Environmental Product Declaration

In accordance with ISO 14025 and EN 15804:2012+A2:2019 for:

SafeStore Auto Midi version 5XL

from

Gunnebo Safe Storage AB

Programme:	The International EPD® System, www.environdec.com
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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

General information

Programme information

Programme:	The International EPD® System
Address:	EPD International AB Box 210 60 SE-100 31 Stockholm Sweden
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CEN standard EN 15804 serves as the Core Product Category Rules (PCR)
Product category rules (PCR): Construction Products 2019:14, Version 1.1 and EN 15804:2012 + A2:2019 Sustainability of Construction Works
PCR review was conducted by: *The Technical Committee on the International EPD ® System. Contact via www.environdec.com info@environdec.com*
Independent third-party verification of the declaration and data, according to ISO 14025:2006: ☐ EPD process certification ☒ EPD verification
Third party verifier*:* Pär Lindman, Miljögiraff *In case of accredited certification bodies:* Accredited by: *<name of the accreditation body and accreditation number, where applicable>.* *In case of recognised individual verifiers:* 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 from different programmes may not be comparable. EPDs of construction products may not be comparable if they do not comply with EN 15804. For further information about comparability, see EN 15804 and ISO 14025.

Company information

Owner of the EPD:
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www.gunnebosafestorage.com

Contact: Linda Andrén

Description of the organisation: Gunnebo Safe Storage is a business unit within Gunnebo AB, with headquarters in Gothenburg, Sweden. Gunnebo Safe Storage is a globally recognised provider of secure storage solutions with five production facilities around the globe. The company's mission is to protect valuable items from burglary, fire and explosion and provide our customers with peace of mind at home, in transit and at work. Gunnebo Safe Storage offers a wide range of both certified and ungraded secure storage products that can be applied to a multitude of differing security needs and environments. The range covers modular strong rooms and vault doors, mechanical and automated safe deposit lockers, the associated high-security electronic locks and locking systems that accompany them, as well as safes and filing cabinets that complement the product portfolio. The product range also includes high security server cabinets that protect sensitive IT equipment.

Sustainability is high on our agenda, as this is a natural part of our company mission. We set high standards for the security level of the products, and also for the way these products are made. We aim to build and maintain a sustainable, ethical business that strives to minimise our impact on the environment. We take a long-term approach to sustainability with clearly defined targets.

Product-related or management system-related certifications: The SafeStore Auto product is manufactured in our production facility in Markersdorf. The Markersdorf operation is certified according to ISO 9001, 14001 and 45001. The product is certified according to EN 1143-1 grade VII EX.

Name and location of production site(s): Gunnebo Markersdorf GmbH

Product information

Product name: SafeStore Auto Midi version 5 XL
Product identification: Global Article Code 4001000015

Product description: The SafeStoreAuto is a fully automated Deposit Locker, that can run 24/7 meaning that users can access them when they want secured by an access control unit part of the SSA solution. Users can access their specific box my using their authentication, around the clock. The SSA is a flexible alternative as it may be installed at any location preferred. An SafeStore Auto solution combines a strong room with a robotic system with a rack, deposit boxes, one or more exit units and one or more access control units. The SSA have been been installed at more than 1,600 sites, including their respective ECB-S certified strong rooms, worldwide.

