# Environmental Product Declaration

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

## DuoForce

from

## Gunnebo Safe Storage AB

| | |
|---|---|
| Programme: | The International EPD® System, www.environdec.com |
| Programme operator: | EPD International AB |
| EPD registration number: | S-P-0 6374 |
| Publication date: | 2022-06-28 |
| Valid until: | 2027-06-16 |

*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<br>Box 210 60<br>SE-100 31 Stockholm<br>Sweden |
| **Website:** | www.environdec.com |
| **E-mail:** | info@environdec.com |

| |
|---|
| 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:<br><br>☐ EPD process certification ☒ EPD verification |
| Third party verifier: Pär Lindman, Miljögiraff<br><br>*In case of accredited certification bodies:*<br>Accredited by: *<name of the accreditation body and accreditation number, where applicable>.*<br><br>*In case of recognised individual verifiers:*<br>Approved by: The International EPD® System |
| Procedure for follow-up of data during EPD validity involves third party verifier:<br><br>☐ 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:
**Gunnebo Safe Storage**
Box 5181
SE-402 26 Gothenburg
Visiting address: Johan på Gårdas gata 7
Org.nr 556573-7508, VAT-nr SE556573750801
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 DuoForce product is manufactured in our production facility in Doetinchem. The Doetinchem factory is certified according to ISO 9001, ISO 14001 and ISO 45001. The product is certified by ECB-S according to EN 1143-1 grade CEN 3.

Name and location of production site(s): Gunnebo Doetinchem BV, Mercuriusstraat 60, 7006 RM Doetinchem, Netherlands

## Product information

Product name: DuoForce
Product identification: The product is a safe certified according to CEN standards, certified by ECB-S, certification no. 140312/ATM-S10-01R
Product description: DuoForce is a robust safe for high-end residential or commercial use. DuoForce is certified by ECB-S as meeting the requirements of EN 1143-1 standard Grade III for burglary protection and of NT-017 60 minutes fire protection of paper documents.

Testing was undertaken by independent ISO 17025 certified testing laboratories. ECB.S issues certification based upon the results of these tests and ensures manufacturing compliance via a series of regular audits.

Manufactured in our production site in Doetinchem, this sturdy safe is built according to most stringent quality, health & safety, and environmental manufacturing standards. The Doetinchem facility carries both ISO 45001 and ISO 14001 certifications.

