

Environmental Product Declaration (EPD)
According to ISO 14025 and EN
15804+A2:2019

HEWI accessible products made from a combination of polyamide and metal

Registration number:	EPD-Kiwa-EE-267175-EN
Issue date:	21-07-2026
Valid until:	21-07-2031
Declaration owner:	HEWI Heinrich Wilke GmbH
Publisher:	Kiwa-Ecobility Experts
Programme operator:	Kiwa-Ecobility Experts
Status:	verified

kiwa



HEWI



1 General information

1.1 PRODUCT

HEWI accessible products made from a combination of polyamide and metal

1.2 REGISTRATION NUMBER

EPD-Kiwa-EE-267175-EN

1.3 VALIDITY

Issue date: 21-07-2026

Valid until: 21-07-2031

1.4 PROGRAMME OPERATOR

Kiwa-Ecobility Experts
Wattstraße 11-13
13355 Berlin
DE



Raoul Mancke

(Head of programme operations, Kiwa-Ecobility Experts)



Dr. Ronny Stadie

(Verification body, Kiwa-Ecobility Experts)

1.5 OWNER OF THE DECLARATION

Declaration owner: HEWI Heinrich Wilke GmbH

Address: Prof.-Bier-Straße 1-5, 34454 Bad Arolsen

E-mail: info@hewi.de

Website: www.hewi.com

Production location: HEWI Heinrich Wilke GmbH

Address production location: Hagenstrasse 2, 34454 Bad Arolsen

1.6 VERIFICATION OF THE DECLARATION

The independent verification is in accordance with the ISO 14025:2011. The LCA is in compliance with ISO 14040:2006 and ISO 14044:2006. The EN 15804+A2:2019 serves as the core PCR.

☐ Internal ☒ External



Anni Oviir, LCA Support

1.7 STATEMENTS

The owner of this EPD shall be liable for the underlying information and evidence. The programme operator Kiwa-Ecobility Experts shall not be liable with respect to manufacturer data, life cycle assessment data and evidence.

1.8 PRODUCT CATEGORY RULES

Kiwa-EE GPI R.4.0

Kiwa-Ecobility Experts, General Programme Instructions "Product Level", SOP EE 1203_R.4.0 (18.12.2025)

Kiwa-EE GPI R.4.0 Annex B1

Kiwa-Ecobility Experts, General Programme Instructions "Product Level" – Annex B1 Environmental Information Programme according to EN 15804 / ISO 21930, SOP EE 1203_R.4.0 (18.12.2025)

PCR B

DAPHabitat, PCR – Sanitary Ware [Sanitary facilities and kitchens] – V.1.3 (June 2022)

1 General information

1.9 COMPARABILITY

In principle, a comparison or assessment of the environmental impacts of different products is only possible if they have been prepared in accordance with EN 15804+A2:2019. For the evaluation of the comparability, the following aspects have to be considered in particular: PCR used, functional or declared unit, geographical reference, the definition of the system boundary, declared modules, data selection (primary or secondary data, background database, data quality), scenarios used for use and disposal phases, and the life cycle inventory (data collection, calculation methods, allocations, validity period). PCRs and general program instructions of different EPD program operators may differ. Comparability needs to be evaluated. For further guidance, see EN 15804+A2:2019 and ISO 14025.

1.10 CALCULATION BASIS

LCA method R<THINK: Ecobility Experts | EN15804+A2

LCA software*: Simapro 9.6

Characterization method: RETHINK characterization method (see references for more details)

LCA database profiles: ecoinvent (for version see references)

Version database: v3.20f (20260507)

** Simapro is used for calculating the characterized results of the Environmental profiles within R<THINK.*

1.11 LCA BACKGROUND REPORT

This EPD is generated on the basis of the LCA background report 'HEWI accessible products made from a combination of polyamide and metal' with the calculation identifier ReTHiNK-167175.

2 Product

2.1 PRODUCT DESCRIPTION

This worst-case EPD covers a defined group of sanitary accessories predominantly manufactured from polyamide with a steel core across multiple HEWI series. The HEWI Removable Hanging Seat (801.51.115) from Foldable Series 801, which is a space-saving seating solution designed for shower areas, made of various materials, mainly plastic (PA6 Ultramid, Masterbatch, Elastollan) as well as stainless steel and steel, refers to the worst-case product and is considered in the calculation. It has the largest environmental impact among the declared products and therefore is chosen as representative of the group. The total weight of the HEWI Removable Hanging Seat (801.51.115) is 10.156 kg.

The product is available in folding cartons. All available packaging was used for the LCA calculations based on packaging consumption in 2024. The composition of the product is listed in the following table:

Component	Share (m.-%)
Polyamide	58.11
Stainless steel	22.11
Steel	14.94
Masterbatch	4.08
Remaining materials	0.76

The following products are included in this EPD.

Series	Article group	Article number	Product category
700	700.22...	700.22.00000, 700.22.00100, 700.22.00200, 700.22.00300, 700.22.00400	S700 angled handles
	700.33...	700.33.00200, 700.33.02000, 700.33.02100, 700.33.02200	S700 shower rail
	700.35...	700.35.00000, 700.35.00100, 700.35.00200, 700.35.00300, 700.35.00400, 700.35.00500, 700.35.00600, 700.35.00700	S700 shower
		700.35.03000, 700.35.03100, 700.35.03200, 700.35.03300	handrails

Series	Article group	Article number	Product category
	700.36...	700.36.00000, 700.36.00100, 700.36.00200, 700.36.00300, 700.36.00400, 700.36.00500, 700.36.00600, 700.36.01800, 700.36.01900, 700.36.02000, 700.36.02100, 700.36.02200, 700.36.02300, 700.36.02400, 700.36.02500, 700.36.02600	S700 grab handles
	700.50...	700.50.00100, 700.50.00200, 700.50.00300, 700.50.00400, 700.50.00500, 700.50.00600, 700.50.00700, 700.50.00800, 700.50.00900, 700.50.01000, 700.50.01100, 700.50.01200, 700.50.01300, 700.50.01400, 700.50.01500, 700.50.01600, 700.50.01700, 700.50.01800, 700.50.01900, 700.50.02000, 700.50.02100, 700.50.02200, 700.50.05100, 700.50.05200, 700.50.05300, 700.50.05400, 700.50.05500, 700.50.05600, 700.50.05700, 700.50.05800, 700.50.05900, 700.50.06000, 700.50.10100, 700.50.10200, 700.50.10300, 700.50.10400, 700.50.10500, 700.50.10600, 700.50.10700, 700.50.10800, 700.50.10900, 700.50.11000, 700.50.11100, 700.50.11200, 700.50.11300, 700.50.11400, 700.50.11500, 700.50.11600, 700.50.11700, 700.50.11800, 700.50.11900, 700.50.12000, 700.50.12100, 700.50.12200, 700.50.15100, 700.50.15200, 700.50.15300, 700.50.15400, 700.50.15500, 700.50.15600	S700 folding support handles
		700.50.15700, 700.50.15800, 700.50.15900, 700.50.16000, 700.51.90000, 700.51.90100, 700.51.90200, 700.51.90300	
801	801.22...	801.22.100, 801.22.10050, 801.22.106, 801.22.110, 801.22.11050, 801.22.120, 801.22.130, 801.22.13050, 801.22.136, 801.22.140, 801.22.14050, 801.22.200, 801.22.20050, 801.22.206, 801.22.300, 801.22.400, 801.22.8100, 801.22.8400, 801.22B100, 801.22B106, 801.22B110, 801.22B120, 801.22B130, 801.22B136,	S801 angled handles