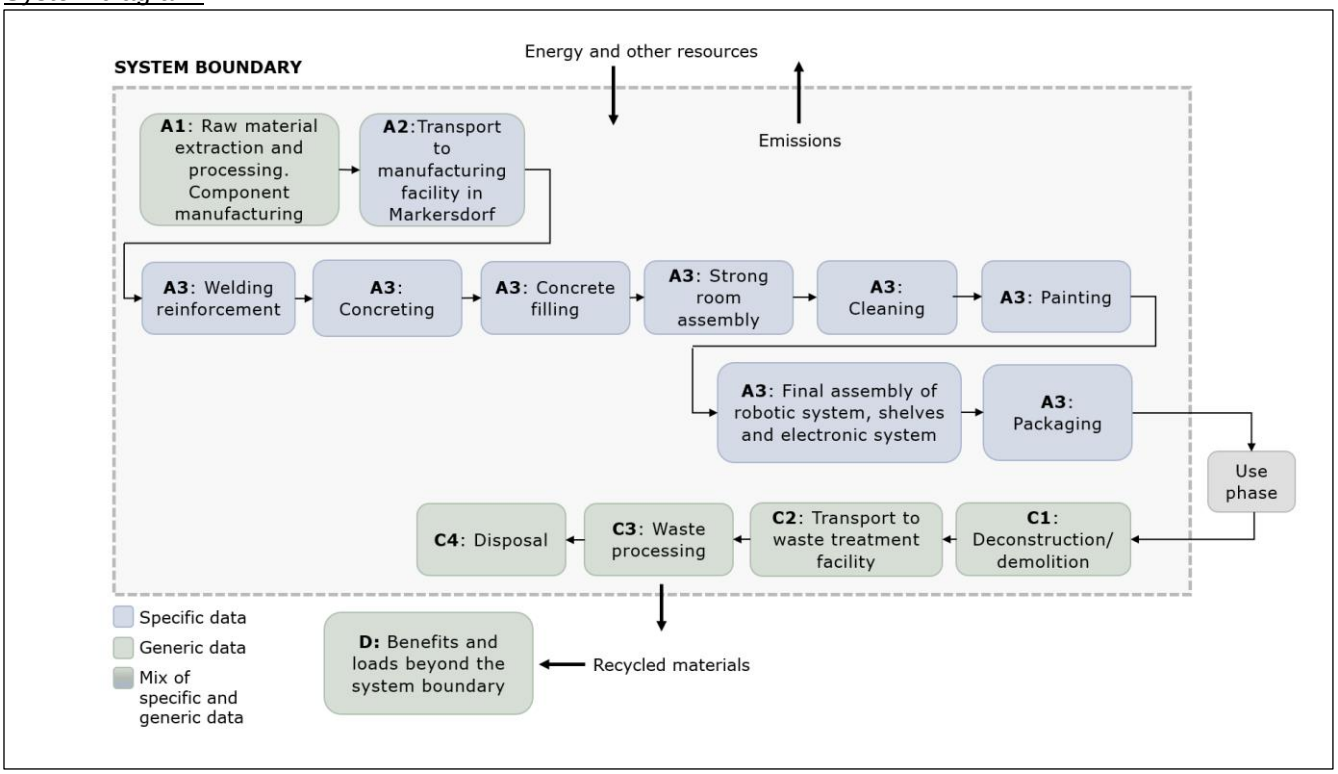
UN CPC code: NA

LCA information

Functional unit / declared unit: One SafeStore Auto Midi version 5 XL, 10 500 kg
Reference service life: No RSL is declared.

Time representativeness: The LCA is based on production data from 2020 which is considered to be an average year of production
Database(s) and LCA software used: Ecoinvent 3.8.1, Industry Data 2.0 and SimaPro 9.3
LCA practitioner: Kristin Fransson & Karin Lagercrantz, AFRY Sustainability Consulting, www.afry.com
Description of system boundaries:
Cradle to gate with options, modules C1–C4 and module D (A1–A3 + A5 + C + D)

System diagram:



Modules declared, geographical scope, share of specific data (in GWP-GHG indicator) and data variation:

	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	ND	X	ND	ND	ND	ND	ND	ND	ND	X	X	X	X	X
Geography	GLO/ EU	EU	EU		EU								EU	EU	EU	EU	EU
Specific data used	4% of the total GWP-GHG impact stems from specific data (A2 and A3)					-	-	-	-	-	-	-	-	-	-	-	-

A1: Raw Material
This stage includes raw material extraction and production of bought components.

