

# Environmental product declaration

in accordance with ISO 14025 and EN 15804+A2

## Modular sofa Gino



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**Owner of the declaration:**

Kinnarps AB

**Product:**

Modular sofa Gino

**Declared unit:**

1 pcs

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**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 (Version 2.0)

**Program operator:**

The Norwegian EPD Foundation

**Declaration number:**

NEPD-4597-3852-EN

**Registration number:**

NEPD-4597-3852-EN

**Issue date:** 20.06.2023

**Valid to:** 20.06.2028

## General information

### Product

Modular sofa Gino

### Program operator:

Post Box 5250 Majorstuen, 0303 Oslo, Norway  
The Norwegian EPD Foundation  
Phone: +47 23 08 80 00  
web: [post@epd-norge.no](mailto:post@epd-norge.no)

**Declaration number:** NEPD-4597-3852-EN

### 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 (Version 2.0)

### 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 Modular sofa Gino

### Declared unit (cradle to gate) with option:

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

### Functional unit:

### 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 EPD Norway'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:

Kinnarps AB  
Contact person: Johanna Ljunggren - Corporate Sustainability Manager  
Phone: +46 515 381 21  
e-mail: [johanna.ljunggren@kinnarps.se](mailto:johanna.ljunggren@kinnarps.se)

### Manufacturer:

Kinnarps AB

### Place of production:

Kinnarps AB  
Industrigatan  
521 88 Kinnarp, Sweden

### Management system:

ISO 9001, ISO 14001, ISO 45001, FSC® (C010544)

### Organisation no:

556256-6736

**Issue date:** 20.06.2023

**Valid to:** 20.06.2028

### Year of study:

2022

### 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: Isabell Vesterberg

Reviewer of company-specific input data and EPD: Rickard Thil

### Approved:



Håkon Hauan, CEO EPD-Norge

## Product

### Product description:

Gino 2-seater sofa section (GI2) with 100% recycled polyester fabric and metal tubular legs.

Armrests, connectors and fasteners for floor anchoring are available to add as options.

Gino is a timeless and stylish modular sofa that is easy to place in a variety of working or learning spaces. The simplicity of its shape gives it the flexibility for spaces such as canteens, coffee shops and meeting rooms. A complete range of sofas in a wide choice of versions and finishes, so you can easily create a customised solution.

Read more: <https://www.kinnarps.com/products/seating/soft-seating/gino/>

### Product specification

Gino has a gap between the seat and back, which makes it easy to wipe and keep clean. Fasteners are available as an option to attach it to the floor, which makes it a safe choice in e.g. learning spaces. There is also a selection of underframes to choose from, depending on the look and function you want – classic tubular legs, a trendy sledge, curved wooden legs or sturdy castors for easy moving.

This EPD includes the following variants:

Gino GI2, 2-seater sofa section with metal tubular legs, upholstered with polyester fabric

Gino GI1A, easy chair with armrests and metal tubular legs, upholstered with 100 % recycled polyester or with polyester fabric

Gino GI3, 3-seater sofa section with metal tubular legs, upholstered with 100 % recycled polyester or with polyester fabric

Gino GI0, corner section, which can be connected to the 2-seater or the 3-seater sofa. With metal tubular legs, connectors and upholstered with polyester fabric

Gino GIP2, 2-seater bench with metal tubular legs and polyester fabric

Gino GI1, 1-seater section with metal tubular legs and polyester fabric

Gino GI2, 2-seater sofa section with metal legs with castors and upholstered with 100 % recycled polyester fabric.

Included options are:

Armrest end panel, GIA1, for sectional sofa and armrest GIA1C for connecting between sofa- or bench sections. Armrests are upholstered in 100 % recycled polyester or polyester fabric.

Connectors, for connecting sofa and bench sections

Floor anchoring to safely secure the sofa to the floor.

Materials	kg	%	Recycled share in material (kg)	Recycled share in material (%)
Metal - Steel	4,22	14,81	0,47	11,12
Textile - Polyester (PE)	1,42	5,00	1,42	100,00
Plastic - Polyurethane (PUR)	4,17	14,65	0,00	0,00
Wood - High Density Fibreboard (HDF)	3,62	12,70	0,00	0,00
Wood - Oriented Strand Board (OSB)	6,16	21,63	0,00	0,00
Wood - Plywood	8,88	31,19	0,00	0,00
Total	28,46		1,89	

### Technical data:

Certifications:

Swedish Möbelfakta

Fulfilled technical standards:

EN 16139:2013 Furniture - Strength, durability and safety - Requirements for non-domestic seating.

