

# teknion



## Aarea

### Conference Chair

#### Environmental Product Declaration

Date of Issue: 5/27/2025

Date of Expiration: 5/26/2030

#### PRODUCT CATEGORY RULE

BIFMA PCR for Seating: UNCPC 3811 Version 3

#### FUNCTIONAL UNIT

1 seat for 1 individual, maintained for a 10-year period (1 unit of Aarea Chair). The conference chair configuration was utilized for the purposes of this study and includes the chair configuration with product code BZCVSNKN30E523127A12UST. The Aarea conference chair for which results are presented has a five-star metal base with casters, adjustable height base, knit fabric back and seat upholstery fabric.



**Certified  
Environmental  
Product Declaration**  
[www.nsf.org](http://www.nsf.org)

Program Operator	NSF Certification, LLC 789 N. Dixboro, Ann Arbor, MI 48105 <a href="mailto:sustainability@nsf.org">sustainability@nsf.org</a>	
Manufacturer Name and Address	Teknion Ltd. 1150 Flint Road North York, ON M3J 2J5, Canada	
Declaration Number	EPD11069	
Declared Product and Functional Unit	Aarea conference chair (Product code BZCVSNKN30E523127A12UST) Functional unit: 1 seat for 1 individual, maintained for a 10-year period.	
Reference PCR and Version Number	BIFMA PCR for Seating: UNCPC 3811 Version 3	
Intended Audience	Business-to-Business, Business-to-Consumer	
Product's intended Application and Use	Commercial Furniture	
Product RSL	10 years	
Markets of Applicability	North America	
Date of Issue	5/27/2025	
Period of Validity	5 years from date of issue	
EPD Type	Product Specific	
Range of Dataset Variability	N/A	
EPD Scope	Cradle to Grave	
Year of reported manufacturer primary data	2021	
LCA Software and Version Number	Sphera LCA For Experts (formerly GaBi) 10.9	
LCI Database and Version Number	Sphera MLC (formerly GaBi Database) 2022.1	
LCIA Methodology and Version Number	TRACI 2.1	
The sub-category PCR review was conducted by:	Thomas Gloria, PhD (chair) Jack Geibig, P.E. Michael Overcash, PhD	
<p>This declaration was independently verified in accordance with ISO 14025: 2006. The BIFMA PCR for Office Furniture Seating Products: UNCPC 3811 Version 3 serves as the core PCR.</p> <p><input type="checkbox"/> Internal      <input checked="" type="checkbox"/> External</p>	<p>Jack Geibig – EcoForm <a href="mailto:jgeibig@ecoform.com">jgeibig@ecoform.com</a></p>	
This life cycle assessment was conducted in accordance with ISO 14044 and the reference PCR by:	WAP Sustainability Consulting	
This life cycle assessment was independently verified in accordance with ISO 14044 and the reference PCR by:	<p>Jack Geibig – EcoForm <a href="mailto:jgeibig@ecoform.com">jgeibig@ecoform.com</a></p>	
<p><b>Limitations:</b></p> <p>Environmental declarations from different programs (ISO 14025) may not be comparable. Comparison of the environmental performance of products using EPD information shall be based on the product's use and impacts at the building level, and therefore EPDs may not be used for comparability purposes when not considering the building energy use phase as instructed under this PCR.</p> <p>Full conformance with the PCR allows EPD comparability only when all stages of a life cycle have been considered. However, variations and deviations are possible". Example of variations: Different LCA software and background LCI datasets may lead to differences results for upstream or downstream of the life cycle stages declared.</p>		



## Company Description

Teknion designs, manufactures, and markets workplace interiors. Its products include panel systems, desking systems, private office systems/case goods, seating solutions, architectural products, tables and collaborative spaces, storage products, work better tech products (complements), and textiles. The company's products are used in various applications, including open, collaborative, private, meeting, lounge, learning, next culture, and work couture areas. Teknion was founded in 1981 and is based in Toronto, Canada.

## Product Description

Designed to be as good for people as it is for the planet, Aarea provides a welcoming and familiar structure; ergonomic and adjustable yet still cozy and inclusive. Ingenuity in material selection and construction, Aarea is a product with few components, yet each has invisible intelligence behind it. Despite the conservative use of materials, Aarea delivers the expected performance experience. With Aarea, the first impression is hospitality, while the experience is of intuitive performance.

In developing Aarea, we chose a 3D knit over a traditional PU foam. This means minimized material, no cut-off waste, and the reduction of staples and glue. Using material created from ocean litter, this mélange 3D knit provides invisible ergonomic support through the variety of tensions in the knit – creating a seamless visual while still supporting the occupant's proper posture.

The results presented in this report are representative of the Aarea conference chair with the product code BZCVSNKN30E523127A12UST. The Aarea chair for which results are presented has a five-star metal base with casters, adjustable height base, knit fabric back and seat upholstery fabric.

	Aarea Conference Chair
<b>Product Category</b>	Seating
<b>Number of Occupants</b>	1
<b>Components Included</b>	Metal five-star base with casters, adjustable height base, knit fabric back and seat upholstery
<b>Recycled Content</b>	15.4% pre-consumer, 21.3% post-consumer

## Product Composition

Like many commercial furniture products, Aarea is available in a multitude of configurations. For this particular study, a specific configuration of Aarea conference chair with product code BZCVSNKN30E523127A12UST was modeled. This composition of the configuration is provided in the table below, with a total product weight of 15.1 kg.