A2: Transport
This stage includes transportation of raw materials to production sites and of components to final site of assembly.

A3: Manufacturing
This stage includes resource use in the manufacturing facility in Markersdorf such as use of energy, water and process chemicals. It also includes treatment of waste generated from the manufacturing processes. The manufacturing includes concrete mixing and filling, reinforcement welding, painting, assembly and packaging.

Electricity mix used in manufacturing

- 9% Nuclear power
- 16% coal power
- 6.6% Gas
- 0.8% Other fossil energy sources
- 67.6% Renewable energy

The climate impact of the electricity mix is 393g CO2 eq./kWh.

A5: Construction/Installation
This stage includes waste treatment of packaging. The packaging is assumed to be incinerated.

C1: Deconstruction
This stage includes impacts from energy use related to deconstruction of the safe room.

C2: Waste Transport
Includes the transportation of the discarded product to a waste treatment facility. 100 km transportation is assumed.

C3: Waste Processing
This stage includes sorting of waste.

C4: Waste disposal
This stage includes waste disposal processes, such as landfill or incineration. Incineration is assumed for concrete, 15% of the steel and other minor materials. Incineration is assumed for the plastic. Electronic components and 85% of the steel in the product is assumed to be recycled.

D: Benefits and loads outside the system boundary
This stage includes benefits and burdens associated with recovery/recycling that affects future life cycles. For this product it includes benefits from the recycling of steel, as well as energy recovery from waste incineration.

Content information

Product components	Weight-%	Post-consumer material, weight-%	Renewable material, weight-%
Steel	34%	21%	0%
Concrete	61%	0%	0%
Plastic	4%	0%	0%
Electronic components	0.7%	0%	0%
Other (glass, wood, rubber, paint)	0.29%	0%	43%
TOTAL	10 500kg		

Packaging materials	Weight, kg	Weight-% (versus the product)
Wood	780	7.4%
Cardboard	4.8	0.05%
Plastics	3.25	0.03%
TOTAL	788 kg	7.5%

Dangerous substances from the candidate list of SVHC for Authorisation	EC No.	CAS No.	Weight-% per functional or declared unit
No dangerous substances from the list of SVHC for Authorisation			0%

