# Environmental Product Declaration



In accordance with ISO 14025:2006 for:

# Carry Bag Beverage

from

**Reused Remade** 





Programme: The International EPD® System, <u>www.environdec.com</u>

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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





# **Programme information**

Programme:	The International EPD® System		
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Accountabilities for PCR, LCA and independent, third-party verification				
Product Category Rules (PCR)				
PCR: LUGGAGE AND HANDBAGS 2022:03, version 1.0. and UN CPC code(s) 26630, valid until 2026-04-22				
PCR review was conducted by: The Technical Committee of the International EPD® System. A full list of members is available at <a href="https://www.environdec.com">www.environdec.com</a> . The review panel may be contacted via <a href="mailto:info@environdec.com">info@environdec.com</a>				
Review chair. Nasser Ayoub				
Life Cycle Assessment (LCA)				
LCA accountability: Theodor Roos, Miljögiraff				
Third-party verification				
Independent third-party verification of the declaration and data, according to ISO 14025:2006:				
Third-party verifier: Martyna Mikusinska, Sweco				
Approved by: The International EPD® System				
Procedure for follow-up of data during EPD validity involves third-party verifier:				
□ Yes ⊠ No				

The EPD owner has the sole ownership, liability, and responsibility for the EPD.

EPDs within the same product category but registered in different EPD programmes may not be comparable. For two EPDs to be comparable, they must be based on the same PCR (including the same version number) or be based on fully-aligned PCRs or versions of PCRs; cover products with identical functions, technical performances and use (e.g. identical declared/functional units); have equivalent system boundaries and descriptions of data; apply equivalent data quality requirements, methods of data collection, and allocation methods; apply identical cut-off rules and impact assessment methods (including the same version of characterisation factors); have equivalent content declarations; and be valid at the time of comparison. For further information about comparability, see ISO 14025.





The LCA approach harmonizes with the Product Category Rules for LUGGAGE AND HANDBAGS, PCR 2022:03 v.1.0. The Life Cycle Assessment report (Roos, 2025) is available to EPD-auditor on request and include all the detailed information required according to ISO 14044 (ISO, 2006b).

## **Company information**

Owner of the EPD: Reused Remade AB

Tegnérsgatan 15, SE-111 40 Stockholm

Contact:

Pia Walter, Co-founder/CFO/Business development, +46 (0)70 653 0990,

pia.walter@reusedremade.com

Description of the organisation:

Reused Remade, founded in 2016, is an innovative company dedicated to making a positive impact on our climate and environment by offering circular solutions for discarded hotel textiles. Through an upcycling process, Reused Remade decreases textile waste and ensure that high quality textiles are transformed into functional and durable everyday products for the B2B and B2C market. With a strong commitment to resource efficiency, Reused Remade is a positive force and front runner in the textile industry, helping clients and consumers to decrease their climate and environmental impact by providing sustainable textile products.

Name and location of production site: Kelmé, Lithuania.

#### **Product information**

Product name: Carry Bag Beverage

Product identification: CBB, 1+0 print, brand

Reused Remade

Article No: CBB004Svart

Geographical scope: Europe

Product description: Carry bag Beverage is made of reused hotel bedlinen and designed and tested to be able to carry a weight of 7 kg in order to be durable so they can be used over and over again. Carry bag Beverages weights 49 g and measures; W: 20 cm, H: 51 cm including 15 cm handles and a gusset of 12 cm

Technical specifications can be found in Appendix 1 Technical Specifications of Carry Bag Beverage

Contact Reused Remade for more details.

UN CPC code: 26630







### **LCA** information

<u>Functional unit / declared unit:</u> One Carry Bag Beverage shopping bag with a weight of 0,049 kg and 0,019 kg of packaging

<u>Time representativeness:</u> The specific data was collected in 2024 and is representative of 2022. Generic data is modelled with ecoinvent 3.10.

<u>Database(s)</u> and <u>LCA software used:</u> The database used is ecoinvent (version 3.10) and the software is SimaPro 10.0.

System diagram: see figure below.

<u>Description of system boundaries:</u> Cradle-to-Grave with life cycle stages of Upstream, Core and Downstream.

Excluded lifecycle stages: The use stage, which is part of the downstream, is omitted as the location of the main customer varies greatly from year to year. Moreover, this life cycle stage is complex to model and have large uncertainties. Therefore, including the use phase would give results with a large uncertainty.