Material	Mass %	Material Type*	Material	Mass %	Material Type*
Steel	33%	VNR, R	Polyurethane (PU)	8%	VNR
Aluminum	27%	VNR, R	Polyester Fabric	4%	VNR
Polyamide 6 (PA 6)	14%	R	Polyoxymethylene (POM)	<1%	VNR, R
Polypropylene (PP)	12%	VNR	Other	<1%	VNR, R

\*VNR = virgin non-renewable resource, VR = virgin renewable resource, R = recycled resource

## Selection of Impact Parameters

Environmental Impacts were calculated using the Sphera LCA For Experts (formerly GaBi) software platform. Impact results have been calculated using TRACI 2.1 characterization factors. Results presented in this report are relative expressions and do not predict impacts on category endpoints, the exceeding of thresholds, safety margins, or risks.

Abbreviation	Parameter	Unit
AP	Acidification potential of soil and water	kg N eq.
EP	Eutrophication potential	kg SO <sub>2</sub> eq.
GWP incl bio c	Global warming potential, including biogenic carbon	kg CO <sub>2</sub> eq.
GWP excl bio c	Global warming potential, excluding biogenic carbon	kg CO <sub>2</sub> eq.
ODP	Depletion of stratospheric ozone layer	kg CFC 11 eq.
SFP	Smog formation potential	kg O <sub>3</sub> eq.

In addition to the environmental parameters above, the following resource use and waste categories are also disclosed.

Abbreviation	Parameter	Unit
PED	Total use of renewable and non-renewable primary energy resources	MJ, net calorific value
FW	Net use of fresh water	kg

## LCA Results

All results are given per functional unit, which is 1 seat for 1 individual for a period of 10 years. The product meets testing criteria per ANSI/BIFMA X5.4 and has a reference service life of 10 years. To fulfill the functional unit, 1 unit of product is required.

### TRACI Results for Aarea

Impact Category	Unit	Total	Material Acquisition	Production	Distribution, Storage, and Use	End-of-Life
AP	kg SO <sub>2</sub> -eq	<b>2.50E-01</b>	9.15E-02	1.45E-01	7.18E-03	6.06E-03
EP	kg N-eq	<b>2.30E-02</b>	6.00E-03	1.44E-02	6.39E-04	1.93E-03
GWP incl bio c	kg CO <sub>2</sub> -eq	<b>6.75E+01</b>	3.67E+01	2.47E+01	1.54E+00	4.57E+00
GWP excl bio c	kg CO <sub>2</sub> -eq	<b>7.50E+01</b>	3.67E+01	3.28E+01	1.54E+00	3.95E+00
ODP	kg CFC-11 eq	<b>9.79E-10</b>	5.56E-13	9.78E-10	2.92E-15	3.30E-14
SFP	kg O <sub>3</sub> -eq	<b>3.89E+00</b>	1.57E+00	2.09E+00	1.66E-01	6.37E-02

### LCI Indicators for Aarea

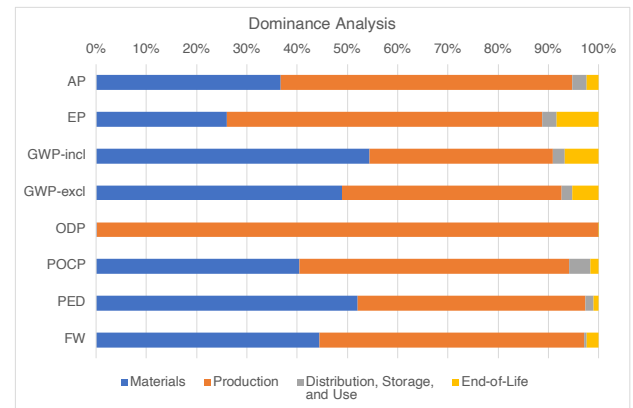
Impact Category	Unit	Total	Material Acquisition	Production	Distribution, Storage, and Use	End-of-Life
PED	MJ	<b>1.43E+03</b>	7.43E+02	6.46E+02	2.26E+01	1.48E+01
FW	kg	<b>5.74E+02</b>	2.55E+02	3.02E+02	3.04E+00	1.36E+01

## Interpretation

A dominance analysis was performed for this product LCA to show which of the life cycle stages contributes to the majority of the impacts. Results are shown for the five TRACI 2.1 impact categories.

Overall, the dominance analysis shows the vast majority of the impacts are coming from the materials and production stages. This tracks with the majority of durable goods similar to Aarea.

An additional dominance analysis was performed to determine the relative impacts of the materials used in the production of Aarea. For most of the LCIA indicators, the materials affecting the results the most are steel, polyamide 6 with glass fiber, aluminum and PET fabric.



## Additional Environmental Information

Teknion is a supporter and/or a participant in the following environmental and sustainability related programs.

- The International Living Future Institute's Declare program. Aarea's label can be found at this [link](#).
- ANSI/BIFMA e3-2014e Furniture Sustainability Standard program. Aarea is certified to Level 3, and the certification can be found at this [link](#).
- Teknion products comply with SCS's Indoor Advantage Gold program. Aarea's certification can be found at [link](#).
- Teknion has been a member of the USGBC since 2016.

Additionally, Teknion publishes a bi-annual Impact Report which is publicly available at <https://teknion-limited.shorthandstories.com/impact-report-3-0/index.html>.

## References

Life Cycle Assessment of Teknion Products: Background Report for LCA/EPD of Seating Products. WAP Sustainability. September 2022. Amendment 1 February 2023. Amendment 24 April 2025.

BIFMA PCR for Seating: UNCPC 3811 Version 3

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.

ISO 14044:2006 Environmental management - Life cycle assessment – Requirements and guidelines.