Environmental Information

Potential environmental impact – mandatory indicators according to EN 15804

Results per SafeStore Auto Midi version 5 XL, 10500 kg											
Indicator	**Unit**	**A1**	**A2**	**A3**	**Tot.A1-A3**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-fossil	kg CO_2 eq.	1.87E+04	3.35E+02	3.35E+02	1.94E+04	2.91E+03	1.99E+01	3.66E+01	1.71E+02	3.49E+00	6.09E+02
GWP-biogenic	kg CO_2 eq.	5.74E+02	9.00E-01	-1.14E+03	-5.68E+02	7.80E+00	1.15E+03	3.17E-02	4.59E-01	8.46E-01	2.11E-01
GWP-luluc	kg CO_2 eq.	2.34E+01	1.34E-01	1.87E+00	2.54E+01	1.16E+00	4.06E-03	3.66E-03	6.84E-02	2.96E-03	2.84E-02
GWP-total	kg CO_2 eq.	1.93E+04	3.36E+02	-8.07E+02	1.88E+04	2.92E+03	1.17E+03	3.67E+01	1.72E+02	4.34E+00	6.09E+02
ODP	kg CFC 11 eq.	1.17E-03	7.77E-05	1.89E-05	1.26E-03	6.74E-04	8.78E-07	7.83E-06	3.96E-05	4.91E-07	1.68E-05
AP	mol H^+ eq.	9.46E+01	9.52E-01	1.32E+00	9.69E+01	8.26E+00	1.31E-01	3.81E-01	4.86E-01	2.99E-02	5.25E-01
EP-freshwater	kg P eq.	1.09E+01	2.20E-02	3.62E-01	1.13E+01	1.90E-01	5.32E-03	1.13E-03	1.12E-02	1.48E-03	5.16E-03
EP-freshwater	kg PO_4^{3-} eq.	4.35E+01	1.64E-01	1.27E+00	4.50E+01	1.42E+00	1.05E-01	6.28E-02	8.36E-02	8.11E-03	1.81E+00
EP-marine	kg N eq.	2.21E+01	1.93E-01	3.65E-01	2.27E+01	1.68E+00	6.90E-02	1.69E-01	9.87E-02	9.20E-03	6.03E-01
EP-terrestrial	mol N eq.	1.83E+02	2.11E+00	3.70E+00	1.89E+02	1.83E+01	6.61E-01	1.85E+00	1.08E+00	9.99E-02	2.18E+00
POCP	kg NMVOC eq.	6.83E+01	8.10E-01	9.80E-01	7.01E+01	7.03E+00	1.63E-01	5.08E-01	4.13E-01	2.73E-02	6.24E-01
ADP-minerals&metals*	kg Sb eq.	1.33E+00	1.19E-03	1.56E-03	1.34E+00	1.03E-02	3.08E-05	1.88E-05	6.06E-04	1.43E-04	1.31E-04
ADP-fossil*	MJ	2.36E+05	5.08E+03	4.93E+03	2.46E+05	4.41E+04	1.07E+02	5.03E+02	2.59E+03	1.58E+02	1.18E+03
WDP*	m^3	5.35E+03	1.50E+01	9.90E+01	5.47E+03	1.30E+02	-8.28E+00	7.16E-01	7.64E+00	1.25E+00	7.21E+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.*

Potential environmental impact – additional mandatory and voluntary indicators

Results per SafeStore Auto Midi version 5 XL, 10500 kg											
Indicator	**Unit**	**A1**	**A2**	**A3**	**Tot.A1-A3**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-GHG[1]	kg CO_2 eq.	1.87E+04	3.35E+02	4.18E+02	1.95E+04	1.99E+01	3.66E+01	1.71E+02	3.49E+00	6.09E+02	-3.52E+03
Additional voluntary indicators e.g. the voluntary indicators from EN 15804 or the global indicators according to ISO 21930:2017											

Use of resources

Results per SafeStore Auto Midi version 5 XL, 10500 kg											
Indicator	**Unit**	**A1**	**A2**	**A3**	**Tot.A1-A3**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**
PERE	MJ	2,08E+04	7,26E+01	1,69E+04	3,78E+04	6,30E+02	2,62E+00	2,83E+00	3,71E+01	1,24E+02	1,33E+01
PERM	MJ	2,48E+02	0,00E+00	1,50E+04	1,52E+04	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	MJ	2,11E+04	7,26E+01	3,19E+04	5,30E+04	6,30E+02	2,62E+00	2,83E+00	3,71E+01	1,24E+02	1,33E+01
PENRE	MJ	2,50E+05	5,40E+03	5,26E+03	2,61E+05	4,68E+04	1,16E+02	5,34E+02	2,75E+03	1,62E+02	1,25E+03
PENRM	MJ	1,63E+04	0,00E+00	1,27E+02	1,64E+04	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	MJ	2,67E+05	5,40E+03	5,38E+03	2,77E+05	4,68E+04	1,16E+02	5,34E+02	2,75E+03	1,62E+02	1,25E+03
SM	kg	7,73E+02	0	0	7,73E+02	0	0	0	0	0	0
RSF	MJ	0	0	0	0	0	0	0	0	0	0
NRSF	MJ	0	0	0	0	0	0	0	0	0	0
FW	m^3	1,88E+02	1,83E+02	8,51E-01	3,80E+00	1,87E+02	4,42E-02	4,42E-02	4,34E-01	4,06E-02	2,03E+00

[1] The indicator includes all greenhouse gases included in GWP-total but excludes biogenic carbon dioxide uptake and emissions and biogenic carbon stored in the product. This indicator is thus almost equal to the GWP indicator originally defined in EN 15804:2012+A1:2013.