<u>Cut-off rules:</u> For the cumulative mass and energy flows a cut-off of 1% is used. Regarding environmental relevance, a cut-off at 1% of the result any of the environmental impact categories is used.

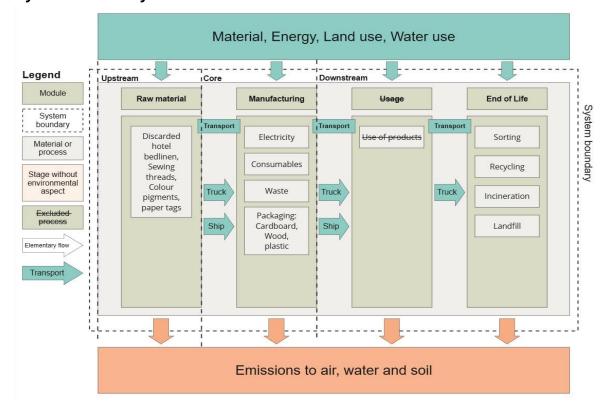
Allocation rules: The allocation of environmental burden to products and scrap materials are made on basis of physical properties or economical value.

In the Core module, the overall energy use was co-allocated between the product manufactured at the production site so that the energy was correctly allocated to Reused Remades products.

<u>Data Quality Assessment:</u> Share of specific data reflects 36% of the GWP-GHG total results, while generic data reflects 64%, and proxy data reflects 0%.

<u>LCA practitioner:</u> Theodor Roos, <u>theodor@miljogiraff.se</u>

#### System boundary







# **Content declaration**

The content declaration below declares the composition of a Carry Bag Beverage. The weight of one unit is 0,049 kg and the core material (main fabric) consist of discarded hotel bedlinen that is reused into this product.

Weight of		ost-consumer erial	Biogenic material		
Product part	product (kg)	Pre-consumer material (weight-%)	Post- consumer material (weight-%)	(weight-%)	kg C/declared unit
Main Fabric, 50% Cotton 50% Polyester	0,043	0%	100%	50%, Cotton	0,0093
Color Pigments	0,0030	0%	0%	0%, Polyester	0,0
Sewing Thread	0,0017	0%	0%	0%, Pigments	0,0
Paper tag	0,0010	0%	100%	100%, Paper	0,00045
Care label	0,00040	0%	100%	0%, Polyester	0,0
Sticker	0,00010	0%	0%	100%, Paper	0,0000
Total	0,049	0%	90%	46%	0,0097

The product does not contain any Substances of Very High Concern (SVHC1) exceeding 0,1 wt%.

#### **Packaging**

<u>Distribution packaging:</u> Data was only available on distribution packaging used for the main fabric and consists of a pallet (0,0056 kg) and cardboard packaging (0,00088 kg) per shopping bag. The pallets are assumed to be reused 25 times. Total amount of biogenic content in supplier packaging reflects 0,0028 kg C per shopping bag.

<u>Consumer packaging:</u> Cardboard and plastic bag is both made with recycled material and 100% of the material is post-consumer for both packaging types. Strengthen by supplied documentations from supplier.

Packaging	Weight of packaging	Weight versus the product (weight-%)	Biogenic material		
materials	(kg per product)		Weight -%	Kg C/product	
Pallet	0,016	32%	99%	0,0068	
Cardboard	0,0031	6%	100%	0,0014	
Plastic Bag (LDPE)	0,000042	0%	0%	0,0	
Total	0,019	38%	99%	0,0082	

<sup>&</sup>lt;sup>1</sup> SVHC and the Candidate List of SVHC are available via the <u>Candidate List of substances of very high concern for Authorisation - ECHA (europa.eu)</u>





# Results of the environmental performance indicators

The environmental performance indicators are calculated in line with the default list of indicators for non-construction products and methods by the EPD International system (version 2.0), specifically, the EN15804 reference package based on EF 3.1 was used.

