epd-norway
Global Program Operator

Environmental Product Declaration

In accordance with 14025 and EN15804 +A2

Hestia

TOPRO – keep on moving

Owner of the declaration:
Topro Industri AS

Product name:
Hestia

Declared unit:
1 piece of Hestia, modules A1-A3, A4, C1-C4 and D

Product category /PCR:
NPCR 026:2022 Part B for furniture + A2
CEN Standard EN 15804:2012+A2:2019 serves as core PCR

Program holder and publisher:
The Norwegian EPD foundation

Declaration number:
NEPD-5537-4840-EN

Registration number:
NEPD-5537-4840-EN

Issue date:
15.12.2023

Valid to:
15.12.2028

The Norwegian
EPD Foundation

General information

Product:
Hestia

Program operator:
The Norwegian EPD Foundation
Post Box 5250 Majorstuen, 0303 Oslo, Norway
Tlf: +47 23 08 80 00
e-mail: post@epd-norge.no

Declaration number:
NEPD-5537-4840-EN

This declaration is based on Product Category Rules:
NPCR 026:2022 Part B for furniture + A2
CEN Standard EN 15804:2012+A2:2019 serves as core PCR

Statements:
The owner of the declaration shall be liable for the underlying information and evidence. EPD Norway shall not be liable with respect to manufacturer, life cycle assessment data and evidences.

Declared unit:
1 piece of Hestia, modules A1-A3, A4, C1-C4 and D

Functional unit:
N/A

Verification:
Independent verification of the declaration and data, according to ISO14025:2010

internal ☐ external ■

Julie Lyslo Skullestad

Julie Lyslo Skullestad
Independent verifier approved by EPD Norway

Owner of the declaration:
Topro Industri AS
Contact person: Ingrid Lonar
Phone: +47 980 38 021
e-mail: Ingrid.Lonar@topromobility.com

Manufacturer:
Topro Industri AS
Rambekkvegen 5, 2816 Gjøvik, Norway
Phone: +47 61 13 46 00
e-mail: kundeservice@topromobility.com

Place of production:
Rambekkvegen 5, 2816 Gjøvik, Norway

Management system:
ISO 9001:2015

ISO 14001:2015

Organisation no:
914 561 973

Issue date:
15.12.2023

Valid to:
15.12.2028

Year of study:
2023

Comparability:
EPDs from other programmes than EPD Norway may not be comparable.

The EPD has been worked out by:
Sander Nørsterud, environmental consultant at Asplan Viak

Sander Nørsterud

Approved

Håkon Haavik

Manager of EPD Norway

Product

Product description:

Hestia is a walking aid that helps people with different physical disability stay active and independent.

The Hestia is a space-saving foldable indoor rollator. Hestia has an integrated, extendable stand-up handles which allow safe support when standing up and sitting down, a special tray with smart functions and an ergonomic handle and brake level can easily be maneuvered with various grips and with one hand.

The main parts of the rollator consist of frame and handles in aluminium and glass fibre reinforced plastic (GFRP) and wheels in PP and stainless steel as well as TPE plastic. Additional parts include breaks, tray and bolts.

Product specification:

The material inventory for Hestia is shown below.

	Hestia	
Materials	KG	%
Aluminium	2,00	29 %
GFRP	2,57	37 %
Steel	1,05	15 %
PP	0,23	3 %
PUR	0,00	0 %
Other materials	1,13	16 %
Weight product	6,97	100 %
Packaging		
Cardboard	1,32	
PE	0,00	
Paper	0,16	
Total weight incl. packaging	8,45	

Technical data:

N/A

Market:

Norway and Scandinavia

Reference service life, product:

Not relevant

Reference service life, building:

N/A

LCA: Calculation rules

Declared unit:

1 piece of Hestia, modules A1-A3, A4, C1-C4 and D

Data quality:

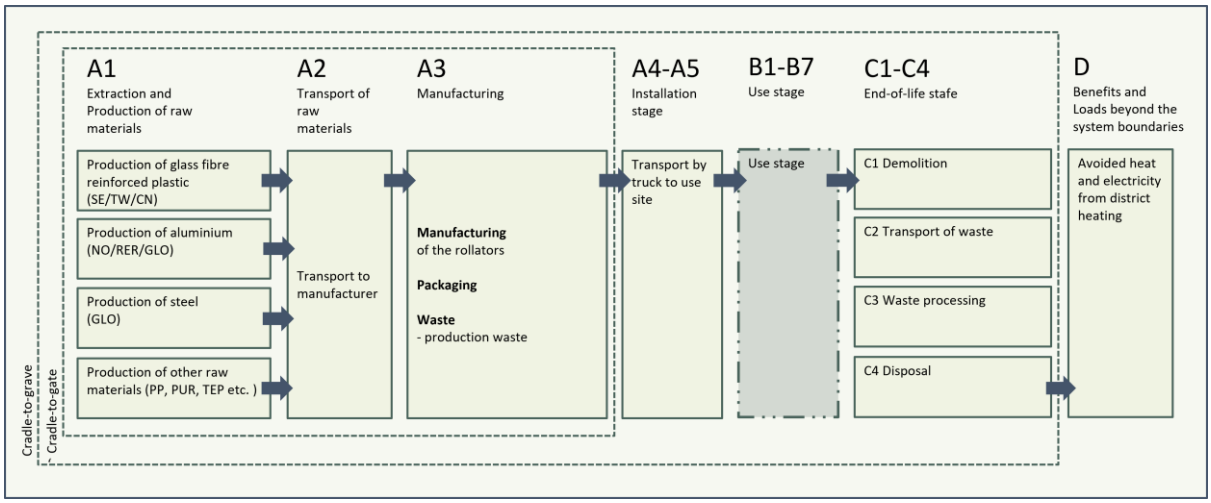
Data is collected during 2023 and is representative for the year 2022 (yearly average). Data for raw material inputs, manufacturing of the product and transport to market (A1-A3 and A4) is based on specific data provided by Topro and technical data sheets from the suppliers. End of Life (C1-C4) scenarios are uncertain and conservative assumptions have therefore been applied. Generic data for background processes has been modelled using ecoinvent 3.9.1. Characterization factors from EN15804: 2012 + A2: 2019.

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 allocated to the main product in which the material was used.

System boundary:

The system boundary is from cradle to gate with options, A1-A3, A4, C1, C2, C3, C4 and D. The flow chart for production, transport and end of life is shown in the figure below.



Cut-off criteria:

All major raw materials and all the essential energy is included. The production process for raw materials and energy flows that are included with very small amounts (<1%) are not included. This cut-off rule does not apply for hazardous materials and substances.

LCA: Scenarios and additional technical information

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

Scenarios have been developed for transportation from manufacturing to market (A4) and to account for downstream for waste treatment in accordance with the requirements of EN 15804 and NPCR PART A.

Transport from production place to assembly/user (A4)

The environmental impacts of transportation to market (A4) are calculated for three different markets: Norway (main scenario), Scandinavia and Europe.

Type	Capacity utilisation (incl. return) %	Type of vehicle	Distance KM	Fuel/Energy consumption	value (l/t)
Scenario 1: Norway					
Truck (Topro to NAV)	50 %	Lorry, EURO 6, 24 ton	130+300	0,144 l/tkm	12,7
Scenario 2: Scandinavia					
Truck (Topro to distribution center)	10,4 %	Lorry, EURO 6, 24 ton	611	0,126 l/tkm	77,1
Truck (Distribution center to customer)	50 %	Lorry, EURO 6, 24 ton	300	0,03 l/tkm	8,86
Scenario 3: Europe					
Truck (Topro to distribution center)	10,4 %	Lorry, EURO 6, 24 ton	947	0,126 l/tkm	119,5
Truck (Distribution center to customer, 1st leg)	50 %	Lorry, EURO 6, 24 ton	511	0,03 l/tkm	8,86
Truck (Distribution center to customer, 2nd leg)	50 %	Van, EURO 6, 6 ton	77	0,32	29,33

Scenario 1: Transportation from Topro to NAV aid centres around the country as part of a larger distribution network. Therefore, a high capacity utilization is likely. A load factor of 50 % is seen as a conservative estimation.

Scenario 2: Transportation from Topro to storage centre and final distribution as part of a larger distribution network. A generic distance of 300 km is assumed as final transport leg.

Scenario 3: Transportation from Topro to distribution centre in Germany. From there it is transported by larger distribution network in two legs as shown in table above.

The main results will include scenario 1, while the results of A4 for scenario 2 and 3 will be shown under "Additional results".

