Environmental Product Declaration

WorkValet™

APAC

About this product

Reimagining lockers beyond storage, WorkValet™ is a blueprint for organizations adopting flexible hybrid strategies.

The reference product is a locker bay with 10-year service life and 1.8 m^3 of storage capacity.

Date of Issue: December 20, 2024
Date of Expiration: December 20, 2029

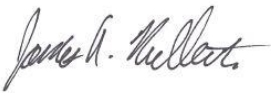
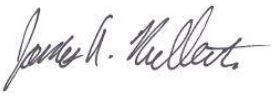
About this document

This declaration describes the Life Cycle Assessment of the WorkValet produced for the APAC market by Steelcase Inc. in Dongguan, China. The assessment is performed according to the ISO standards 14040 (2006), 14044 (2006) and 14025 (2006), and BIFMA PCR for Storage: UNCPC 3812 to generate an EPD for business-to-business communication.

Learn more

- Explore Steelcase environmental philosophy and commitments overview.
- Find product details and sustainability certifications on product page at steelcase.com.
- See our product warranty.
- Contact epd@steelcase.com for any EPD-related questions or inquiries.

ASSESSMENT OVERVIEW

EPD commissioner	Steelcase® Inc
Corporate Address	901 44th Street SE Grand Rapids, Michigan 49508-7594 United States
Product group	Storage
Product name	WorkValet™
Product intended use	Storage
Product reference service life	10 years
Reference standards	ISO 14025, ISO 14040, ISO 14044
EPD scope	Cradle to grave
EPD number	EPD11012
Date of issuance	December 20, 2024
Date of expiration	December 20, 2029
EPD type	Product specific
EPD Product Coverage	WorkValet™ for APAC market
Intended audience	Business to business (B2B)
Year of reported manufacturer data	2023
Functional unit	Storage unit 0.15 m^3 for a reference service life of 10 years
Applicable markets/regions	APAC
LCA software and database version	GaBi 10.6.2.9; GaBi database, 2022.2
LCIA methodology and version number	TRACI 2.1, IPCC AR6
Program administrator	NSF Certification LLC 789 N. Dixboro, Ann Arbor, MI 48105 www.nsf.org
Reference PCR and version number	BIFMA PCR for Storage: UNCPC 3812 (BIFMA PCR, 2022)
PCR reviewer	Review Panel Chaired by Dr. Thomas Gloria
EPD reviewer	External review conducted by:  Jim Mellentine, Thrive ESG This declaration and its Life Cycle Assessment was independently verified in accordance with ISO standards 14040 (2006), 14044 (2006), 14025 (2006), and BIFMA PCR for Storage UNCPC 3812 (2022).
LCA reviewer	External review conducted by:  Jim Mellentine, Thrive ESG The product Life Cycle Assessment was conducted in accordance with ISO 14044 and the reference PCR.
Disclaimer	The PCR this EPD was based on was written to determine the potential environmental impacts of a storage product from cradle to grave. It was not written to support comparative assertions. EPDs based on different PCRs, or different calculation models, may not be comparable. When attempting to compare EPDs or life cycle impacts of products from different companies, the user should be aware of the uncertainty in the final results, due to and not limited to, the practitioner's assumptions, the source of the data used in the study, and the specifics of the product modeled.

ASSESSMENT PARAMETERS

Functional unit

0.15 m^3 of storage space including packaging, for a reference service life of 10 years under ANSI/BIFMA X5.9.

Product scope

One product with a storage volume of 1.81 m^3. To match the functional unit of 0.15 m^3, the results in this EPD were scaled down to 0.08 of one WorkValet™ configuration. The product is a 5 tiers x 6 columns storage bay, with LPL doors, mail slots, and steel drawers. This configuration represents the following style numbers: SNGCAR400L, SNGDRAWERR, SNGBASEPL, SNGPLNTHTRAY. The product is subcategory 4.2 Closed Static Storage with hinged doors. This assessment does not include electronic locks.

Manufacturing location
Dongguan, China

Assessment goal and scope

The potential environmental impacts of WorkValet™ storage and its packaging throughout its entire life cycle – including raw materials extraction, production, transport, use, and end of life – were assessed. In the absence of primary information, the GaBi database was used for secondary data.

The life cycle stages included in this assessment follow the BIFMA PCR for Storage: UNCPC 3812. Material acquisition and pre-processing (including transportation), production, distribution, use and end-of-life are assessed for the storage product.

Assessment boundary

The Life Cycle Assessment considers the full life cycle of the product as described here, cradle to grave. Life cycle stages and phases included in this assessment follow the BIFMA PCR for Storage and are presented in the following table.