2 Product

Series	Article group	Article number	Product category
		801.22B140, 801.22B200, 801.22B206, 801.22B300, 801.22B400, 801.22D100, 801.22D110, 801.22D130, 801.22D140, 801.22D200, 801.22US100, 801.22US110	
	801.33...	801.33.100, 801.33.1000, 801.33.1001, 801.33.10051, 801.33.10054, 801.33.110, 801.33.1100, 801.33.1101, 801.33.1102, 801.33.1103, 801.33.11051, 801.33.11054, 801.33.120, 801.33.12051, 801.33.12054, 801.33.210, 801.33.2100, 801.33.2101, 801.33.21051, 801.33.21054, 801.33.211, 801.33.212, 801.33.216, 801.33.2160, 801.33.2161, 801.33.217, 801.33.218, 801.33.220, 801.33.226, 801.33.2S, 801.33.8120, 801.33.99130, 801.33B100, 801.33B110, 801.33B1103, 801.33B120, 801.33B210, 801.33B216, 801.33B220, 801.33B226, 801.33B2S, 801.33BUS100, 801.33BUS200, 801.33D100, 801.33D110, 801.33D120, 801.33D210, 801.33D220, 801.33US100, 801.33US200	S801 shower holder rail
	801.34...	801.34.019, 801.34.01S, 801.34.020, 801.34.021, 801.34.022, 801.34.02S, 801.34.03S, 801.34.100, 801.34.1061, 801.34.1062, 801.34.110, 801.34.1161, 801.34.1162, 801.34.120, 801.34.1261, 801.34.130, 801.34.140, 801.34.1461, 801.34.1462, 801.34.150, 801.34.1S, 801.34.300, 801.34.310, 801.34.320, 801.34.3S, 801.34.400, 801.34.4S, 801.34.99020, 801.34.99022, 801.34.99100, 801.34.99110, 801.34.99400, 801.34.994S, 801.34B019, 801.34B020, 801.34B021, 801.34B022, 801.34B02S, 801.34B100, 801.34B1061, 801.34B1062, 801.34B110, 801.34B1161, 801.34B1162, 801.34B120, 801.34B1261, 801.34B130, 801.34B140, 801.34B1461, 801.34B1462, 801.34B150, 801.34B1S, 801.34B300,	S801 shower curtain rails

Series	Article group	Article number	Product category
		801.34B310, 801.34B320, 801.34B400, 801.34B4S, 801.34BUS020, 801.34BUS110, 801.34US020, 801.34US100, 801.34US110, 801.34US400, 801.34US410, 801.34US420, 801.34US430	
	801.35...	801.35.100, 801.35.110, 801.35.11050, 801.35.120, 801.35.1S, 801.35.200, 801.35.210, 801.35.21051, 801.35.21054, 801.35.211, 801.35.212, 801.35.216, 801.35.220, 801.35.226, 801.35.230, 801.35.236, 801.35.240, 801.35.246, 801.35.300, 801.35.310, 801.35.3100, 801.35.3101, 801.35.31051, 801.35.31054, 801.35.311, 801.35.312, 801.35.316, 801.35.3160, 801.35.3161, 801.35.317, 801.35.318, 801.35.320, 801.35.3200, 801.35.3201, 801.35.32051, 801.35.32054, 801.35.330, 801.35.340, 801.35.346, 801.35.350, 801.35.360, 801.35.366, 801.35.370, 801.35.376, 801.35.3S, 801.35.410, 801.35.41051, 801.35.41054, 801.35.420, 801.35.42051, 801.35.42054, 801.35.426, 801.35.430, 801.35.43051, 801.35.43054, 801.35.440, 801.35.450, 801.35.460, 801.35.500, 801.35.8110, 801.35B100, 801.35B110, 801.35B120, 801.35B1S, 801.35B200, 801.35B210, 801.35B216, 801.35B220, 801.35B226, 801.35B230, 801.35B240, 801.35B300, 801.35B310, 801.35B3100, 801.35B316, 801.35B320, 801.35B330, 801.35B340, 801.35B346, 801.35B350, 801.35B3S, 801.35B410, 801.35B420, 801.35B430, 801.35B440, 801.35B450, 801.35B460, 801.35B500, 801.35BUS100, 801.35BUS110, 801.35BUS120, 801.35BUS200, 801.35BUS220, 801.35BUS310, 801.35D110, 801.35D210, 801.35D220,	S801 shower handrails

2 Product

Series	Article group	Article number	Product category
		801.35D310, 801.35D320, 801.35D340, 801.35D350, 801.35D410, 801.35D420, 801.35D430, 801.35D440, 801.35D450, 801.35D460, 801.35US100, 801.35US110, 801.35US120, 801.35US200, 801.35US210, 801.35US220, 801.35US310	
		801.36.100, 801.36.1000, 801.36.1001, 801.36.1002, 801.36.1003, 801.36.10050, 801.36.110, 801.36.11050, 801.36.116, 801.36.120, 801.36.12050, 801.36.126, 801.36.130, 801.36.1300, 801.36.1301, 801.36.1302, 801.36.1303, 801.36.13050, 801.36.136, 801.36.140, 801.36.14050, 801.36.150, 801.36.15050, 801.36.160, 801.36.16050, 801.36.170, 801.36.17050, 801.36.8100, 801.36.8110, 801.36B100, 801.36B1000, 801.36B1001, 801.36B1002, 801.36B1003, 801.36B110, 801.36B116, 801.36B120, 801.36B126, 801.36B130, 801.36B1301, 801.36B1302, 801.36B136, 801.36B140, 801.36B150, 801.36B160, 801.36B170, 801.36BUS100, 801.36BUS110, 801.36BUS120, 801.36BUS130, 801.36BUS140, 801.36BUS150, 801.36BUS160, 801.36BUS200, 801.36BUS210, 801.36BUS220, 801.36BUS300, 801.36BUS310, 801.36BUS320, 801.36D100, 801.36D110, 801.36D120, 801.36D130, 801.36D140, 801.36D150, 801.36D160, 801.36D170, 801.36US100, 801.36US110, 801.36US120, 801.36US1250, 801.36US130, 801.36US140, 801.36US150, 801.36US1550, 801.36US160, 801.36US1650, 801.36US200, 801.36US210, 801.36US220, 801.36US300, 801.36US310, 801.36US320	S801 grab handles
	801.36...		
	801.50...		