End of Life (C1, C3, C4)

	Unit	Value
Hazardous waste disposed	g	0
Collected as mixed construction waste	g	
Reuse	g	
Recycling	g	3061
Energy recovery	g	3913
To landfill	g	865

The end of life scenarios are not well documented. Therefore, conservative scenarios are assumed. Metal waste (steel, aluminium and brass) are assumed recycled, while plastic materials are assumed to be incinerated with energy recovery (C3). Solids and ash after incineration is landfilled (C4). Recovered energy from C3 is assumed to substitute electricity and district heating (D). The dismantling of the walkers (C1) is assumed to be done manually, and its environmental impact negligible. C1 is therefore not included in the assessment.

Transport to waste processing (C2)

Waste type	Type	Capacity utilisation (incl. return) %	Type of vehicle	Distance KM	Fuel/Energy consumption	value (l/t)
GFRP and plastic	Truck	50 %	lorry 16-32 metric ton, EURO5	85	0,045	3,79
Metal	Truck	50 %	lorry 16-32 metric ton, EURO5	295	0,045	13,16
Wood	Truck	50 %	lorry 16-32 metric ton, EURO5	85	0,045	3,79
Paper and cardboard	Truck	50 %	lorry 16-32 metric ton, EURO5	498	0,045	22,21

Transport distance scenarios to waste processing is based on Raadal et al. (2009).

Benefits and loads beyond the system boundaries (D)

	Unit	Value
Substitution of delivered electricity	2,3	MJ/pcs
Substitution of delivered district heating	59,5	MJ/pcs

Exported energy replaces the Norwegian district heating mix and electricity mix. All conversion factors for efficiencies and losses from waste to delivered energy are included.

Additional technical information

Not relevant

LCA: Results

The LCA results are presented below for the declared unit "*1 piece of Hestia, modules A1-A3, A4, C1-C4 and D*".

Impact assessment results are presented with core and additional impact indicators presented in EN15804+A2. Reading example: 9,0 E-03 = 9,0*10-3 = 0,009.

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

Product stage				Assembly stage			Use stage					End of life stage				Benefits & loads beyond system boundary
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	X	X	X	X	X

Core environmental impact indicators

Indicator	Unit	A1	A2	A3	A1-A3	A4
GWP-total	kg CO2 eq.	5,5E+01	9,6E-01	2,3E+00	5,8E+01	4,4E-01
GWP-fossil	kg CO2 eq.	5,5E+01	9,5E-01	1,8E+00	5,8E+01	4,4E-01
GWP-biogenic	kg CO2 eq.	-1,1E-01	2,6E-04	4,8E-01	3,7E-01	7,0E-04
GWP-LULUC	kg CO2 eq.	4,1E-02	6,7E-04	5,6E-03	4,8E-02	1,3E-04
ODP	kg CFC11 eq.	2,4E-06	1,5E-08	3,7E-08	2,4E-06	9,8E-09
AP	mol H^+ eq.	2,7E-01	2,3E-02	1,3E-02	3,1E-01	9,3E-04
EP-freshwater	kg P eq.	7,5E-03	4,5E-06	9,9E-05	7,6E-03	2,5E-06
EP-marine	kg N eq.	4,1E-02	5,8E-03	1,5E-03	4,8E-02	2,5E-04
EP-terrestial	mol N eq.	3,6E-01	6,4E-02	1,9E-02	4,4E-01	2,6E-03
POCP	kg NMVOC eq.	1,4E-01	1,8E-02	5,8E-03	1,6E-01	1,6E-03
ADP-M&M	kg Sb eq.	3,0E-04	1,2E-06	1,3E-04	4,3E-04	5,9E-07
ADP-fossil	MJ	7,0E+02	1,2E+01	2,4E+01	7,3E+02	6,4E+00
WDP	m^3	2,2E+01	3,2E-02	1,0E+00	2,3E+01	2,3E-02