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.

### Market:

Mainly Europe, but is available worldwide.

### Reference service life, product

15 years (5 years warranty).

### Reference service life, building

## LCA: Calculation rules

### Declared unit:

1 pcs Modular sofa Gino

#### 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.

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
Metal - Steel	ecoinvent 3.6	Database	2019
Plastic - Polyurethane (PUR)	ecoinvent 3.6	Database	2019
Wood - High Density Fibreboard (HDF)	ecoinvent 3.6	Database	2019
Textile - Polyester (PE)	Modified ecoinvent 3.6	Database	2019
Wood - Oriented Strand Board (OSB)	modified ecoinvent 3.6	Database	2019
Wood - Plywood	modified ecoinvent 3.6	Database	2019

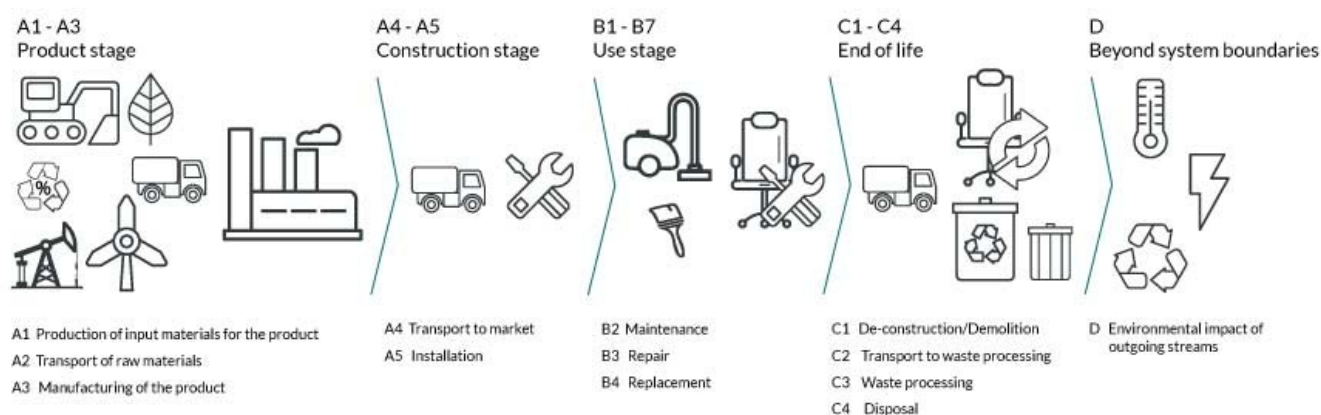
## System boundaries (X=included, MND=module not declared, MNR=module not relevant)

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:

The upholstery is manufactured at Kinnarps' production site in Skillingaryd, where final assembly is also done. Certain steel components are manufactured at Kinnarps' production site in Jönköping and some are purchased as premanufactured components. The plastic components are purchased as premanufactured components.

The flow chart below illustrates the system boundaries of the analysis.



### 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/>.

The maintenance scenario includes vacuum cleaning of textiles once a week for the whole reference service life.

In normal use, no repair or replacement is required during the product's referenced service life.