Series	Article group	Article number	Product category
		801.50.100, 801.50.1000, 801.50.1001, 801.50.1002, 801.50.101, 801.50.106, 801.50.107, 801.50.108, 801.50.110, 801.50.1100, 801.50.111, 801.50.116, 801.50.117, 801.50.118, 801.50.120, 801.50.1200, 801.50.1201, 801.50.1202, 801.50.121, 801.50.125S, 801.50.126, 801.50.127, 801.50.128, 801.50.130, 801.50.131, 801.50.134S, 801.50.135S, 801.50.136, 801.50.137, 801.50.138, 801.50.140, 801.50.141, 801.50.145S, 801.50.146, 801.50.147, 801.50.148, 801.50.200, 801.50.2000, 801.50.2001, 801.50.2002, 801.50.201, 801.50.206, 801.50.207, 801.50.208, 801.50.210, 801.50.2100, 801.50.211, 801.50.215S, 801.50.216, 801.50.217, 801.50.218, 801.50.220, 801.50.2200, 801.50.221, 801.50.226, 801.50.227, 801.50.228, 801.50.230, 801.50.231, 801.50.234S, 801.50.236, 801.50.237, 801.50.238, 801.50.240, 801.50.241, 801.50.246, 801.50.247, 801.50.248, 801.50.300, 801.50.3000, 801.50.3001, 801.50.3002, 801.50.3003, 801.50.3004, 801.50.301, 801.50.310, 801.50.311, 801.50.320, 801.50.321, 801.50.340, 801.50.341, 801.50.500, 801.50.501, 801.50.505, 801.50.510, 801.50.511, 801.50.515, 801.50.520, 801.50.525, 801.50.550, 801.50.551, 801.50.560, 801.50.561, 801.50.570, 801.50.700, 801.50.701, 801.50.705, 801.50.710, 801.50.711, 801.50.715, 801.50.720, 801.50.725, 801.50.750, 801.50.751, 801.50.760, 801.50.761, 801.50.770, 801.50B100, 801.50B1000, 801.50B101, 801.50B106, 801.50B107, 801.50B108, 801.50B110, 801.50B111, 801.50B116, 801.50B117, 801.50B118, 801.50B120, 801.50B121,	S801 folding support handles

2 Product

Series	Article group	Article number	Product category
		801.50B125S, 801.50B126, 801.50B127, 801.50B128, 801.50B130, 801.50B131, 801.50B134S, 801.50B135S, 801.50B136, 801.50B137, 801.50B138, 801.50B140, 801.50B141, 801.50B145S, 801.50B146, 801.50B147, 801.50B148, 801.50B200, 801.50B2000, 801.50B2001, 801.50B2002, 801.50B201, 801.50B206, 801.50B207, 801.50B208, 801.50B210, 801.50B211, 801.50B215S, 801.50B216, 801.50B217, 801.50B218, 801.50B220, 801.50B2200, 801.50B221, 801.50B226, 801.50B227, 801.50B228, 801.50B230, 801.50B231, 801.50B234S, 801.50B236, 801.50B237, 801.50B238, 801.50B240, 801.50B241, 801.50B246, 801.50B247, 801.50B248, 801.50B300, 801.50B301, 801.50B310, 801.50B311, 801.50B320, 801.50B321, 801.50B340, 801.50B341, 801.50B500, 801.50B501, 801.50B505, 801.50B510, 801.50B511, 801.50B515, 801.50B520, 801.50B525, 801.50B550, 801.50B551, 801.50B560, 801.50B561, 801.50B570, 801.50B700, 801.50B701, 801.50B705, 801.50B710, 801.50B711, 801.50B715, 801.50B720, 801.50B725, 801.50B750, 801.50B751, 801.50B760, 801.50B761, 801.50B770, 801.50D100, 801.50D107, 801.50D110, 801.50D117, 801.50D120, 801.50D127, 801.50D130, 801.50D137, 801.50D140, 801.50D147, 801.50D200, 801.50D207, 801.50D210, 801.50D217, 801.50D220, 801.50D227, 801.50D230, 801.50D237, 801.50D240, 801.50D247, 801.50D300, 801.50D310, 801.50D320, 801.50D340	
	801.51...		

Series	Article group	Article number	Product category
		801.51.100, 801.51.106, 801.51.110, 801.51.115, 801.51.116, 801.51.200, 801.51.2000, 801.51.2001, 801.51.2002, 801.51.202S, 801.51.203S, 801.51.207, 801.51.207S, 801.51.210, 801.51.2100, 801.51.217, 801.51.300, 801.51.306, 801.51.900, 801.51.901, 801.51.9061, 801.51.9062, 801.51.9063, 801.51.9071, 801.51.9072, 801.51.9073, 801.51.910, 801.51.911, 801.51.9121, 801.51.9122, 801.51.9123, 801.51.9131, 801.51.9132, 801.51.9133, 801.51.9161, 801.51.9162, 801.51.9163, 801.51.9171, 801.51.9172, 801.51.9173, 801.51.920L, 801.51.920R, 801.51.9261L, 801.51.9261R, 801.51.9262L, 801.51.9262R, 801.51.9263L, 801.51.9263R, 801.51.9271L, 801.51.9271R, 801.51.9272L, 801.51.9272R, 801.51.9273L, 801.51.9273R, 801.51B100, 801.51B110, 801.51B200, 801.51B2001, 801.51B2002, 801.51B202S, 801.51B203S, 801.51B210, 801.51B2100, 801.51B300, 801.51B900, 801.51B9061, 801.51B9062, 801.51B9063, 801.51B9071, 801.51B9072, 801.51B9073, 801.51B910, 801.51B9161, 801.51B9162, 801.51B9163, 801.51B9171, 801.51B9172, 801.51B9173, 801.51B920L, 801.51B920R, 801.51B9261L, 801.51B9261R, 801.51B9262L, 801.51B9262R, 801.51B9263L, 801.51B9263R, 801.51B9271L, 801.51B9271R, 801.51B9272L, 801.51B9272R, 801.51B9273L, 801.51B9273R, 801.51BCH110, 801.51BFR101, 801.51CH110, 801.51D100, 801.51D110, 801.51D200, 801.51D210, 801.51D300, 801.51D900, 801.51D910, 801.51D920L, 801.51D920R, 801.51DCH110, 801.51FR101	S801 seats/ backrests
	801.52...		

2 Product

Series	Article group	Article number	Product category
950	950.22...	801.52.10001, 801.52.10030, 801.52.10038, 801.52.10039, 801.52.10040, 801.52.20080, 801.52B10041, 801.52B20080	S801 shower splash guards
		950.22.10050, 950.22.10090, 950.22.10091, 950.22.10099, 950.22.11050, 950.22.11090, 950.22.11091, 950.22.11099, 950.22.13050, 950.22.13090, 950.22.13091, 950.22.13099, 950.22.14050, 950.22.14090, 950.22.14091, 950.22.14099, 950.22.20050, 950.22.20090, 950.22.20091, 950.22.20099	S800K/ Warmtouch angled handles
		950.33.10051, 950.33.10054, 950.33.10090, 950.33.10091, 950.33.10099, 950.33.11051, 950.33.11054, 950.33.11090, 950.33.11091, 950.33.11099, 950.33.12051, 950.33.12054, 950.33.12090, 950.33.12091, 950.33.12099, 950.33.20051, 950.33.20054, 950.33.21051, 950.33.21054, 950.33.21090, 950.33.21091, 950.33.21099, 950.33.22051, 950.33.22054, 950.33.22090, 950.33.22091, 950.33.22099, 950.33.23051, 950.33.23054, 950.33.24051, 950.33.24054	S800K/ Warmtouch shower holder rails
950	950.35...	950.35.11050, 950.35.11090, 950.35.11091, 950.35.11099, 950.35.12050, 950.35.13050, 950.35.21051, 950.35.21054, 950.35.21090, 950.35.21091, 950.35.21099, 950.35.22051, 950.35.22054, 950.35.22090, 950.35.22091, 950.35.22099, 950.35.23051, 950.35.23054, 950.35.23090, 950.35.23091, 950.35.23099, 950.35.24051, 950.35.24054, 950.35.24090, 950.35.24091, 950.35.24099, 950.35.31051, 950.35.31054, 950.35.31090, 950.35.31091, 950.35.31099, 950.35.32051, 950.35.32054, 950.35.32090, 950.35.32091, 950.35.32099, 950.35.33051, 950.35.33054, 950.35.33090, 950.35.33091, 950.35.33099, 950.35.34051, 950.35.34054,	S800K/ Warmtouch shower handrails