#### Impact category indicators

Results per declared unit - One Carry Bag Beverage					
Impact category	Unit	Total	Upstream	Core	Downstream
GWP - Total	kg CO <sub>2</sub> eq	1,10E-01	-3,97E-02	3,15E-02	1,18E-01
GWP - Fossil	kg CO <sub>2</sub> eq	1,05E-01	3,55E-02	2,03E-02	4,89E-02
GWP - Biogenic	kg CO <sub>2</sub> eq	4,74E-03	-7,52E-02	1,12E-02	6,88E-02
GWP - Luluc	kg CO <sub>2</sub> eq	8,72E-05	7,68E-05	6,35E-06	4,04E-06
ODP	kg CFC11 eq	5,52E-08	5,44E-08	3,65E-10	3,95E-10
AP	mol H+ eq	4,30E-04	1,53E-04	8,72E-05	1,90E-04
EP - Freshwater	kg P eq	2,20E-06	1,89E-06	1,91E-07	1,21E-07
EP - Marine	kg N eq	1,54E-04	3,30E-05	2,90E-05	9,18E-05
EP – Terrestrial	mol N eq	1,53E-03	3,16E-04	3,14E-04	8,95E-04
POCP	kg NMVOC eq	5,58E-04	1,62E-04	1,27E-04	2,69E-04
ADPE*	kg Sb eq	2,92E-07	2,19E-07	3,65E-08	3,68E-08
ADPF*	MJ	1,17E+00	6,15E-01	2,89E-01	2,69E-01
WDP*	m3 depriv.	1,17E-02	9,03E-03	1,25E-03	1,45E-03
Acronyms	GWP: Global Warming Potential, LULUC: Land Use and Land Use Change, ODP: Ozone Depletion Potential, AP: Acidification Potential. EP: Eutrophication Potential, POCP: Photochemical Ozone Creation Potential, ADPE: Abiotic Depletion Potential – Elements, ADPF: Abiotic Depletion Potential – Fossil Fuels, WDP: Water Scarcity Footprint, GWP-GHG: Global Warming Potential, Greenhouse Gases				
Legend	Material Tran processing of	sport, A3: Manu the fabric, B1: T ne consumer, C	facturing, A4 Transpo	rt of the fabri abric to the us rting, C2: Tra	terial Supply, A2: Raw c to retailer, A5: Further se phase, B2: Use of the ansport to Recovery /

<sup>\*</sup> 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.





#### **Additional voluntary parameters**

Indicators and methods used are from the EN15804.

Results per declared unit - One Carry Bag Beverage					
Impact category	Unit	Total	Upstream	Core	Downstream
GWP-GHG**	kg CO2 eq	1,10E-01	3,65E-02	2,12E-02	5,19E-02
PM	disease inc.	5,17E-09	1,54E-09	1,54E-09	2,09E-09
IR***	kBq U-235 eq	1,46E-03	9,98E-04	3,74E-04	9,22E-05
ETP-FW*	CTUe	3,97E-01	2,20E-01	5,59E-02	1,21E-01
HTTP-C*	CTUh	2,40E-10	9,02E-11	6,77E-11	8,17E-11
HTTP-NC*	CTUh	4,09E-09	3,70E-09	1,39E-10	2,54E-10
Land use, SQP*	Pt	3,95E-01	2,54E-01	6,60E-02	7,55E-02
Acronyms	PM: Particulate Matter, IRP: Ionizing Radiation - Human Health, ETP-FW: Ecotoxicity Potential – Freshwater, HTP-C: Human Toxicity Potential – Cancer, HTP-NC: Human Toxicity Potential – Non-Cancer, SQP: Soil Quality Potential Index				
Legend	Material Tran processing of	A1-C3: Sum of impacts inside system boundary, A1: Raw Material Supply, A2: Raw Material Transport, A3: Manufacturing, A4 Transport of the fabric to retailer, A5: Further processing of the fabric, B1: Transportation of the fabric to the use phase, B2: Use of the fabric by the consumer, C1: Disassembling / Sorting, C2: Transport to Recovery / Disposal, C3: Final Disposal,			

Disclaimers: The results of the environmental impact indicators for ETP-FW, HTP-C, and HTP-NC shall be used with care as the uncertainties of these results are high or as there is limited experience with the indicator. The impact category for IR 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.

<sup>\*</sup> 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.

<sup>\*\*</sup> Disclaimer: This indicator accounts for all greenhouse gases except biogenic carbon dioxide uptake and emissions and biogenic carbon stored in the product. As such, the indicator is identical to GWP-total except that the CF for biogenic CO2 is set to zero.

<sup>\*\*\*</sup> Disclaimer: 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.