Transport from production place to user (A4)	Capacity utilisation (incl. return) %	Distance (km)	Fuel/Energy Consumption	Unit	Value (Liter/tonne)
Truck, 16-32 tonnes, HVO, EURO 6 (kgkm)	36,7 %	300	0,043	l/tkm	12,90
Maintenance (B2)	Unit	Value			
Electricity, Sweden (kWh)	kWh/DU	11,70			
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 %	85	0,023	l/tkm	1,96
Waste processing (C3)	Unit	Value			
Waste treatment per kg Polyurethane (PU), incineration (kg)	kg	4,17			
Waste treatment per kg Scrap steel, incineration with fly ash extraction (kg)	kg	1,82			
Waste treatment per kg Textile, incineration with fly ash extraction (kg)	kg	1,42			
Waste treatment per kg Wood, incineration with fly ash extraction (kg)	kg	15,04			
Waste, materials to recycling (kg)	kg	0,62			
Disposal (C4)	Unit	Value			
Landfilling of ashes and residues from incineration of Scrap steel (kg)	kg	1,20			
Landfilling of ashes from incineration of Polyurethane (PU), process per kg ashes and residues - C4 (kg)	kg	0,16			
Landfilling of ashes from incineration of Textile, soiled, process per kg ashes and residues (kg)	kg	0,07			
Landfilling of ashes from incineration of Wood, process per kg ashes and residues (kg)	kg	0,17			
Benefits and loads beyond the system boundaries (D)	Unit	Value			
Substitution of electricity, in Norway (MJ)	MJ	17,61			
Substitution of primary steel with net scrap (kg)	kg	0,62			
Substitution of thermal energy, district heating, in Norway (MJ)	MJ	266,42			

## 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 <sub>2</sub> -eq	2,89E+01	3,35E-01	0	6,43E-01	0	
GWP-fossil	kg CO <sub>2</sub> -eq	5,93E+01	3,34E-01	0	5,92E-01	0	
GWP-biogenic	kg CO <sub>2</sub> -eq	-3,07E+01	5,66E-04	0	1,20E-02	0	
GWP-luluc	kg CO <sub>2</sub> -eq	2,35E-01	5,21E-04	0	3,85E-02	0	
ODP	kg CFC11 -eq	4,19E-06	6,89E-08	0	2,90E-07	0	
AP	mol H <sup>+</sup> -eq	3,35E-01	2,34E-03	0	3,86E-03	0	
EP-FreshWater	kg P -eq	3,97E-03	1,23E-05	0	4,00E-05	0	
EP-Marine	kg N -eq	7,71E-02	6,20E-04	0	6,57E-04	0	
EP-Terrestrial	mol N -eq	7,85E-01	6,93E-03	0	8,65E-03	0	
POCP	kg NMVOC -eq	2,66E-01	2,54E-03	0	1,97E-03	0	
ADP-minerals&metals <sup>1</sup>	kg Sb -eq	1,75E-03	4,06E-05	0	2,37E-05	0	
ADP-fossil <sup>1</sup>	MJ	1,08E+03	7,07E+00	0	6,94E+01	0	
WDP <sup>1</sup>	m <sup>3</sup>	2,14E+04	2,09E+01	0	7,04E+03	0	

Indicator	Unit	B4	C1	C2	C3	C4	D
GWP-total	kg CO <sub>2</sub> -eq	0	0	2,13E-01	3,84E+01	3,40E-02	-2,28E+00
GWP-fossil	kg CO <sub>2</sub> -eq	0	0	2,12E-01	1,14E+01	3,39E-02	-2,23E+00
GWP-biogenic	kg CO <sub>2</sub> -eq	0	0	9,10E-05	2,70E+01	2,95E-05	-3,56E-03
GWP-luluc	kg CO <sub>2</sub> -eq	0	0	6,47E-05	9,42E-05	7,07E-06	-5,35E-02
ODP	kg CFC11 -eq	0	0	5,12E-08	7,19E-08	6,18E-09	-1,13E-01
AP	mol H <sup>+</sup> -eq	0	0	6,84E-04	1,22E-02	1,64E-04	-1,61E-02
EP-FreshWater	kg P -eq	0	0	1,69E-06	6,66E-06	4,14E-07	-1,79E-04
EP-Marine	kg N -eq	0	0	1,50E-04	6,65E-03	5,52E-05	-4,86E-03
EP-Terrestrial	mol N -eq	0	0	1,67E-03	6,48E-02	6,18E-04	-5,21E-02
POCP	kg NMVOC -eq	0	0	6,56E-04	1,55E-02	1,75E-04	-1,58E-02
ADP-minerals&metals <sup>1</sup>	kg Sb -eq	0	0	3,79E-06	2,78E-06	3,37E-07	-2,71E-05
ADP-fossil <sup>1</sup>	MJ	0	0	3,45E+00	6,10E+00	4,82E-01	-2,78E+01
WDP <sup>1</sup>	m <sup>3</sup>	0	0	2,65E+00	1,71E+01	2,58E+00	-2,40E+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<sup>-3</sup> = 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	7,57E-06	7,75E-08	0	2,78E-08	0
 IRP <sup>2</sup>	kgBq U235 -eq	8,37E+00	2,31E-02	0	2,38E+00	0
 ETP-fw <sup>1</sup>	CTUe	2,46E+03	1,03E+01	0	3,66E+01	0
 HTP-c <sup>1</sup>	CTUh	1,85E-07	0,00E+00	0	1,05E-09	0
 HTP-nc <sup>1</sup>	CTUh	1,41E-06	1,72E-08	0	2,54E-08	0
 SQP <sup>1</sup>	dimensionless	4,04E+03	1,32E+01	0	3,07E+01	0