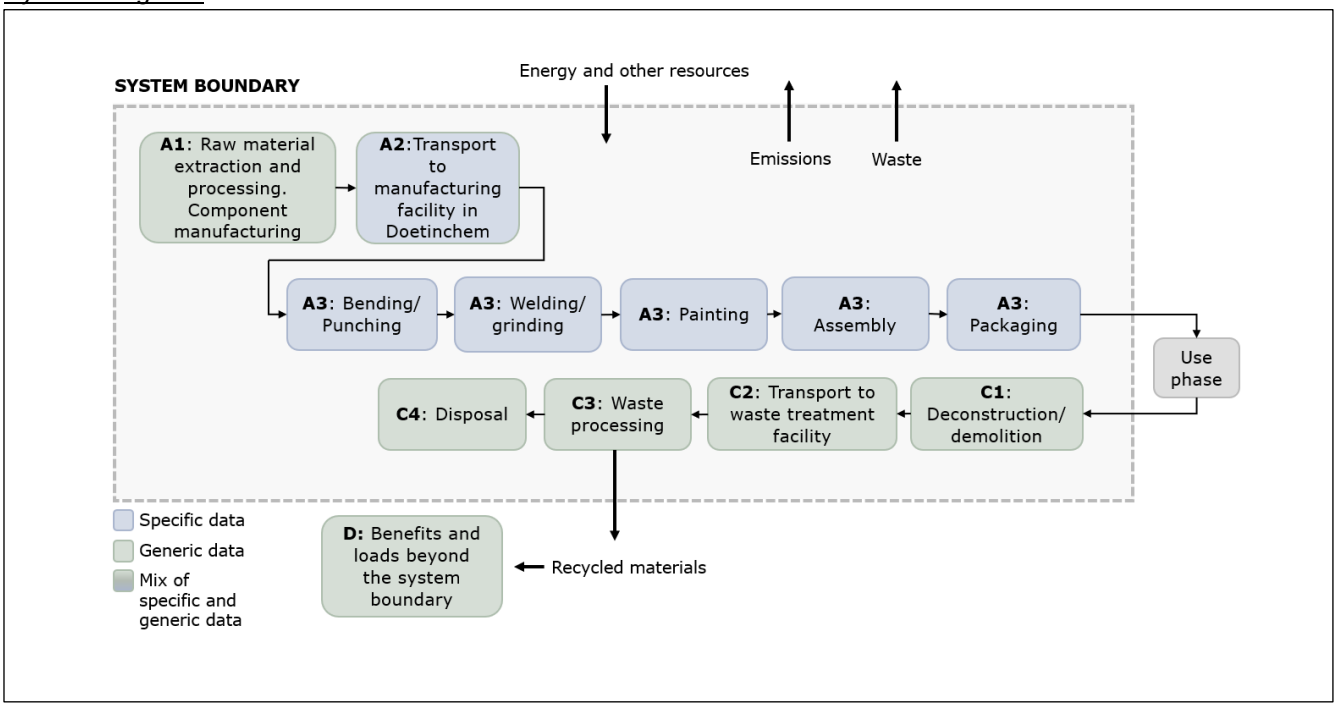
All sizes can be trusted to protect their contents not just against unauthorised forced burglary attack but also against the extreme temperatures experienced during fire. The product is supplied with one key lock as standard with the option of a factory fitted electronic lock or optional two locks. This gives the flexibility to customise how DuoForce can be secured and operated. The DuoForce is equipped with an ergonomic soft-touch handle and a range of internal fittings to maximise storage capacity.

UN CPC code: NA

## LCA information

Functional unit / declared unit: One kg of DuoForce safe. The calculation is made on the DuoForce M65 (260kg) which is selected as a worst-case product. The impact per kg varies with the size. The largest difference is -13% (for DuoForce M225).
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 | 10% of the total GWP-GHG impact stems from specific data (A2 and A3) | | | | | - | - | - | - | - | - | - | - | - | - | - | - |
| Variation - products | The largest variation is -13% for GWP-GHG (M225 safe) | | | | | - | - | - | - | - | - | - | - | - | - | - | - |

**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 Doetinchem such as use of energy, water and process chemicals. It also includes treatment of waste generated from the manufacturing processes. The manufacturing includes bending and punching of steel sheets, concrete mixing and filling, painting, assembly and packaging.

*Electricity mix used in manufacturing*

- 100% Hydro power

The climate impact of the electricity mix is 4.2g CO2 eq./kWh.

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

**C1: Deconstruction**
No deconstruction of the safe is assumed.

**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 the product at a waste handling station.

**C4: Waste disposal**
This stage includes waste disposal processes of the product, such as landfill or incineration. The whole safe is assumed to be landfilled.

**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 energy recovery in incineration processes and recycling of steel scrap in manufacturing.

## Content information

| Product components | Weight-% | Post-consumer material, weight-% | Renewable material, weight-% |
|---|---|---|---|
| Steel | 46 | 20% | 0 |
| Concrete mix | 45 | 0% | 0 |
| Glass fibre reinforced gypsum | 7 | 0 | 0 |
| Chemicals (paint, hardener, glue etc.) | <1% | 0 | 0 |
| Chrome steel | <1% | 49% | 0 |
| Others (glass, plastic, manganese) | <0.05% | 0 | 0 |
| TOTAL | 1 kg | | |

| Packaging materials | Weight, kg | Weight-% (versus the product) |
|---|---|---|
| Pallet wood | 0.032 | 3.2 |
| Cardboard | 0.006 | 0.6 |
| TOTAL | 0.037 | 3.7 |

