26E-03	1,82E-03	9,61E-05
ADPM	kg Sb -eq	4,48E-04	5,25E-06	1,10E-05	2,02E-05
ADPE	MJ	8,01E+02	6,00E+01	6,76E+00	3,23E+00

GWP Global warming potential; ODP Depletion potential of the stratospheric ozone layer; POCP Formation potential of tropospheric photochemical oxidants; AP Acidification potential of land and water; EP Eutrophication potential; ADPM Abiotic depletion potential for non fossil resources; ADPE Abiotic depletion potential for fossil resources

Reading example: 9,0 E-03 = 9,0*10⁻³ = 0,009

*INA Indicator Not Assessed

Resource use

Parameter	Unit	A1	A2	A3	A4
RPEE	MJ	7,21E+01	1,27E+00	1,35E+02	1,60E-01
RPEM	MJ	8,25E+00	0,00E+00	0,00E+00	0,00E+00
TPE	MJ	8,03E+01	1,27E+00	1,35E+02	1,60E-01
NRPE	MJ	9,15E+02	6,24E+01	9,35E+00	3,52E+00
NRPM	MJ	1,83E+02	0,00E+00	0,00E+00	0,00E+00
TRPE	MJ	1,10E+03	6,24E+01	9,35E+00	3,48E+00
SM	kg	1,24E+00	7,32E-03	0,00E+00	1,89E-01
RSF	MJ	0,00E+00	1,97E-04	3,51E-06	5,18E-03
NRSF	MJ	0,00E+00	6,67E-04	3,60E-03	1,79E-02
W	m ³	6,25E-01	9,55E-03	3,17E-02	1,44E-03

RPEE Renewable primary energy resources used as energy carrier; RPEM Renewable primary energy resources used as raw materials; TPE Total use of renewable primary energy resources; NRPE Non renewable primary energy resources used as energy carrier; NRPM Non renewable primary energy resources used as materials; TRPE 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; W Use of net fresh water

Reading example: 9,0 E-03 = $9,0 \cdot 10^{-3} = 0,009$

*INA Indicator Not Assessed

End of life - Waste

Parameter	Unit	A1	A2	A3	A4
HW	kg	1,65E-02	5,68E-05	4,70E-02	4,94E-04
NHW	kg	3,45E+01	1,55E+00	6,01E-01	5,24E-01
RW	kg	INA*	INA*	INA*	INA*

HW Hazardous waste disposed; NHW Non hazardous waste disposed; RW Radioactive waste disposed

Reading example: 9,0 E-03 = $9,0 \cdot 10^{-3} = 0,009$

*INA Indicator Not Assessed

End of life - Output flow

Parameter	Unit	A1	A2	A3	A4
CR	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MR	kg	0,00E+00	1,30E-04	3,53E-01	3,39E-03
MER	kg	0,00E+00	2,28E-06	4,03E-04	6,01E-05
EEE	MJ	INA*	INA*	INA*	INA*
ETE	MJ	INA*	INA*	INA*	INA*

CR Components for reuse; MR Materials for recycling; MER Materials for energy recovery; EEE Exported electric energy; ETE Exported thermal energy

Reading example: 9,0 E-03 = $9,0 \cdot 10^{-3} = 0,009$

*INA Indicator Not Assessed

Additional Norwegian 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	Data source	Amount	Unit
Energy, district heating, Norwegian average (kWh)	Østfoldforskning	19,71	g CO ₂ -ekv/kWh
Energy, electricity, Nordic average, hydro: 1 kWh	Østfoldforskning	10,19	g CO ₂ -ekv/kWh

Dangerous substances

The product contains substances given by the REACH Candidate list and the Norwegian priority list that are less than 0,1 % by weight.

Indoor environment

The product is low-emitting and tested according to Swedish Möbelfakta.

Additional environmental information

Key environmental indicators for variants for this EPD: Cradle to Gate analyse from A1 to A3

Variant number	Global warming (kg CO ₂)	Total energy use (MJ)	Share of recycled material in product(%)
Task Chair Claro - D-1053-DG with mesh back and lumbar support, wool fabric and plastic starbase	73,12	1 329,35	8,59
Task Chair Claro - D-1053-V with upholstered seat and back, wool fabric and plastic starbase	71,23	1 327,80	10,14
Task Chair Claro - D-1053-DG with mesh back, polyester fabric and plastic starbase	67,82	1 253,02	12,19
Task Chair Claro - D-1053-DG with mesh back, wool fabric and aluminum starbase	100,85	1 555,03	8,55

Key environmental indicators for options for this EPD: Cradle to Gate analyse from A1 to A3

Option number	Global warming (kg CO ₂)	Total energy use (MJ)	Share of recycled material in product(%)
Headrest NCL	4,27	99,37	5,04
1D-armrest	4,15	96,71	10,37
3D-armrest	5,22	121,76	10,30

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+A1:2013 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., (2018) eEPD v3.0 - Background information for EPD generator system. LCA.no report number 04.18

Vold et al., (2019) EPD generator for Norsk Industri, Background information for industry application and LCA data, LCA.no report number 06.19.

NPCR Part A: Construction products and services. Ver. 1.0. April 2017, EPD-Norge.

NPCR 026 Part B for Furniture. Ver. 2.0 October 2018, EPD-Norge.

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