Indicator	Unit	B4	C1	C2	C3	C4	D
 PM	Disease incidence	0	0	1,95E-08	5,93E-08	2,56E-09	-8,28E-07
 IRP <sup>2</sup>	kgBq U235 -eq	0	0	1,51E-02	9,87E-03	2,07E-03	-1,39E-01
 ETP-fw <sup>1</sup>	CTUe	0	0	2,52E+00	3,24E+01	5,27E-01	-1,58E+02
 HTP-c <sup>1</sup>	CTUh	0	0	0,00E+00	1,35E-09	2,40E-11	-5,47E-09
 HTP-nc <sup>1</sup>	CTUh	0	0	2,44E-09	5,89E-08	8,22E-10	-4,40E-08
 SQP <sup>1</sup>	dimensionless	0	0	3,96E+00	7,22E-01	1,21E+00	-1,48E+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<sup>-3</sup> = 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	7,27E+02	3,20E-01	0	3,34E+01	0
	PERM	MJ	2,53E+02	0,00E+00	0	0,00E+00	0
	PERT	MJ	9,26E+02	3,20E-01	0	3,34E+01	0
	PENRE	MJ	9,10E+02	7,07E+00	0	6,96E+01	0
	PENRM	MJ	1,68E+02	0,00E+00	0	0,00E+00	0
	PENRT	MJ	1,08E+03	7,07E+00	0	6,96E+01	0
	SM	kg	2,16E+00	0,00E+00	0	0,00E+00	0
	RSF	MJ	1,39E+00	1,04E-02	0	1,29E-01	0
	NRSF	MJ	5,36E+00	3,59E-02	0	4,08E-01	0
	FW	m <sup>3</sup>	1,16E+00	2,89E-03	0	7,58E-02	0

Indicator		Unit	B4	C1	C2	C3	C4	D
	PERE	MJ	0	0	4,34E-02	1,75E-01	1,67E-02	-1,37E+02
	PERM	MJ	0	0	0,00E+00	-2,10E+02	0,00E+00	0,00E+00
	PERT	MJ	0	0	4,34E-02	-2,10E+02	1,67E-02	-1,37E+02
	PENRE	MJ	0	0	3,45E+00	6,12E+00	4,82E-01	-2,78E+01
	PENRM	MJ	0	0	0,00E+00	-1,62E+02	0,00E+00	0,00E+00
	PENRT	MJ	0	0	3,45E+00	-1,56E+02	4,82E-01	-2,78E+01
	SM	kg	0	0	0,00E+00	0,00E+00	0,00E+00	0,00E+00
	RSF	MJ	0	0	1,52E-03	4,16E-03	4,23E-04	6,85E-04
	NRSF	MJ	0	0	5,09E-03	0,00E+00	7,67E-02	-7,37E+00
	FW	m <sup>3</sup>	0	0	3,93E-04	1,99E-02	4,38E-04	-1,66E-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<sup>-3</sup> = 0,009"

\*INA Indicator Not Assessed






End of life - Waste							
Indicator		Unit	A1-A3	A4	A5	B2	B3
	HWD	kg	6,12E-01	9,92E-04	0	3,63E-03	0
	NHWD	kg	1,52E+01	1,05E+00	0	2,29E-01	0
	RWD	kg	4,99E-03	2,83E-05	0	1,05E-03	0