| 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 kg of DuoForce safe | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Indicator** | **Unit** | **A1** | **A2** | **A3** | **Tot.A1-A3** | **A5** | **C1** | **C2** | **C3** | **C4** | **D** |
| GWP-fossil | kg $CO_2$ eq. | 1,86E+00 | 6,62E-02 | 1,48E-01 | 2,08E+00 | 1,45E-03 | 0,00E+00 | 1,63E-02 | 1,75E-03 | 5,27E-03 | -1,75E-01 |
| GWP-biogenic | kg $CO_2$ eq. | 4,24E-02 | 1,41E-04 | -3,27E-02 | 9,76E-03 | 7,13E-02 | 0,00E+00 | 4,37E-05 | 9,27E-05 | 1,86E-05 | 9,47E-04 |
| GWP-luluc | kg $CO_2$ eq. | 1,40E-02 | 2,54E-05 | 1,24E-04 | 1,42E-02 | 5,97E-07 | 0,00E+00 | 6,51E-06 | 3,52E-06 | 4,97E-06 | -2,16E-05 |
| GWP-total | kg $CO_2$ eq. | 1,92E+00 | 6,64E-02 | 1,15E-01 | 2,10E+00 | 7,28E-02 | 0,00E+00 | 1,63E-02 | 1,85E-03 | 5,29E-03 | -1,74E-01 |
| ODP | kg CFC 11 eq. | 1,12E-07 | 1,51E-08 | 1,38E-08 | 1,40E-07 | 2,16E-10 | 0,00E+00 | 3,77E-09 | 1,30E-10 | 2,13E-09 | -8,32E-09 |
| AP | mol $H^+$ eq. | 8,67E-03 | 4,24E-04 | 3,50E-04 | 9,45E-03 | 1,05E-05 | 0,00E+00 | 4,63E-05 | 1,11E-05 | 4,95E-05 | -5,09E-04 |
| EP-freshwater | kg P eq. | 7,90E-04 | 3,57E-06 | 2,57E-05 | 8,20E-04 | 3,58E-07 | 0,00E+00 | 1,07E-06 | 1,50E-06 | 4,82E-07 | -7,27E-05 |
| EP-freshwater | kg $PO_4^{3-}$ eq. | 3,36E-03 | 5,22E-05 | 1,27E-04 | 3,54E-03 | 1,68E-05 | 0,00E+00 | 7,96E-06 | 5,55E-06 | 8,01E-06 | -2,66E-04 |
| EP-marine | kg N eq. | 1,97E-03 | 1,05E-04 | 8,93E-05 | 2,16E-03 | 8,26E-06 | 0,00E+00 | 9,40E-06 | 2,57E-06 | 1,72E-05 | -1,22E-04 |
| EP-terrestrial | mol N eq. | 1,85E-02 | 1,15E-03 | 8,48E-04 | 2,05E-02 | 4,51E-05 | 0,00E+00 | 1,02E-04 | 2,52E-05 | 1,88E-04 | -1,29E-03 |
| POCP | kg NMVOC eq. | 7,33E-03 | 3,37E-04 | 6,55E-04 | 8,32E-03 | 1,36E-05 | 0,00E+00 | 3,94E-05 | 6,99E-06 | 5,48E-05 | -7,81E-04 |
| ADP-minerals&metals* | kg Sb eq. | 1,85E-05 | 1,87E-07 | 4,61E-07 | 1,91E-05 | 4,36E-09 | 0,00E+00 | 5,77E-08 | 1,48E-08 | 1,20E-08 | 1,03E-07 |
| ADP-fossil* | MJ | 2,13E+01 | 9,76E-01 | 1,82E+00 | 2,41E+01 | 1,71E-02 | 0,00E+00 | 2,47E-01 | 3,49E-02 | 1,47E-01 | -1,80E+00 |
| WDP* | $m^3$ | 6,41E-01 | 2,42E-03 | 5,89E-02 | 7,02E-01 | -3,03E-04 | 0,00E+00 | 7,28E-04 | 3,75E-04 | 6,61E-03 | -3,41E-02 |
| 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 kg of DuoForce safe | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Indicator** | **Unit** | **A1** | **A2** | **A3** | **Tot.A1-A3** | **A5** | **C1** | **C2** | **C3** | **C4** | **D** |
| GWP-GHG[1] | kg $CO_2$ eq. | 1,88E+00 | 6,62E-02 | 1,48E-01 | 2,09E+00 | 1,45E-03 | 0,00E+00 | 1,63E-02 | 1,76E-03 | 5,27E-03 | -1,75E-01 |
| | | | | | | | | | | | |
| *Additional voluntary indicators e.g. the voluntary indicators from EN 15804 or the global indicators according to ISO 21930:2017* | | | | | | | | | | | |