Series	Article group	Article number	Product category
950	950.35...	950.35.34090, 950.35.34091, 950.35.34099, 950.35.41051, 950.35.41054, 950.35.41090, 950.35.41091, 950.35.41099, 950.35.42051, 950.35.42054, 950.35.42090, 950.35.42091, 950.35.42099, 950.35.43051, 950.35.43054, 950.35.43090, 950.35.43091, 950.35.43099, 950.35.44051, 950.35.44054, 950.35.44090, 950.35.44091, 950.35.44099, 950.35.45051, 950.35.45054, 950.35.45090, 950.35.45091, 950.35.45099, 950.35.46051, 950.35.46054, 950.35.46090, 950.35.46091, 950.35.46099	
		950.36.10050, 950.36.10090, 950.36.10091, 950.36.10099, 950.36.11050, 950.36.11090, 950.36.11091, 950.36.11099, 950.36.13050, 950.36.13090, 950.36.13091, 950.36.13099, 950.36.14050, 950.36.14090, 950.36.14091, 950.36.14099, 950.36.33090, 950.36.33091, 950.36.33099, 950.36US1190, 950.36US1390, 950.36US1490, 950.36US1590	S800K/ Warmtouch grab rails
		950.50.01050, 950.50.01090, 950.50.01150, 950.50.01290, 950.50.11050, 950.50.11090, 950.50.11091, 950.50.11099, 950.50.11150, 950.50.11190, 950.50.11191, 950.50.11199, 950.50.12050, 950.50.12090, 950.50.12091, 950.50.12099, 950.50.12150, 950.50.12190, 950.50.12191, 950.50.12199, 950.50.13050, 950.50.13090, 950.50.13091, 950.50.13099, 950.50.13150, 950.50.13190, 950.50.13191, 950.50.13199, 950.50.14050, 950.50.14090, 950.50.14091, 950.50.14099, 950.50.61040, 950.50.61140, 950.50.62040, 950.50.62140, 950.50.63040, 950.50.63140, 950.50.64040	S800K/ Warmtouch folding support handles

2 Product

2.2 APPLICATION (INTENDED USE OF THE PRODUCT)

HEWI Removable Hanging Seat (801.51.115) is designed for use in bathrooms, especially showers. It provides a seat for persons with and without physical disabilities during showering.

2.3 REFERENCE SERVICE LIFE

RSL PRODUCT

Since the scope of the study does not consider the entire life cycle of the product, the indication of the reference service life (RSL) is voluntary. According to the manufacturer, the RSL of HEWI Removable hanging seat is 20 years.

USED RSL (YR) IN THIS LCA CALCULATION:

20

2.4 TECHNICAL DATA

HEWI Removable Hanging Seat (801.51.115), Foldable Series 801

Parameter	Value
Piece weight (including packagings)	10.156 kg / piece
Construction	Bars, seat and back slats
Function	Removable shower seat with space-saving fold-up mechanism
Mounting compatibility	For attaching to shower handrails & grab rails
Compatible rod diameters	30 mm, 32 mm, 33 mm
Dimensions (overall)	450 mm (W) × 474 mm (H) × 504 mm (D)
Seat dimensions	450 mm (W) × 358 mm (D)
Seat element width	60 mm
Material	Matt polyamide with corrosion-resistant steel core

Parameter	Value
Available colours (HEWI)	99 Pure white, 98 Signal white, 97 Light grey, 95 Stone grey, 92 Anthracite grey
Load testing	Tested up to 200 kg
Recommended max. user weight	150 kg
Additional information	Combination options with grab rails, angled rails and shower handrails available in the online catalogue (download area of corresponding product).

2.5 SUBSTANCES OF VERY HIGH CONCERN

This product contains no substance listed in the candidate list exceeding 0.1 % by mass.

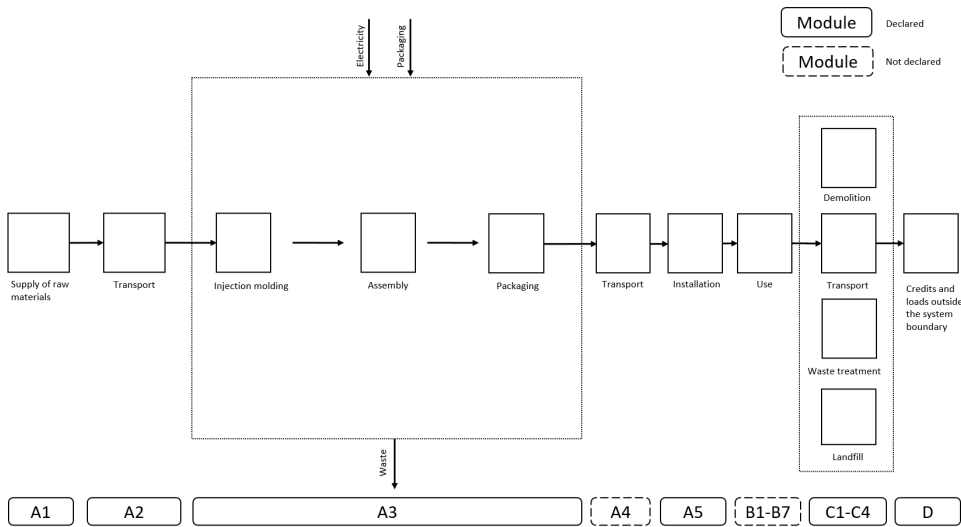
2.6 DESCRIPTION PRODUCTION PROCESS

The 801.51.115 Removable hanging seat, foldable is made of various materials, mainly plastic (PA6 Ultramid, Masterbatch, Elastollan) as well as stainless steel and steel. These raw materials are first manufactured at the respective production sites and then transported by truck to the processing plants.

The plastic components are manufactured using injection molding. The plastic granules are melted using electricity, injected into molds, and removed from the molds after cooling. This process produces sprues and start-up scrap, some of which can be recycled. At the same time, the stainless steel and steel parts are machined and prepared for final assembly.

All the individual parts of the electrically operated assembly devices are then joined together and assembled into a complete seat. After a quality control check, the finished product is packaged.

2 Product



2.7 CONSTRUCTION DESCRIPTION

The HEWI Removable hanging seat is installed manually.

3 Calculation rules

3.1 DECLARED UNIT

One piece

One piece of sanitary product (HEWI Removable hanging seat 801.51.115) is selected as the declared unit.