Indicator	Unit	C1	C2	C3	C4	D
GWP-total	kg CO2 eq.	0,0E+00	2,4E-01	6,8E+00	1,1E-02	-3,5E+00
GWP-fossil	kg CO2 eq.	0,0E+00	2,3E-01	6,8E+00	1,1E-02	-3,3E+00
GWP-biogenic	kg CO2 eq.	0,0E+00	6,0E-04	5,5E-04	2,3E-04	-1,8E-01
GWP-LULUC	kg CO2 eq.	0,0E+00	1,1E-04	1,9E-05	2,1E-06	-4,5E-03
ODP	kg CFC11 eq.	0,0E+00	5,0E-09	3,5E-09	2,3E-10	-2,8E-08
AP	mol H^+ eq.	0,0E+00	7,5E-04	1,3E-03	5,0E-05	-1,9E-02
EP-freshwater	kg P eq.	0,0E+00	1,8E-06	9,2E-07	1,1E-07	-8,7E-05
EP-marine	kg N eq.	0,0E+00	2,5E-04	6,1E-04	7,5E-05	-3,6E-03
EP-terrestial	mol N eq.	0,0E+00	2,7E-03	6,8E-03	2,1E-04	-4,0E-02
POCP	kg NMVOC eq.	0,0E+00	1,1E-03	1,7E-03	8,2E-05	-1,2E-02
ADP-M&M	kg Sb eq.	0,0E+00	7,3E-07	1,6E-07	1,3E-08	-1,3E-05
ADP-fossil	MJ	0,0E+00	3,2E+00	7,4E-01	1,9E-01	-3,2E+01
WDP	m^3	0,0E+00	1,3E-02	1,6E-02	-5,1E-04	-8,4E+00

GWP-total: *Global Warming Potential;* ***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; See "additional requirements" for indicator given as PO4 eq.* ***EP-marine:*** *Eutrophication potential, fraction of nutrients reaching freshwater end compartment;* ***EP-terrestial:*** *Eutrophication potential, Accumulated Exceedance;* ***POCP****: Formation potential of tropospheric ozone;* ***ADP-M&M****: Abiotic depletion potential for non-fossil resources (minerals and metals);* ***ADP-fossil:*** *Abiotic depletion potential for fossil resources;* ***WDP:*** *Water deprivation potential, deprivation weighted water counsumption*

Additional environmental impact indicators

Indicator	Unit	A1	A2	A3	A1-A3	A4
PM	Disease incidence	2,1E-06	3,6E-08	8,1E-08	2,2E-06	2,5E-08
IRP	kBq U235 eq.	6,7E-01	3,2E-03	3,1E-01	9,8E-01	6,2E-03
ETP-fw	CTUe	1,0E+02	6,2E+00	1,6E+01	1,3E+02	2,9E+00
HTP-c	CTUh	4,6E-08	4,0E-10	3,2E-09	5,0E-08	1,1E-10
HTP-nc	CTUh	3,8E-07	7,0E-09	1,3E-07	5,2E-07	4,3E-09
SQP	Dimensionless	1,7E+02	3,5E+00	1,4E+01	1,9E+02	4,9E+00

Indicator	Unit	C1	C2	C3	C4	D
PM	Disease incidence	0,0E+00	1,5E-08	7,4E-09	1,0E-09	-3,9E-07
IRP	kBq U235 eq.	0,0E+00	1,6E-03	6,2E-04	1,5E-04	1,5E+01
ETP-fw	CTUe	0,0E+00	1,7E+00	2,5E-01	4,3E+00	-7,8E+00
HTP-c	CTUh	0,0E+00	1,0E-10	1,0E-10	1,4E-10	-3,1E-09

HTP-nc	CTUh	0,0E+00	3,0E-09	4,0E-09	9,1E-09	-8,3E-08
SQP	Dimensionless	0,0E+00	1,9E+00	1,3E-01	3,7E-01	-8,7E+01

PM: *Particulate matter emissions;* ***IRP:*** *Ionising radiation, human health;* ***ETP-fw:*** *Ecotoxicity (freshwater);* ***ETP-c:*** *Human toxicity, cancer effects;* ***HTP-nc:*** *Human toxicity, non-cancer effects;* ***SQP:*** *Land use related impacts / soil quality*

Classification of disclaimers to the declaration of core and additional environmental impact indicators