		Stage	Status
	***Cradle to inbound gate*** **MATERIALS ACQUISITION** Raw material extraction, pre-processing and transportation. Transportation up to the factory gate and internal transport.	**A1.** Raw material supply	✓
		A2. Transport	✓
	***Gate to gate*** **PRODUCTION PROCESS** External and internal manufacturing of products, ancillary materials, parts, packaging.	**A3.** Manufacturing	✓
	***Gate to grave*** **DISTRIBUTION, USE AND END OF LIFE** Distribution of products, installation, use and end of life.	**A4.** Transport	✓
		A5. Installation	✓
		B1. Use	✓
		B2. Maintenance/cleaning	✓
		B3. Repair	✓
		B4. Replacement	✓
		B5. Refurbishment	✓
		B6. Operational energy use	✓
		B7. Operational water use	✓
		C1. Disassembly	✓
		C2. Transport	✓
		C3. Waste processing	✓
		C4. Disposal	✓
	Beyond the boundary	**D.** Reuse/recovery	

RESULTS

The product composition, packaging composition, recycled content, recyclability visuals, and life cycle impacts below relate specifically to 0.15m^3 (0.08 units) of the WorkValet™ storage configuration listed above.

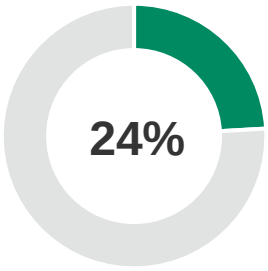
Product composition

Material	Weight (kg)	Weight (%)	Resource Type
Steel	35.72	87.20%	Recycled, Virgin non-renewable
Melamine faced particleboard	3.34	8.14%	Virgin non-renewable
Aluminum	1.63	3.97%	Recycled, Virgin non-renewable
PET	0.18	0.44%	Recycled, Virgin non-renewable
ABS	0.07	0.18%	Virgin non-renewable
30% GF Nylon (6)	0.02	0.05%	Virgin non-renewable
Silicone	0.00	0.01%	Virgin non-renewable
Polypropylene	0.00	0.00%	Virgin non-renewable
Total	40.96	100%	

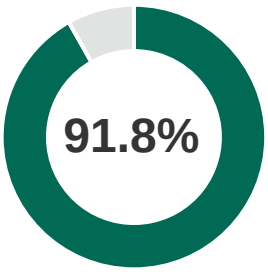
Product packaging composition

Material	Weight (kg)	Weight (%)	Resource Type
Cardboard	3.93	76.34%	Virgin non-renewable
PE Foam	1.01	19.61%	Virgin non-renewable
PE Film	0.21	4.05%	Virgin non-renewable
Total	5.14	100.00%	

Product recycled content* and recyclability** summary



TOTAL RECYCLED CONTENT*



RECYCLABILITY BY WEIGHT**

*Total recycled content based on supplier's data. The source of recycled content of various materials could be either post-industrial or post-consumer based on market availability. Excludes packaging.

**Recyclability: this recyclability rate is the maximum amount of the product that is recyclable, based on the availability of recycling facilities in the specified regions and the ability of the product to be disassembled. Note that, per the requirements of the PCR, the end-of-life results presented in this EPD were calculated using the US EPA's recycling rates within the 2020 Municipal Solid Waste Report for parts that can be disassembled. Excludes packaging

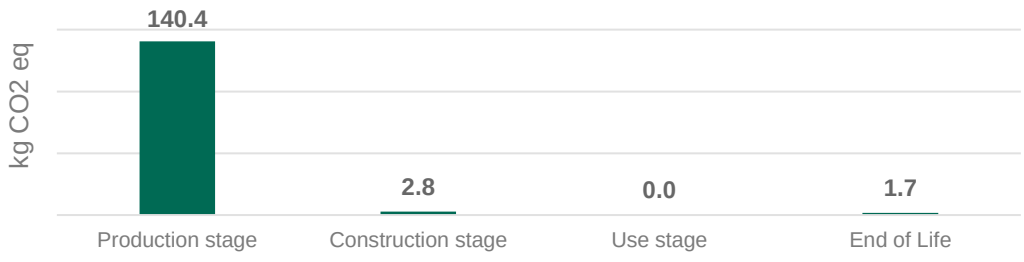
Life cycle impact by category and stage

Environmental impacts were calculated using the GaBi software platform. Impact results according to the BIFMA PCR have been calculated using IPCC 6, TRACI 2.1 characterization factors, as well as LCI indicators for primary energy and water usage. Results presented in this report are for 0.15 m^3 (0.083 units) of a Workvalet™ maintained for 10 years. Additionally, the results are relative expressions and do not predict impacts on category endpoints, the exceeding of thresholds, safety margins, or risks.