Reference unit: piece (p)

3.2 CONVERSION FACTORS

Description	Value	Unit
Reference unit	1	p
Weight per reference unit	7.030	kg
Conversion factor to 1 kg	0.142253	p

3.3 SCOPE OF DECLARATION AND SYSTEM BOUNDARIES

This is a Cradle to gate with options EPD. The life cycle stages included are as shown below:

(X = module included, ND = module not declared)

A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
X	X	X	ND	X	ND	ND	ND	ND	ND	ND	ND	X	X	X	X	X

The modules of the EN 15804 contain the following:

Module A1 = Raw material supply	Module B5 = Refurbishment
Module A2 = Transport	Module B6 = Operational energy use
Module A3 = Manufacturing	Module B7 = Operational water use
Module A4 = Transport	Module C1 = De-construction / Demolition
Module A5 = Construction - Installation process	Module C2 = Transport
Module B1 = Use	Module C3 = Waste Processing
Module B2 = Maintenance	Module C4 = Disposal
Module B3 = Repair	Module D = Benefits and loads beyond the product system boundaries
Module B4 = Replacement	

3.4 REPRESENTATIVENESS

This EPD is representative for HEWI accessible products made from a combination of polyamide and metal, products of HEWI Heinrich Wilke GmbH. The results of this EPD are representative of the European Union.

3.5 CUT-OFF CRITERIA

For each unit process, the cut-off criteria of 1% of renewable and non-renewable primary energy usage and 1% of the total mass input of that unit process are complied with. The total neglected input flows do not exceed the limit of 5% of energy use and mass.

3 Calculation rules

Product stage (A1-A3)

All input flows (e.g. raw materials, transportation, energy use, packaging, etc.) and output flows (e.g. production waste) are considered in this LCA.

Construction process stage (A5)

All input flows (e.g. transportation to the construction site, additional raw material use for construction, installation energy (use) of energy use for assembly, etc.) and output flows (e.g. construction waste, packaging waste, etc.) are considered in this LCA. Module A4 is not declared in the EPD.

End of life stage (C1-C4)

All input flows (e.g. energy use for demolition or disassembly, transport to waste processing, etc.) and output flows (e.g. end-of-life waste processing of the product, etc.) are considered in this LCA. Demolition of the product is accomplished using hand tools with no associated emissions and negligible impacts.

Benefits and loads beyond the system boundary (Module D)

All benefits and loads beyond the system boundary resulting from reusable products, recyclable materials and/or useful energy carriers leaving the product system are considered in this LCA.

The following processes are excluded:

- Manufacturing of equipment used in production, buildings or any other capital asset
- Water and electricity consumption for the building
- Transportation of personnel to the plant
- Transportation of personnel within the plant
- Research and development activities
- Long-term emissions

3.6 ALLOCATION

The energy consumption is calculated based on the total consumption at the production site in 2024 (for all products manufactured) and converted into the amount used solely for the production of the declared product. The amount of energy is given per kg of product manufactured.

No allocation is performed with regard to the use of secondary materials or fuels, co-products, plant-specific production processes or multi-input systems. The polluter pays principle applies to the use of waste as a substitute for primary fuels or materials.

3.7 DATA COLLECTION & REFERENCE PERIOD

All process-specific data are collected for the reference year 2024 (01.01.2024 - 31.12.2024).

3.8 ESTIMATES AND ASSUMPTIONS

For all raw materials used (raw materials, operating materials, packaging), the transportation distance is recorded. A payload factor of 50% is used for all truck transports (suppliers, disposal transports and internal transports), which corresponds to a full delivery and empty return journey.

Excluded are the manufacturing of capital equipment, construction undertakings, and infrastructure development, along with the maintenance and operation of capital equipment. Additionally, activities related to personnel, as well as energy and water consumption associated with company management and sales, are also excluded.

The scenarios included are currently in use and are representative of one of the most likely scenario alternatives.

3.9 DATA QUALITY

The data are based on the annual average. Generic datasets from the ecoinvent database V3.9.1 are used for the secondary data, which refers to reference year 2022. This database is regularly maintained and meets the requirements of EN 15804+A2 (background data not older than 10 years). All consistent datasets contained in the ecoinvent database are documented and can be viewed in the online ecoinvent documentation. In the operating data survey all relevant process-specific data could be collected.

The quality of the data used for this EPD can be divided into three categories (time-related coverage, geographical coverage and technology coverage) according to the criteria of the UN Global Environmental Guideline on LCA database development (as described in EN 15804+A2).

Temporal representativeness

The primary foreground data are based on the annual average for the year 2024, reflecting the actual production conditions at HEWI Heinrich Wilke GmbH. Secondary background data are taken from ecoinvent v3.9.1, which has a reference year of 2022 and is updated regularly. All background datasets are younger than 10 years, meeting the requirements of

3 Calculation rules

EN 15804+A2 and EN 15941 (maximum age ≤ 10 years; newly collected data ≤ 3 years). Therefore, the temporal representativeness is considered “good”.

Geographical representativeness

The primary data represent the production processes at the manufacturer’s site in Germany. The ecoinvent background data reflect the geographical regions where the respective processes typically occur. Geographical representativeness is judged “good” for the studied system.

Technological representativeness

The primary data reflect the actual technologies used in the 2024 production processes, including machinery, energy systems, and material flows. Background datasets represent average or typical technologies in the relevant regions (consistent with EN 15941). Technological representativeness is considered “good”.

Aspect	Data quality assessment
Time-related coverage	Primary data represent 2024; secondary data <10 years old (ecoinvent 3.9.1, 2022)
Geographical coverage	Most of the datasets selected for the LCA refer to Europe as the geographical reference.
Technology coverage	The life cycle assessment represents data from processes and products with similar technology.
Completeness	

Aspect	Data quality assessment
	Specific data are compared with literature data. Simple plausibility checks (e.g. mass or energy balances) are performed.
Representativeness	The data fulfill the defined time-related, geographical, and technological scope.
Precision	As far as possible, representative data are used. The data originate from reliable sources, and references are provided.
Reproducibility	Information on the method and the data used (reference sources) is provided.
Sources of data	The data originate from reliable sources, and references are provided.

Therefore, the overall data quality for this EPD can be described as “good”.

3.10 POWER MIX

The use of green electricity is included in the calculation of the environmental impacts, which is based on the purchased electricity mix, referring to the market-based approach. The share of green electricity with guarantees of origin in total electricity consumption is 100% (hydropower from Norway). The GWP-total of the electricity is calculated at 0.04554 kg CO2 eqv./kWh.

4 Scenarios and additional technical information

4.1 ASSEMBLY (A5)

The following information describes the scenarios for flows entering the system and flows leaving the system at module A5.

FLOWS ENTERING THE SYSTEM

There are no significant environment impacts as a result of materials or energy used in the construction stage (A5).

FLOWS LEAVING THE SYSTEM

The following output flows leaving the system at module A5 are assumed.

Description	Value	Unit
Output materials as result of loss during construction	0	%
Output materials as result of waste processing of materials used for installation/assembly at the building site	0.000	kg
Output materials as result of waste processing of used packaging	3.126	kg

4.2 DE-CONSTRUCTION, DEMOLITION (C1)

No inputs are needed for the product at the de-construction / demolition phase

4.3 TRANSPORT END-OF-LIFE (C2)

The following distances and transport conveyance are assumed for transportation during end of life for the different types of waste processing.