ILCD classification	Indicator	Disclaimer
ILCD type / level 1	Global warming potential (GWP)	None
	Depletion potential of the stratospheric ozone layer (ODP)	None
	Potential incidence of disease due to PM emissions (PM)	None
	Acidification potential, Accumulated Exceedance (AP)	None
	Eutrophication potential, Fraction of nutrients reaching marine end compartment (EP-marine)	None
ILCD type / level 2	Eutrophication potential, Accumulated Exceedance (EP-terrestrial)	None
	Formation potential of tropospheric ozone (POCP)	None
	Potential Human exposure efficiency relative to U235 (IRP)	1
ILCD type / level 3	Abiotic depletion potential for non-fossil resources (ADP-minerals&metals)	2
	Abiotic depletion potential for fossil resources (ADP-fossil)	2
	Water (user) deprivation potential, deprivation-weighted water consumption (WDP)	2
	Potential Comparative Toxic Unit for ecosystems (ETP-fw)	2
	Potential Comparative Toxic Unit for humans (HTP-c)	2
	Potential Comparative Toxic Unit for humans (HTP-nc)	2
	Potential Soil quality index (SQP)	2

Disclaimer 1 – 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.

Disclaimer 2 – 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

Resource use

Parameter	Unit	A1	A2	A3	A1-A3	A4
RPEE	MJ	1,7E+02	1,1E-01	5,5E+01	2,2E+02	7,4E-02
RPEM	MJ	0,0E+00	0,0E+00	2,6E+01	2,6E+01	0,0E+00
TPE	MJ	1,7E+02	1,1E-01	8,1E+01	2,5E+02	7,4E-02
NRPE	MJ	7,3E+02	1,2E+01	-6,4E+01	6,8E+02	6,4E+00
NRPM	MJ	0,0E+00	0,0E+00	8,8E+01	8,8E+01	0,0E+00

TRPE	MJ	7,3E+02	1,2E+01	2,4E+01	7,7E+02	6,4E+00
SM	kg	6,0E-01	0,0E+00	0,0E+00	6,0E-01	0,0E+00
RSF	MJ	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00
NRSF	MJ	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00
W	m^3	6,0E-01	1,1E-03	5,7E-01	1,2E+00	6,8E-04

Parameter	Unit	C1	C2	C3	C4	D
RPEE	MJ	0,0E+00	5,0E-02	2,7E-02	6,3E-03	-3,1E+01
RPEM	MJ	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00
TPE	MJ	0,0E+00	5,0E-02	2,7E-02	6,3E-03	-3,1E+01
NRPE	MJ	0,0E+00	3,2E+00	7,4E-01	1,9E-01	-3,2E+01
NRPM	MJ	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00
TRPE	MJ	0,0E+00	3,2E+00	7,4E-01	1,9E-01	-3,2E+01
SM	kg	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00
RSF	MJ	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00
NRSF	MJ	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00
W	m^3	0,0E+00	4,3E-04	3,8E-03	-9,2E-04	-9,8E-02

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

End of life - Waste

Parameter	Unit	A1	A2	A3	A1-A3	A4
HW	KG	3,1E+00	1,9E-04	4,8E-02	1,4E-04	1,2E-04
NHW	KG	1,5E+01	2,7E-01	9,2E-01	4,8E-01	4,2E-01
RW	KG	1,2E-03	1,8E-06	1,6E-04	1,7E-06	1,5E-06

Parameter	Unit	C1	C2	C3	C4	D
HW	KG	0,0E+00	8,0E-05	3,3E-04	9,6E-01	-3,5E-03
NHW	KG	0,0E+00	1,6E-01	1,4E-02	4,3E-02	-5,8E-01
RW	KG	0,0E+00	1,1E-06	4,2E-07	8,6E-08	-3,0E-05

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

End of life – output flow

Parameter	Unit	A1	A2	A3	A1-A3	A4
CR	kg	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00
MR	kg	0,0E+00	0,0E+00	1,0E+00	1,0E+00	0,0E+00
MER	kg	0,0E+00	0,0E+00	2,8E-01	2,8E-01	0,0E+00
EEE	MJ	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00
ETE	MJ	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00

Parameter	Unit	C1	C2	C3	C4	D
CR	kg	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00
MR	kg	0,0E+00	0,0E+00	3,1E+00	0,0E+00	0,0E+00
MER	kg	0,0E+00	0,0E+00	3,9E+00	0,0E+00	0,0E+00
EEE	MJ	0,0E+00	0,0E+00	2,3E+00	0,0E+00	0,0E+00
ETE	MJ	0,0E+00	0,0E+00	6,0E+01	0,0E+00	0,0E+00

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*10-3 = 0,009

Information describing the biogenic carbon content at the factory gate

Biogenic carbon content	Unit	Value
Biogenic carbon content in product	kg C	
Biogenic carbon content in the accompanying packaging	kg C	

Additional requirements

Location based electricity mix 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).