*Disclaimers shall be added, if required by EN 15804.*

## Use of resources

| Results per kg of DuoForce safe | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Indicator** | **Unit** | **A1** | **A2** | **A3** | **Tot.A1-A3** | **A5** | **C1** | **C2** | **C3** | **C4** | **D** |
| PERE | MJ | 2,15E+00 | 1,17E-02 | 1,82E+00 | 3,98E+00 | 3,43E-04 | 0,00E+00 | 3,53E-03 | 6,28E-03 | 1,25E-03 | -1,37E-02 |
| PERM | MJ | 0,00E+00 | 0,00E+00 | 7,06E-01 | 7,06E-01 | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 |
| PERT | MJ | 2,15E+00 | 1,17E-02 | 2,52E+00 | 4,68E+00 | 3,43E-04 | 0,00E+00 | 3,53E-03 | 6,28E-03 | 1,25E-03 | -1,37E-02 |
| PENRE | MJ | 2,27E+01 | 1,04E+00 | 1,98E+00 | 2,57E+01 | 1,83E-02 | 0,00E+00 | 2,62E-01 | 3,67E-02 | 1,56E-01 | -1,91E+00 |
| PENRM | MJ | 1,42E-01 | 0,00E+00 | 1,17E-01 | 2,58E-01 | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 |
| PENRT | MJ | 2,28E+01 | 1,04E+00 | 2,10E+00 | 2,60E+01 | 1,83E-02 | 0,00E+00 | 2,62E-01 | 3,67E-02 | 1,56E-01 | -1,91E+00 |
| SM | kg | 9,53E-02 | 0 | 0 | 9,53E-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 |

[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.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| FW | $m^3$ | 2,19E-02 | 1,43E-04 | 1,37E-03 | 2,34E-02 | 4,13E-05 | 0,00E+00 | 4,13E-05 | 9,83E-06 | 1,61E-04 | -4,57E-04 |
| 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 kg of DuoForce safe | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Indicator** | **Unit** | **A1** | **A2** | **A3** | **Tot.A1-A3** | **A5** | **C1** | **C2** | **C3** | **C4** | **D** |
| Hazardous waste disposed | kg | 0 | 0 | 8,39E-03 | 8,39E-03 | 0 | 0 | 0 | 0 | 0 | 0 |
| Non-hazardous waste disposed | kg | 0 | 0 | 1,87E-01 | 1,87E-01 | 3,89E-02 | 0 | 0 | 0 | 1,00E+00 | 0 |
| Radioactive waste disposed | kg | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

### Output flows

| Results per kg of DuoForce safe | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **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 | 1,42E-01 | 1,42E-01 | 0 | 0 | 0 | 0 | 0 | 0 |
| 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 kg of DuoForce safe | | |
|---|---|---|
| **BIOGENIC CARBON CONTENT** | **Unit** | **QUANTITY** |
| Biogenic carbon content in packaging | kg C | 0,017 |

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

## Additional information

The product is made under ISO 14001 certification meaning Gunnebo Safe Storage take great care over environment management and the impact production can have..

The life cycle assessment for this product covers the complete chain from supply to production to usage. Gunnebo Safe Storage aims to reduce the environmental impact of the product and it's supply chain.

It is possible to prolong life of the DuoForce by upgrade e.g., locking solution or interiors. It is also possible to recycle the safe and re-use the concrete, steel, locks and furniture for other applications.

Gunnebo Safe Storage operations are certified to ISO 9001, ISO 14001 and ISO 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

EPD International (2021): General Programme Instructions for the International EPD® System. Version 4.0. www.environdec.com.

EPD International (2019): Product Category Rules (PCR) Construction products 2019:14, version 1.1

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