Waste Scenario	Transport conveyance	Not removed (stays in work) [km]	Landfill [km]	Incineration [km]	Recycling [km]	Re-use [km]
(ei3.9.1) Metals, others (i.a. fasteners, fittings) (NMD ID 50)	(ei3.9.1) Lorry (Truck), unspecified (default) market group for (GLO)	0	100	150	50	50
(ei3.9.1) finishes (adhered to wood, plastic, metal) (NMD ID 2)	(ei3.9.1) Lorry (Truck), unspecified (default) market group for (GLO)	0	100	150	50	50
(ei3.9.1) elastomeres (i.a. epdm) (i.a. roofing, foils) (NMD ID 20)	(ei3.9.1) Lorry (Truck), unspecified (default) market group for (GLO)	0	100	150	50	50
(ei3.9.1) Steel, light (NMD ID 73)	(ei3.9.1) Lorry (Truck), unspecified (default) market group for (GLO)	0	100	150	50	50

4 Scenarios and additional technical information

Waste Scenario	Transport conveyance	Not removed (stays in work) [km]	Landfill [km]	Incineration [km]	Recycling [km]	Re-use [km]
(ei3.9.1) Corrugated board / Core board (PEF scenario) (u=10%, glue=2%) corr. acc. EN16449	(ei3.9.1) Lorry (Truck), unspecified (default) market group for (GLO)	0	100	150	50	50
(ei3.9.1) plastics, via residue (NMD ID 43)	(ei3.9.1) Lorry (Truck), unspecified (default) market group for (GLO)	0	100	150	50	50

The transport conveyance(s) used in the scenario(s) for transport during end of life has the following characteristics.

	Value and unit
Vehicle type used for transport	(ei3.9.1) Lorry (Truck), unspecified (default) market group for (GLO)
Fuel type and consumption of vehicle	not available
Capacity utilisation (including empty returns)	50 % (loaded up and return empty)
Bulk density of transported products	inapplicable
Volume capacity utilisation factor	1

4.4 END OF LIFE (C3, C4)

The scenario(s) assumed for end of life of the product are given in the following tables. First the assumed percentages per type of waste processing are displayed, followed by the assumed amounts.

Waste Scenario	Region	Not removed (stays in work) [%]	Landfill [%]	Incineration [%]	Recycling [%]	Re-use [%]
(ei3.9.1) Metals, others (i.a. fasteners, fittings) (NMD ID 50)	NL	0	5	5	90	0
(ei3.9.1) finishes (adhered to wood, plastic, metal) (NMD ID 2)	NL	0	0	100	0	0
(ei3.9.1) elastomeres (i.a. epdm) (i.a. roofing, foils) (NMD ID 20)	NL	0	10	85	5	0
(ei3.9.1) Steel, light (NMD ID 73)	NL	0	1	0	87	12
(ei3.9.1) Corrugated board / Core board (PEF scenario) (u=10%, glue=2%) corr. acc. EN16449	NL	0	0	25	75	0
(ei3.9.1) plastics, via residue (NMD ID 43)	NL	0	20	80	0	0

4 Scenarios and additional technical information

Waste Scenario	Not removed (stays in work) [kg]	Landfill [kg]	Incineration [kg]	Recycling [kg]	Re-use [kg]
(ei3.9.1) Metals, others (i.a. fasteners, fittings) (NMD ID 50)	0.000	0.060	0.060	1.084	0.000
(ei3.9.1) finishes (adhered to wood, plastic, metal) (NMD ID 2)	0.000	0.000	0.287	0.000	0.000
(ei3.9.1) elastomeres (i.a. epdm) (i.a. roofing, foils) (NMD ID 20)	0.000	0.003	0.025	0.002	0.000
(ei3.9.1) Steel, light (NMD ID 73)	0.000	0.010	0.000	0.913	0.126
(ei3.9.1) Corrugated board / Core board (PEF scenario) (u=10%, glue=2%) corr. acc. EN16449	0.000	0.000	0.087	0.263	0.000
(ei3.9.1) plastics, via residue (NMD ID 43)	0.000	0.822	3.287	0.000	0.000
Total	0.000	0.895	3.747	2.261	0.126

4.5 BENEFITS AND LOADS BEYOND THE SYSTEM BOUNDARY (D)

The presented Benefits and loads beyond the system boundary in this EPD are based on the following calculated Net output flows in kilograms and Energy recovery displayed in MJ Lower Heating Value.

Waste Scenario	Net output flow [kg]	Energy recovery [MJ]
(ei3.9.1) Metals, others (i.a. fasteners, fittings) (NMD ID 50)	1.084	0.000
(ei3.9.1) finishes (adhered to wood, plastic, metal) (NMD ID 2)	0.000	6.716
(ei3.9.1) elastomeres (i.a. epdm) (i.a. roofing, foils) (NMD ID 20)	0.002	0.693
(ei3.9.1) Steel, light (NMD ID 73)	0.913	0.000
(ei3.9.1) Corrugated board / Core board (PEF scenario) (u=10%, glue=2%) corr. acc. EN16449	0.263	0.000
(ei3.9.1) plastics, via residue (NMD ID 43)	0.000	101.193
Total	2.261	108.603

5 Results

For the impact assessment long-term emissions (>100 years) are not considered. The results of the impact assessment are only relative statements that do not make any statements about end-points of the impact categories, exceedance of threshold values, safety margins or risks. The following tables show the results of the indicators of the impact assessment, of the use of resources as well as of waste and other output flows.

5.1 ENVIRONMENTAL IMPACT INDICATORS PER PIECE

CORE ENVIRONMENTAL IMPACT INDICATORS EN 15804+A2

Abbr.	Unit	A1	A2	A3	A1-A3	A5	C1	C2	C3	C4	D
GWP-total	kg CO ₂ eq.	5.34E+1	4.33E-1	-2.50E+0	5.14E+1	5.37E+0	0.00E+0	1.15E-1	1.01E+1	9.20E-2	-6.78E+0
GWP-f	kg CO ₂ eq.	5.32E+1	4.32E-1	2.38E+0	5.60E+1	4.00E-1	0.00E+0	1.14E-1	9.51E+0	9.20E-2	-6.78E+0
GWP-b	kg CO ₂ eq.	1.86E-1	1.30E-4	-4.90E+0	-4.71E+0	4.97E+0	0.00E+0	3.73E-5	5.75E-1	4.90E-5	2.89E-3
GWP-luluc	kg CO ₂ eq.	1.40E-2	1.32E-3	1.56E-2	3.09E-2	2.07E-4	0.00E+0	4.08E-4	8.14E-4	7.79E-6	-1.47E-3
ODP	kg CFC 11 eq.	2.59E-7	7.47E-9	1.48E-6	1.75E-6	1.24E-8	0.00E+0	2.04E-9	2.39E-7	2.49E-10	-3.30E-7
AP	mol H ⁺ eq.	2.25E-1	4.08E-3	1.54E-2	2.44E-1	1.23E-3	0.00E+0	5.48E-4	3.75E-3	7.64E-5	-1.05E-2
EP-fw	kg P eq.	1.15E-3	3.82E-6	1.78E-4	1.34E-3	3.29E-6	0.00E+0	1.14E-6	2.44E-5	1.58E-7	1.03E-4
EP-m	kg N eq.	4.77E-2	1.24E-3	4.76E-3	5.37E-2	4.83E-4	0.00E+0	2.08E-4	1.08E-3	6.48E-5	-2.78E-3
EP-T	mol N eq.	4.85E-1	1.35E-2	4.43E-2	5.43E-1	5.15E-3	0.00E+0	2.22E-3	1.21E-2	3.02E-4	-4.01E-2
POCP	kg NMVOC eq.	1.72E-1	4.12E-3	1.40E-2	1.90E-1	1.72E-3	0.00E+0	7.58E-4	3.44E-3	1.25E-4	-2.21E-2
ADP-mm	kg Sb-eq.	5.50E-4	1.18E-6	1.70E-5	5.68E-4	8.69E-7	0.00E+0	3.58E-7	3.97E-6	2.26E-8	3.43E-6
ADP-f	MJ	6.63E+2	6.02E+0	3.50E+1	7.04E+2	2.32E+0	0.00E+0	1.64E+0	6.20E+0	2.29E-1	-9.20E+1
WDP	m ³ world eq.	1.51E+1	2.97E-2	1.04E+0	1.62E+1	3.03E-2	0.00E+0	8.95E-3	3.95E-1	9.05E-3	-2.77E+0