National electricity grid	Foreground/core [kWh]	GWP_{total} [kg CO2-eq/kWh]	SUM [kg CO2-eq]
Electricity, low voltage {NO}| market for electricity, low voltage | Cut-off, U	20,45	0,0389	0,8

Topro buys guarantees of origin (GoO) certificates. However, the results are only calculated with location based electricity mix. Contact EPD-owner to get more information on market-based electricity mix approach.

Additional environmental impact indicators required in NPCR Part A for construction products

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.

Indicator	Unit	A1	A2	A3	A1-A3	A4
GWP-IOBC	kg CO2 eq.	5,5E+01	9,6E-01	2,3E+00	5,8E+01	4,4E-01
Indicator	Unit	C1	C2	C3	C4	D
GWP-IOBC	kg CO2 eq.	0,0E+00	2,4E-01	6,8E+00	1,1E-02	9,0E+01

GWP-IOBC *Global warming potential calculated according to the principle of instantaneous oxidation.*

Hazardous substances

The declaration is based upon reference to threshold values and/or test results and/or material safety data sheets provided to EPD verifiers. Documentation available upon request to EPD owner.

- ■ The product contains no substances given by the REACH Candidate list or the Norwegian priority list.
- □ The product contains substances given by the REACH Candidate list or the Norwegian priority list that are less than 0,1 % by weight.
- □ The product contain dangerous substances, more than 0,1% by weight, given by the REACH Candidate List or the Norwegian Priority list, see table.
- □ The product contains no substances given by the REACH Candidate list or the Norwegian priority list. The product is classified as hazardous waste (Avfallsforskriften, Annex III), see table.

Indoor environment

Not relevant

Carbon footprint

Carbon footprint has not been worked out for the product.

Additional results

Below the results of the different scenarios for transport to market (A4) is shown.

Results for A4 – Transport to market scenarios

To calculate the results for the Scandinavian market (scenario 2) or the European market (scenario 3), simply substitute the value for A4 in the main results with the results for the scenarios in the table below.

Hestia M				
	Unit	Scenario 1: Norway	Scenario 2: Scandinavia	Scenario 3: Europe
GWP-total	kg CO2 eq.	0,39	2,34	4,85

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	Sustainability of construction works - Environmental product declaration - Core rules for the product category of construction products
ISO 21930:2007	Sustainability in building construction - Environmental declaration of building products
EPD-Norge 2021	NPCR Part A: Construction products and services
EPD-Norge 2022	NPCR 026 Part B for Furniture v. 2
Raadal et al. (2009)	Climate account for waste management. Phase I and II: Glass packaging, Metal Packaging, Paper, Cardboard, Plastic Packaging, Wet Organic Waste, Tree Waste and Refuse Waste from Households
Nørsterud (2023)	LCA Report for Topro Mobility Aids, Topro Mobility

epd-norway Global Program Operator	**Program Operator**	tlf	+47 23 08 80 00
	The Norwegian EPD Foundation		
	Post Box 5250 Majorstuen, 0303 Oslo	e-post:	post@epd-norge.no
	Norway	web	www.epd-norge.no
epd-norway Global Program Operator	**Publisher**	tlf	+47 23 08 80 00
	The Norwegian EPD Foundation		
	Post Box 5250 Majorstuen, 0303 Oslo	e-post:	post@epd-norge.no
	Norway	web	www.epd-norge.no
TOPRO – keep on moving	**Owner of the declaration**	tlf	+47 61 13 46 00
	Topro Industri AS	Fax	
	Rambekkvegen 5, 2816 Gjøvik, Norway	e-post:	kundeservice@topromobility.com
	Norway	web	https://www.topromobility.no/
asplan viak	**Author of the life cycle assessment**	tlf	+47 41 79 94 17
	Sander Nørsterud, Asplan Viak AS	Fax	
	Postboks 24, 1300 Sandvika	e-post:	asplanviak@asplanviak.no
	Norway	web	www.asplanviak.no
ECO PLATFORM EPD VERIFIED	ECO Platform ECO Portal	web web	www.eco-platform.org ECO Portal