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 production and output flows

Waste production

Results per SafeStore Auto Midi version 5 XL, 10500 kg

Indicator	Unit	A1	A2	A3	Tot.A1-A3	A5	C1	C2	C3	C4	D
Hazardous waste disposed	kg	0	0	0	0	0	0	0	0	0	0
Non-hazardous waste disposed	kg	0	0	4,48E+01	4,48E+01	7,81E+02	0	0	0	7,36E+03	7,81E+02
Radioactive waste disposed	kg	0	0	0	0	0	0	0	0	0	0

Output flows

Results per SafeStore Auto Midi version 5 XL, 10500 kg

Indicator	Unit	A1	A2	A3	Tot.A1-A3	A5	C1	C2	C3	C4	D
Components for re-use	kg	0	0	0	0	0	0	0	0	0	0
Material for recycling	kg	0	0	3,00E+01	3,00E+01	0	0	0	3,17E+03		3,20E+03
Materials for energy recovery	kg	0	0	0	0	0	0	0	0	0	0
Exported energy, electricity	MJ	0	0	0	0	0	0	0	0	0	0
Exported energy, thermal	MJ	0	0	0	0	0	0	0	0	0	0

The result tables shall only contain values or the letters "ND" (Not Declared). It is not possible to specify ND for mandatory indicators. ND shall only be used for voluntary parameters that are not quantified because no data is available.

Information on biogenic carbon content

Results per SafeStore Auto Midi version 5 XL, 10500 kg

BIOGENIC CARBON CONTENT	Unit	QUANTITY
Biogenic carbon content in packaging	kg C	359

Note: 1 kg biogenic carbon is equivalent to 44/12 kg CO_2.

Additional information

SafeStore Auto (SSA) Midi is a plug and play solution, fully assembled at the factory. The installation of the SSA Midi does not require any assembling of the strong room and robotic system on site.

A standard power consumption is needed: 230V - 240V(AC) / 50 - 60 Hz - Active current: 2,5A (max.)- Line fused: 16A or 110V – 120V (AC) / 50 – 60 Hz - Active current: 4,0A (max.) -Line fused: 20A
A stable temperature must be maintained from -5°C up to +40°C
System can accept a humidness rate up to 95% (but without any precipitation) Air condition is recommended for keeping a constant temperature for the machine in extreme hot areas.

The SafeStore Auto is an automated system. The product must be maintained during its life to reach the “high availability level” and ensuring the high product performance. A service agreement is required which includes at least one annual preventive maintenance visit and one during the warranty period. In case the robot is intensively used, two service visits per year are required. This service maintenance is ensured by the Gunnebo technical team or by a third party.

A spare parts kit is included with every SSA unit released from the factory to put in place the conditions of a good quality maintenance. A spare parts catalogue is available and split into 3 lists:
List 1: Spare parts required on site with the SSA
List 2: Spare parts required in stock at the service maintenance department
List 3: Spare parts (occasionally needed) on stock at the factory

The first generation of SSA has been installed in the 1970’. Most of the units are still operating and have been upgraded to prolong the product’s lifecycle. The robotic system can be changed to newer versions, wirings can be replaced, and software can be updated. The modular specificity of the SSA Midi also offers a smart investment as it can be moved and reinstalled at another place if needed. This operation does not require a disassembling and reassembling of the system. The SSA does not have any known life limitations, as long as security systems are upgraded to the latest known technologies and standards.

Gunnebo Safe Storage operations are certified to ISO 9001, 14001 and 45001. Gunnebo Safe Storage follow Gunnebo Group Sustainability Approach, and sustainability KPI are measured in a dedicated sustainability tool. More information about our sustainability approach and targets can be found at www.gunnebo.com/Sustainability

References

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