GWP-total=Global Warming Potential total (GWP-total) | **GWP-f**=Global Warming Potential fossil fuels (GWP-fossil) | **GWP-b**=Global Warming Potential biogenic (GWP-biogenic) | **GWP-luluc**=Global Warming Potential land use and land use change (GWP-luluc) | **ODP**=Depletion potential of the stratospheric ozone layer (ODP) | **AP**=Acidification potential, Accumulated Exceedance (AP) | **EP-fw**=Eutrophication potential, fraction of nutrients reaching freshwater end compartment (EP-freshwater) | **EP-m**=Eutrophication potential, fraction of nutrients reaching marine end compartment (EP-marine) | **EP-T**=Eutrophication potential, Accumulated Exceedance (EP-terrestrial) | **POCP**=Formation potential of tropospheric ozone (POCP) | **ADP-mm**=Abiotic depletion potential for non fossil resources (ADP mm) | **ADP-f**=Abiotic depletion for fossil resources potential (ADP fossil) | **WDP**=Water (user) depreciation potential, deprivation-weighted water consumption (WDP)

5 Results

ADDITIONAL ENVIRONMENTAL IMPACT INDICATORS EN 15804+A2

Abbr.	Unit	A1	A2	A3	A1-A3	A5	C1	C2	C3	C4	D
PM	disease incidence	2.74E-6	3.71E-8	2.87E-7	3.06E-6	2.07E-8	0.00E+0	1.13E-8	3.28E-8	1.61E-9	-2.19E-7
IR	kBq U235 eq.	5.74E-1	2.17E-3	9.03E-2	6.66E-1	3.09E-3	0.00E+0	6.39E-4	2.12E-2	1.41E-4	2.08E-2
ETP-fw	CTUe	9.27E+1	4.20E+0	1.43E+1	1.11E+2	5.24E+0	0.00E+0	1.21E+0	1.02E+2	1.23E+0	1.33E+1
HTP-c	CTUh	8.37E-8	2.21E-10	1.44E-9	8.54E-8	4.16E-10	0.00E+0	6.06E-11	2.46E-9	6.71E-12	1.81E-8
HTP-nc	CTUh	3.22E-7	4.33E-9	2.75E-8	3.54E-7	3.07E-9	0.00E+0	1.32E-9	1.91E-8	2.65E-10	1.56E-7
SQP	Pt	8.21E+1	4.05E+0	3.87E+2	4.73E+2	8.91E-1	0.00E+0	1.29E+0	1.75E+0	5.17E-1	-2.05E+2

PM=Potential incidence of disease due to PM emissions (PM) | **IR**=Potential Human exposure efficiency relative to U235 (IRP) | **ETP-fw**=Potential Comparative Toxic Unit for ecosystems (ETP-fw) | **HTP-c**=Potential Comparative Toxic Unit for humans (HTP-c) | **HTP-nc**=Potential Comparative Toxic Unit for humans (HTP-nc) | **SQP**=Potential soil quality index (SQP)

CLASSIFICATION OF DISCLAIMERS TO THE DECLARATION OF CORE AND ADDITIONAL ENVIRONMENTAL IMPACT INDICATORS

ILCD classification	Indicator	Disclaimer
ILCD type / level 1	Global warming potential (GWP)	None
	Depletion potential of the stratospheric ozone layer (ODP)	None
	Potential incidence of disease due to PM emissions (PM)	None
ILCD type / level 2	Acidification potential, Accumulated Exceedance (AP)	None
	Eutrophication potential, Fraction of nutrients reaching freshwater end compartment (EP-freshwater)	None
	Eutrophication potential, Fraction of nutrients reaching marine end compartment (EP-marine)	None
	Eutrophication potential, Accumulated Exceedance (EP-terrestrial)	None
	Formation potential of tropospheric ozone (POCP)	None
	Potential Human exposure efficiency relative to U235 (IRP)	1
	Abiotic depletion potential for non-fossil resources (ADP-minerals&metals)	2
ILCD type / level 3	Abiotic depletion potential for fossil resources (ADP-fossil)	2
	Water (user) deprivation potential, deprivation-weighted water consumption (WDP)	2
	Potential Comparative Toxic Unit for ecosystems (ETP-fw)	2
	Potential Comparative Toxic Unit for humans (HTP-c)	2
	Potential Comparative Toxic Unit for humans (HTP-nc)	2

5 Results

ILCD classification	Indicator	Disclaimer
	Potential Soil quality index (SQP)	2
Disclaimer 1 – This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.		
Disclaimer 2 – The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.		

5.2 INDICATORS DESCRIBING RESOURCE USE AND ENVIRONMENTAL INFORMATION BASED ON LIFE CYCLE INVENTORY (LCI)

PARAMETERS DESCRIBING RESOURCE USE

Abbr.	Unit	A1	A2	A3	A1- A3	A5	C1	C2	C3	C4	D
PERE	MJ	3.74E+1	7.82E-2	2.91E+1	6.66E+1	9.49E-2	0.00E+0	2.32E-2	7.13E-1	5.01E-3	-3.65E+1
PERM	MJ	0.00E+0	0.00E+0	4.73E+1	4.73E+1	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
PERT	MJ	3.74E+1	7.82E-2	7.63E+1	1.14E+2	9.49E-2	0.00E+0	2.32E-2	7.13E-1	5.01E-3	-3.65E+1
PENRE	MJ	5.29E+2	6.03E+0	3.06E+1	5.65E+2	2.32E+0	0.00E+0	1.64E+0	6.20E+0	2.29E-1	-9.19E+1
PENRM	MJ	1.34E+2	0.00E+0	4.48E+0	1.38E+2	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	-4.27E-2
PENRT	MJ	6.63E+2	6.03E+0	3.50E+1	7.04E+2	2.32E+0	0.00E+0	1.64E+0	6.20E+0	2.29E-1	-9.20E+1
SM	Kg	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
RSF	MJ	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
NRSF	MJ	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
FW	m ³	4.05E-1	1.30E-3	6.87E-2	4.75E-1	1.32E-3	0.00E+0	3.96E-4	1.20E-2	2.38E-4	-5.38E-2

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 resources | **SM**=Use of secondary material | **RSF**=Use of renewable secondary fuels | **NRSF**=Use of non-renewable secondary fuels | **FW**=Net use of fresh water