#### **Resource use indicators**

The resource use indicators have been calculated using the method Cumulative Energy Demand 1.12.

Results per declared unit - One Carry Bag Beverage					
Impact category	Unit	Total	Upstream	Core	Downstream
PERE	MJ	4,21E-02	2,89E-02	1,06E-02	2,68E-03
PERM	MJ	0,00E+00	3,42E-01	0,00E+00	-3,42E-01
PERT	MJ	4,21E-02	3,71E-01	1,06E-02	-3,39E-01
PENRE	MJ	1,07E-01	8,35E-02	1,78E-02	5,22E-03
PENRM	MJ	0,00E+00	1,30E-03	0,00E+00	-1,30E-03
PENRT	MJ	1,07E-01	8,48E-02	1,78E-02	3,91E-03
Abbreviations	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;				
Legend	A1-C3: Sum of impacts inside system boundary, A1: Raw Material Supply, A2: Raw Material Transport, A3: Manufacturing, A4 Transport of the fabric to retailer, A5: Further processing of the fabric, B1: Transportation of the fabric to the use phase, B2: Use of the fabric by the consumer, C1: Disassembling / Sorting, C2: Transport to Recovery / Disposal, C3: Final Disposal,				





# **Additional Environmental Information**

Down below additional results are shown for the Carry Bag Beverage. The result in the table is defined for 1 kg of CBB instead of the declared unit of one CBB shopping bag. The difference between the results in the table below and the main results presented in this EPD reflects the division of the main results with the weight of the shopping bag, which is 0,049 kg.

Results per declared unit - One Carry Bag Beverage					
Impact category	Unit	Total	Upstream	Core	Downstream
GWP - Total	kg CO <sub>2</sub> eq	2,23E+00	-2,69E+01	6,43E-01	2,85E+01
GWP - Fossil	kg CO <sub>2</sub> eq	2,14E+00	7,24E-01	4,15E-01	9,98E-01
GWP - Biogenic	kg CO <sub>2</sub> eq	9,68E-02	-2,76E+01	2,28E-01	2,75E+01
GWP - Luluc	kg CO <sub>2</sub> eq	1,78E-03	1,57E-03	1,30E-04	8,24E-05
ODP	kg CFC11 eq	1,13E-06	1,11E-06	7,45E-09	8,07E-09
AP	mol H+ eq	8,77E-03	3,12E-03	1,78E-03	3,87E-03
EP - Freshwater	kg P eq	4,50E-05	3,86E-05	3,90E-06	2,46E-06
EP - Marine	kg N eq	3,14E-03	6,73E-04	5,92E-04	1,87E-03
EP – Terrestrial	mol N eq	3,11E-02	6,45E-03	6,42E-03	1,83E-02
POCP	kg NMVOC eq	1,14E-02	3,30E-03	2,60E-03	5,50E-03
ADPE*	kg Sb eq	5,97E-06	4,47E-06	7,46E-07	7,51E-07
ADPF*	MJ	2,39E+01	1,25E+01	5,89E+00	5,49E+00
WDP*	m3 depriv.	2,39E-01	1,84E-01	2,55E-02	2,96E-02
PM	disease inc.	1,05E-07	3,13E-08	3,14E-08	4,27E-08
IR	kBq U-235 eq	2,99E-02	2,04E-02	7,63E-03	1,88E-03
ETP – FW	CTUe	8,10E+00	4,48E+00	1,14E+00	2,47E+00
HTP - C	CTUh	4,89E-09	1,84E-09	1,38E-09	1,67E-09
HTP - NC	CTUh	8,35E-08	7,55E-08	2,85E-09	5,18E-09
Land use, SQP	Pt	8,07E+00	5,18E+00	1,35E+00	1,54E+00
GWP-GHG	kg CO2 eq	2,23E+00	7,44E-01	4,32E-01	1,06E+00
PERE	MJ	8,60E-01	5,89E-01	2,16E-01	5,47E-02
PERM	MJ	0,00E+00	6,98E+00	0,00E+00	-6,98E+00
PERT	MJ	8,60E-01	7,57E+00	2,16E-01	-6,93E+00
PENRE	MJ	2,17E+00	1,70E+00	3,63E-01	1,06E-01