Indicator		Unit	B4	C1	C2	C3	C4	D
	HWD	kg	0	0	1,89E-04	0,00E+00	1,44E+00	-4,58E-03
	NHWD	kg	0	0	3,00E-01	0,00E+00	1,76E-01	-8,00E-01
	RWD	kg	0	0	2,36E-05	0,00E+00	2,86E-06	-1,14E-04

HWD = Hazardous waste disposed; NHWD = Non-hazardous waste disposed; RWD = 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							
Indicator		Unit	A1-A3	A4	A5	B2	B3
	CRU	kg	0,00E+00	0,00E+00	0	0,00E+00	0
	MFR	kg	4,24E+00	0,00E+00	0	0,00E+00	0
	MER	kg	3,52E-05	0,00E+00	0	0,00E+00	0
	EEE	MJ	2,87E+00	0,00E+00	0	0,00E+00	0
	EET	MJ	4,35E+01	0,00E+00	0	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	6,19E-01	0,00E+00	0,00E+00
	MER	kg	0	0	0,00E+00	2,25E+01	0,00E+00	0,00E+00
	EEE	MJ	0	0	0,00E+00	1,74E+01	0,00E+00	0,00E+00
	EET	MJ	0	0	0,00E+00	2,63E+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 =  $9,0 \cdot 10^{-3}$  = 0,009"

\*INA Indicator Not Assessed

Biogenic Carbon Content		
Indicator	Unit	At the factory gate
Biogenic carbon content in product	kg C	8,72E+00
Biogenic carbon content in accompanying packaging	kg C	0,00E+00

Note: 1 kg biogenic carbon is equivalent to 44/12 kg CO<sub>2</sub>

## 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	Data source	Amount	Unit
Electricity, Sweden (kWh)	ecoinvent 3.6	54,94	g CO <sub>2</sub> -eq/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 certified according to Swedish Möbelfakta.

## Additional Environmental Information

Additional environmental impact indicators required in NPCR Part A for construction products							
Indicator	Unit	A1-A3	A4	A5	B2	B3	
GWPIOBC	kg CO <sub>2</sub> -eq	6,84E+01	3,35E-01	0	6,42E-01	0	
Indicator	Unit	B4	C1	C2	C3	C4	D
GWPIOBC	kg CO <sub>2</sub> -eq	0	0	2,13E-01	1,37E+01	3,91E-02	-2,60E+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 <sub>2</sub> -eq)	Total energy consumption (MJ)	Amount of recycled materials (%)
Gino corner section - polyester fabric - metal tubular legs	22,50	25,19	1346,47	2,56
Gino easy chair - 100 % recycled polyester fabric - metal tubular legs	25,00	24,63	1399,87	10,12
Gino easy chair - polyester fabric - metal tubular legs	25,20	28,49	1519,25	2,16
Gino 2-seater bench - polyester fabric - metal tubular legs	17,80	23,19	1076,73	2,39
Gino 3-seater sofa - polyester fabric - metal tubular legs	40,30	40,25	2429,44	1,31
Gino 3-seater sofa - 100 % recycled polyester fabric - metal tubular legs	40,20	35,69	2291,30	6,89
Gino 1-seater section - polyester fabric - metal tubular legs	17,30	25,86	1069,71	3,07
Gino 2-seater sofa - polyester fabric - metal tubular legs	28,80	32,23	1745,33	1,78
Gino 2-seater sofa - 100 % recycled polyester fabric - metal legs - castors	32,30	44,96	1922,68	8,43






Key environmental indicators (A1-A3) for options for this EPD				
Options	Weight (kg)	GWPTotal (kg CO <sub>2</sub> -eq)	Total energy consumption (MJ)	Amount of recycled materials (%)
Gino - connector	0,10	0,33	6,19	6,28
Gino - floor anchoring - tubular legs	0,20	0,84	15,57	15,625
Gino armrest - end/connector panel - polyester fabric	4,10	1,77	240,08	0,44
Gino armrest - end/connector panel - 100 % recycled polyester fabric	4,02	0,62	211,27	9,55

### Key Environmental Indicators

Indicator	Unit	A1-A3	A4	A1-C4	A1-D
GWPTotal	kg CO <sub>2</sub> -eq	28,92	0,33	68,53	66,25
Total energy consumption	MJ	1643,77	7,44	1765,04	1592,96
Amount of recycled materials	%	6,64			

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