5 Results

OTHER ENVIRONMENTAL INFORMATION DESCRIBING WASTE CATEGORIES

Abbr.	Unit	A1	A2	A3	A1-A3	A5	C1	C2	C3	C4	D
HWD	Kg	6.83E-4	3.70E-5	1.05E-4	8.26E-4	1.38E-5	0.00E+0	1.05E-5	2.34E-5	1.12E-6	-6.62E-4
NHWD	Kg	1.18E+1	3.35E-1	6.03E-1	1.28E+1	9.33E-1	0.00E+0	1.08E-1	3.89E+0	8.98E-1	2.49E-1
RWD	Kg	4.22E-4	1.26E-6	7.10E-5	4.94E-4	2.25E-6	0.00E+0	3.75E-7	1.49E-5	8.50E-8	1.35E-5

HWD=Hazardous waste disposed | NHWD=Non-hazardous waste disposed | RWD=Radioactive waste disposed

ENVIRONMENTAL INFORMATION DESCRIBING OUTPUT FLOWS

Abbr.	Unit	A1	A2	A3	A1-A3	A5	C1	C2	C3	C4	D
CRU	Kg	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	1.26E-1	0.00E+0	0.00E+0
MFR	Kg	0.00E+0	0.00E+0	0.00E+0	0.00E+0	2.27E+0	0.00E+0	0.00E+0	2.26E+0	0.00E+0	0.00E+0
MER	Kg	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
EET	MJ	0.00E+0	0.00E+0	3.34E-1	3.34E-1	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	3.79E+1
EEE	MJ	0.00E+0	0.00E+0	1.94E-1	1.94E-1	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	2.20E+1

CRU=Components for re-use | MFR=Materials for recycling | MER=Materials for energy recovery | EET=Exported Energy, Thermic | EEE=Exported Energy, Electric

5 Results

5.3 INFORMATION ON BIOGENIC CARBON CONTENT PER PIECE

BIOGENIC CARBON CONTENT

The following Information describes the biogenic carbon content in (the main parts of) the product at the factory gate per piece:

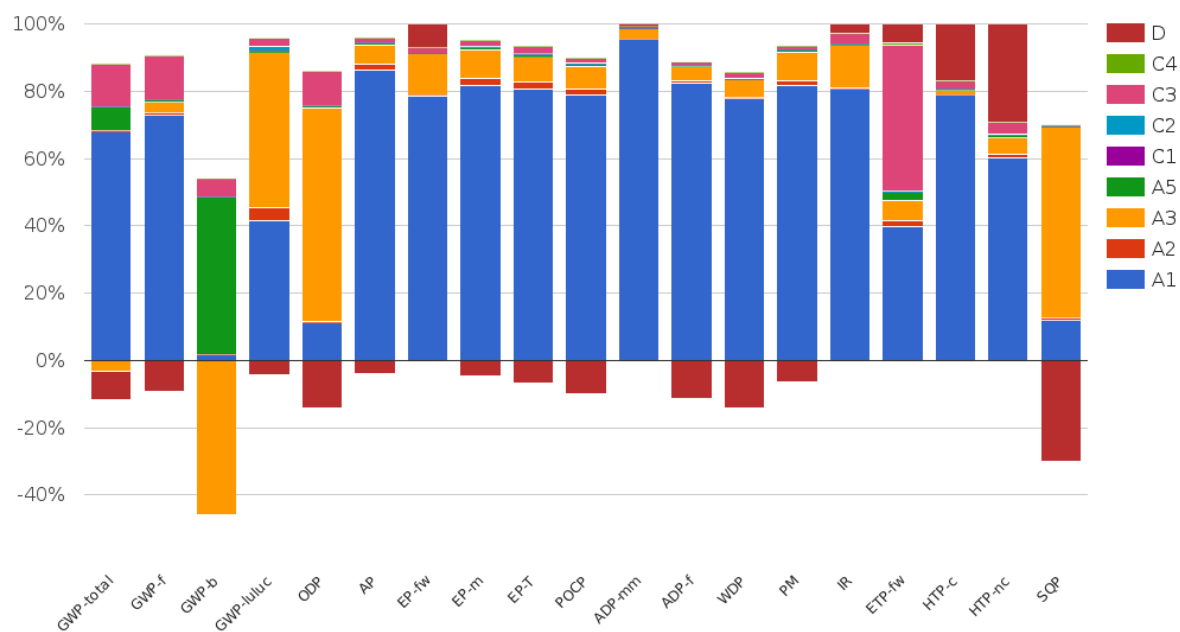
Biogenic carbon content	Amount	Unit
Biogenic carbon content in the product	0	kg C
Biogenic carbon content in accompanying packaging	1.35	kg C

UPTAKE OF BIOGENIC CARBON DIOXIDE

The following amount of carbon dioxide uptake is taken into account. Related uptake and release of carbon dioxide in downstream processes are not taken into account in this number although they do appear in the presented results. One kilogram of biogenic Carbon content is equivalent to 44/12 kg of biogenic carbon dioxide uptake.

Uptake Biogenic Carbon dioxide	Amount	Unit
Packaging	4.951	kg CO2 (biogenic)

6 Interpretation of results



In most impact categories, the environmental impact of HEWI Removable hanging seat is predominantly determined by the extraction and processing of raw materials (Module A1). Among the raw materials (Module A1), polyamide 6 results in the largest environmental impact, accounting for 70.9 % of the GWP-total.

7 References

ISO 14040

ISO 14040:2006-10, Environmental management - Life cycle assessment - Principles and framework; EN ISO 14040:2006

ISO 14044

ISO 14044:2006-10, Environmental management - Life cycle assessment - Requirements and guidelines; EN ISO 14044:2006

ISO 14025

ISO 14025:2011-10, Environmental labels and declarations — Type III environmental declarations — Principles and procedures

EN 15804+A2

EN 15804:2012+A2:2019/AC:2021, Sustainability of Buildings - Environmental Product Declarations - Framework Development Rules by Product Category

Kiwa-EE GPI R.4.0

Kiwa-Ecobility Experts, General Programme Instructions “Product Level”, SOP EE 1203_R. 4.0 (18.12.2025)

Kiwa-EE GPI R.4.0 Annex B1

Kiwa-Ecobility Experts, General Programme Instructions “Product Level” – Annex B1 Environmental Information Programme according to EN 15804 / ISO 21930, SOP EE 1203_R. 4.0 (18.12.2025)

PCR B

DAPHabitat, PCR – Sanitary Ware [Sanitary facilities and kitchens] – V.1.3 (June 2022)

Ecoinvent

ecoinvent Version 3.9.1 (December 2022)

R<THINK characterization method

ecoinvent 3.9.1: EN 15804+A2 indicators (EF 3.1)

8 Contact information

Publisher	Operator	Owner of declaration
		
Kiwa-Ecobility Experts Wattstraße 11-13 13355 Berlin, DE	Kiwa-Ecobility Experts Wattstraße 11-13 13355 Berlin, DE	HEWI Heinrich Wilke GmbH Prof.-Bier-Straße 1-5 34454 Bad Arolsen, DE
E-mail: DE.Ecobility.Experts@kiwa.com Website: https://www.kiwa.com/de/en-de/areas-of-expertise/sustainable-solutions/ecobility-experts-epd-program/	E-mail: DE.Ecobility.Experts@kiwa.com Website: https://www.kiwa.com/de/en-de/areas-of-expertise/sustainable-solutions/ecobility-experts-epd-program/	E-mail: info@hewi.de Website: www.hewi.com

Kiwa-Ecobility Experts is established member of the 