PENRM	MJ	0,00E+00	2,66E-02	0,00E+00	-2,66E-02
PENRT	MJ	2,17E+00	1,73E+00	3,63E-01	7,99E-02
Acronyms	GWP: Global Warming Potential, LULUC: Land Use and Land Use Change, ODP: Ozone Depletion Potential, AP: Acidification Potential. EP: Eutrophication Potential, POCP: Photochemical Ozone Creation Potential, ADPE: Abiotic Depletion Potential – Elements, ADPF: Abiotic Depletion Potential – Fossil Fuels, WDP: Water Scarcity Footprint, GWP-GHG: Global Warming Potential, Greenhouse Gases				
Abbreviations	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;				
Legend	A1-C3: Sum of impacts inside system boundary, A1: Raw Material Supply, A2: Raw Material Transport, A3: Manufacturing, A4 Transport of the fabric to retailer, A5: Further processing of the fabric, B1: Transportation of the fabric to the use phase, B2: Use of the fabric by the consumer, C1: Disassembling / Sorting, C2: Transport to Recovery / Disposal, C3: Final Disposal,				





#### References

General Programme Instructions of the International EPD® System. Version 4.0.

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.

Life Cycle Assessment of Shoulder Bag Original and Carry Bag Beverage by Reuse Remade, Theodor Roos, Miljögiraff AB, 2025.

PCR 2022:03. LUGGAGE AND HANDBAGS. Version 1.0.







# **Appendix 1 Technical Specifications of Carry Bag Beverage**

CHARACTERISTICS	REFERENCE STANDARD	Unit
GENERAL REQUIRMENTS OF TEX	TILES	
<b>Compositio</b> n	Regulation (EU) No 1007/2011	NA / Reused hotel textile with a general weight of 140 gsm
Width and Length	EN 1773:1998	NA / Reused hotel textile with a general weight of 140 gsm
Surface fuzzing and pilling	ISO 12945-2:2002	Reused hotel textile
Determination of pH	ISO 3071:2006	NA / Reused hotel textile of various sizes
Elasticity PRODUCT PERFORMANCE	EN 14704-1:2005	No change
Dimensional change to washing	SOP M2044	2.0 - 2.7 %
Apperance after washing	SOP M2045	4 - No negative change that affect appearance or use
Colour fastness to artificial light: Xenon arc fading lamp test	ISO 105 B02:2014-11	4
Colour fastness to water	ISO 105 E01:2013-06	4 -5
Colour fastness to rubbing, dry	ISO 105-X12:2016-11	4-5
Colour fastness to rubbing, wet	ISO 105-X12:2016-11	2-4
Colour fastness to washing	ISO 105-C06 2010-08	4-5
Fatigue test handles, CBB	SIS 849231	7 kg. The test was discontinued after approximately 25 000 cycles and bags examined for damage o seams and fabric. No damage.
TEST ON CHEMICALS		
AZO Dyes Synthetic Fibres	ISO 14362-3 2017-05	< 5 mg/kg
AZO Dyes Mixed Fibres	ISO 14362-1 2017-05	< 5 mg/kg
4-Aminoazobenxene Synthetic Fibres	ISO 14362-3 2017-05	< 5 mg/kg
Formalldehyde (Textile)	ISO 214184-1 2011-12	< 10 mg/kg
Quinoline	HPLC-DAD-MS	< 15 mg/kg
Chlorinated Phenols	SOP M 3125 2019-12	< 0.01 mg/kg
Chlorinated Benzenes and Toluene	DIN EN 17137:2019	< 0.10 mg/kg
PAH	AfPS GS 2019:01	< 0.2 mg/kg
Alkylphenolethoxylates	ISO 18254-1 2016-09	< 10 mg/kg
Dimethyl Fumarate	ISO/TS 16186 2012-2	< 0.1 mg/kg
Extractable Heavy Metals	ISO 105-E04/ISO 16711-2:2015	< 0.01 - 1.0 mg/kg
Heavy Metals in Packaging	SOP M 1631 2011-09 / SOP M 2552 2012-08 + SOP M 1631 ICP- OES	< 0.5 - 10 mg/kg
Plyvinyl chloride identification	SOP M 3416 2016-11	Negative, no green flame
Sensory test	DIN 10955 2004-06	No change
All Discourse	DIN 54231 2005-11, with use of	Not detected
Allergenic Disperse Dyes	HPLC-DAD-MS	