

Amia®

AMERICAS



Certified
Environmental
Product Declaration
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About this product

Amia® brings a refined style to any space, enhanced by precise manual adjustments, two back options and responsive support, Amia® is a versatile best-seller.

One chair is required to meet the functional unit of seating one individual for a 10-year period.

Date of Issue: March 8, 2023
Date of Expiration: March 8, 2028

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.

About this document

This declaration describes the Life Cycle Assessment of the Amia office chair produced for the Americas market by Steelcase Inc. in Reynosa, Mexico. The assessment is performed according to the ISO standards 14040 (2006), 14044 (2006) and 14025 (2006), and BIFMA PCR for Seating: UNCPC 3811 (2020) to generate an EPD for business-to-business and business-to-consumer communication.

ASSESSMENT OVERVIEW

EPD commissioner	Steelcase® Inc
Corporate Address	901 44th Street SE Grand Rapids, Michigan 49508-7594 United States
Product group	Seating
Product name	Amia
Product intended use	Office Chair
Product reference service life	10 years
Reference standards	ISO 14025, ISO 14040, ISO 14044
EPD scope	Cradle to grave
EPD number	EPD10815
Date of issuance	March 8, 2023
Date of expiration	March 8, 2028
EPD type	Product specific
EPD Product Coverage	Amia task chairs for products made in Americas and sold in Americas and APAC, including the following codes: 4821414, 4821412, 4821418, 4821410
Intended audience	Business to business and business to consumer
Year of reported manufacturer data	2021
Functional unit	One unit of seating to seat one individual for a reference service life of 10 years
Applicable markets/regions	Americas
LCA software and database version	GaBi 10.6.2.9; GaBi database, 2022.2
LCIA methodology and version number	TRACI 2.1 and CML 2001-October 2012
Program administrator	NSF Certification LLC 789 N. Dixboro, Ann Arbor, MI 48105 www.nsf.org
Reference PCR and version number	BIFMA PCR for Seating: UNCPC 3811 (BIFMA PCR, 2020)
PCR reviewer	Review Panel Chaired by Dr. Thomas Gloria
EPD reviewer	External review conducted by: Jack Geibig, jgeibig@ecoform.com  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 Seating UNCPC 3811 (2020).
LCA reviewer	External review conducted by: Jack Geibig, jgeibig@ecoform.com  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 seating 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

One unit of seating to seat one individual for a reference service life of 10 years. One product required to fulfill the functional unit.

Product scope

One Amia Chair (product number 4821414) consisting of hard casters, 4D arms, an upholstered back, and an aluminum base was modeled for this EPD. This office chair configuration is determined to be representative of all configurations produced in the Americas and sold in the Americas and APAC regions and is considered to have the highest impacts of all configurations produced in this region, making the results presented in the EPD a conservative estimate for all products listed.



Manufacturing location

Reynosa, Mexico

Product SKUs within the variation allowance

4821414, 4821412, 4821418, 4821410

Applicable markets and regions

Americas




Assessment goal and scope

The potential environmental impacts of Amia 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 Seating: UNCPC 3811 V3. Material acquisition and pre-processing (including transportation), production, distribution, use and end-of-life are assessed for the seating product.

Assessment boundary

The Life Cycle Assessment considers the full life cycle of the product as described here, cradle to grave. Life cycle stages included in this assessment follow the BIFMA PCR for Seating: UNCPC 3811 2020. Life cycle stages and phases are presented according to the PCR for seating.

	Stage	Status	
 <p>Cradle to inbound gate MATERIALS ACQUISITION</p> <p>Raw material extraction, pre-processing and transportation of materials to suppliers.</p>	A1. Raw material supply	✓	
	A2. Transport	✓	
 <p>Gate to gate PRODUCTION PROCESS</p> <p>Transportation of furniture components and materials from Tier 1 suppliers to Steelcase final manufacturing facility. External and internal production.</p>	A3. Manufacturing	✓	
	A4. Transport	✓	
 <p>Gate to grave DISTRIBUTION, USE AND END OF LIFE</p> <p>Distribution of products, installation, use and end of life.</p>	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, and recyclability visuals below relate specifically to the configuration consisting of hard casters, 4D arms, upholstered back, and an aluminum base.

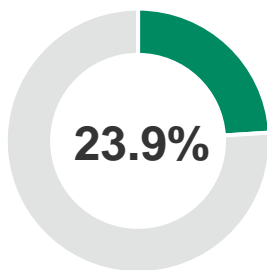
Product composition

Material	Weight (kg)	Weight (%)	Resource Type
Steel	13.377	56.11%	Recycled, Virgin non-renewable
Nylon (PA6 and PA66)	4.318	18.11%	Virgin non-renewable
Aluminum	1.910	8.01%	Recycled, Virgin non-renewable
Polypropylene (PP)	1.628	6.83%	Virgin non-renewable
Polyurethane (PU)	1.599	6.71%	Virgin non-renewable
Polyoxymethylene (POM)	0.747	3.13%	Virgin non-renewable
Other	0.262	1.10%	Virgin non-renewable
Total	23.840	100%	

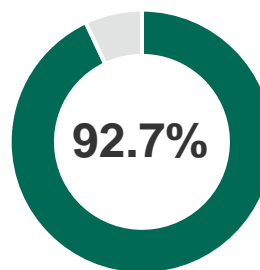
Product packaging composition

Material	Weight (kg)	Weight (%)	Resource Type
Cardboard	10.739	93.79%	Renewable
Linear low-density polyethylene (LLDPE)	0.617	5.39%	Non-renewable
Paper	0.049	0.43%	Renewable
Polyethylene (PE)	0.046	0.40%	Non-renewable
Total	11.450	100%	

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.

**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.

RESULTS

Results for one Amia® Chair with hard casters, 4D arms, an upholstered back, and an aluminum base shown on the subsequent pages.

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 TRACI 2.1 characterization factors, as well as LCI indicators for primary energy and water usage. Results presented in this report are for one seat maintained for one individual 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.

	Unit	Life cycle stages				Totals
		Materials acquisition	Production process	Distribution & Use	End of life	
*Global warming potential (100 years) Warming of the atmosphere caused by the global release of greenhouse gases.	kg CO2 eq	1.01E+02	1.64E+01	1.08E+01	7.21E+00	1.35E+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	2.47E-01	1.50E-01	5.01E-02	1.22E-02	4.59E-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	3.90E+00	2.33E+00	1.16E+00	1.05E-01	7.50E+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	5.18E+00	4.32E+00	8.53E-01	4.52E-01	1.08E+01
*Ozone depletion Reduction of the stratospheric ozone layer due to anthropogenic emissions of ozone depleting substances.	kg CFC-11 eq	1.20E-10	1.40E-10	2.04E-14	4.04E-14	2.60E-10
Primary energy demand Energy consumption at the source.	MJ	1.79E+03	9.03E+02	1.58E+02	2.02E+01	2.87E+03
Net freshwater usage Freshwater used and otherwise not recoverable.	kg	6.06E+02	2.21E+02	2.12E+01	1.39E+01	8.62E+02

*Methods: TRACI 2.1

Global warming potential summary



REFERENCES

Life Cycle Assessment, LCA Report for Steelcase. WAP Sustainability Consulting. November 2022.

NSF BIFMA Product Category Rule (PCR) for Seating: UNCPC 3811, Version 3. September 2020.

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.

Product Category Rule for Environmental Product Declarations, BIFMA PCR for Seating: UNCPC 3811 (ext. 2020-111)

Steelcase®

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Contact
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