		Life cycle stages				
	Unit	A1-A3 **Production stage**	A4-A5 **Construction stage**	B1-B7 **Use Stage**	C1-C4 **End of life stage**	***Totals***
***Global warming potential** (100 years) Warming of the atmosphere caused by the global release of greenhouse gases.	kg CO2 eq	1.40E+02	2.78E+00	0.00E+00	1.74E+00	**1.45E+02**
***Acidification** Emissions that increase the acidity of the environment due to various chemical reactions and/or biological activity, or by natural circumstances.	kg SO2 eq	4.59E-01	3.23E-02	0.00E+00	8.67E-03	**5.00E-01**
***Photochemical ozone creation (Smog)** Through various chemical reactions, which occur between nitrogen oxides (NOx) and volatile organic compounds (VOCs) in sunlight.	kg O3 eq	7.00E+00	5.98E-01	0.00E+00	1.56E-01	**7.76E+00**
***Eutrophication** Enrichment of an aquatic ecosystem with nutrients (nitrates, phosphates) that accelerate biological productivity and an undesirable accumulation of algal biomass.	kg N eq	2.81E-02	1.36E-03	0.00E+00	8.53E-04	**3.03E-02**
***Ozone depletion** Reduction of the stratospheric ozone layer due to anthropogenic emissions of ozone depleting substances.	kg CFC-11 eq	1.53E+03	1.76E+01	0.00E+00	2.05E+01	**1.57E+03**
Primary energy demand Energy consumption at the source.	MJ	2.11E+03	1.95E+01	0.00E+00	2.45E+01	**2.15E+03**
Net freshwater usage Freshwater used and otherwise not recoverable.	kg	1.83E+04	2.86E+00	0.00E+00	1.32E+01	**1.83E+04**
Renewable primary resources used as an energy carrier (RPRe) First use materials from renewable sources with energy content used as a fuel	MJ	2.22E+02	4.77E-01	0.00E+00	2.38E+00	**2.24E+02**
Renewable primary resources used as material (RPRm) First use materials from renewable sources with energy content used as a material	MJ	5.50E+01	0.00E+00	0.00E+00	0.00E+00	**5.50E+01**
Non-renewable primary resources used as an energy carrier First use materials from non-renewable sources with energy content used as a fuel	MJ	1.53E+03	1.76E+01	0.00E+00	2.05E+01	**1.57E+03**
Non-renewable primary resources used as material First use materials from non-renewable sources with energy content used as a material	MJ	6.17E+01	0.00E+00	0.00E+00	0.00E+00	**6.17E+01**
Recovered electrical energy (EEE) Electrical energy recovered from disposal of waste in previous systems	MJ	1.09E-01	1.39E+00	0.00E+00	3.20E-01	**1.82E+00**
Recovered thermal energy (EET) Thermal energy recovered from disposal of waste in previous systems	MJ	1.95E-01	2.51E+00	0.00E+00	3.55E-01	**3.06E+00**

*Methods: TRACI 2.1, IPCC AR6

Global warming potential summary



144.9 kg total CO_2-eq footprint

This EPD was not written to support comparative assertions. EPDs based on different PCRs or different calculation models may not be comparable. When attempting to compare EPDs or life cycle impacts of products from different companies, the user should be aware of the uncertainty in the final results due to and not limited to the practitioner's assumptions, the source of the data used in the study, the specifics of the product modeled, and the software tool used to conduct the study.

ADDITIONAL ENVIRONMENTAL INFORMATION

Indoor air: Steelcase storage products are certified with SCS's Indoor Advantage Gold™ program, conforming to the ANSI/BIFMA Furniture Emissions Standard (M7.1/X7.1-2011 R2021) and CDPH/EHLB Standard Method (CA 01350) v1.2-2017. The certification can be found here.

Improper disposal of product: At the end of its useful life, manage Steelcase products correctly in accordance with all applicable regulations for effective end-of-life management, including recycling, disposal, or incineration. Improper management may result in the release of chemicals that may represent a risk to the environment and human health & safety.

REFERENCES

Life Cycle Assessment, Global Storage. Steelcase Inc. December 2024.

NSF BIFMA Product Category Rule (PCR) for Storage: UNCPC 3812.

NSF Certification Policies for Environmental Product Declarations (EPD). November 1, 2022.

ISO 14025:2006 Environmental Labels and Declarations – Type III Environmental Declarations – Principles and Procedures.

ISO 14040:2006 Environmental Management – Life Cycle Assessment – Principles and Framework, Requirements and Guidelines.

ISO 14044:2006 Environmental Management – Life cycle assessment – Requirements and Guidelines.

ISO 14044: 2006/ Amd 1:2017 Environmental Management – Life cycle assessment – Requirements and Guidelines – Amendment 1.

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