Environmental Product Declaration



In accordance with ISO 14025:2006 for:

Semi Aniline Leathers

from

Garrett Leather



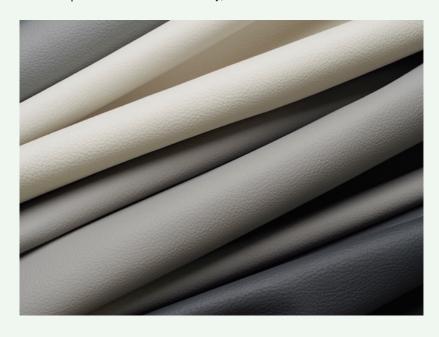
LEATHER

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

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An EPD may be updated or depublished if conditions change. To find the latest version of the EPD and to confirm its validity, see www.environdec.com.







General information

Programme information

Programme:	The International EPD® System				
Address:	EPD International AB Box 210 60 SE-100 31 Stockholm Sweden				
Website:	www.environdec.com				
E-mail:	info@environdec.com				

Accountabilities for PCR, LCA and independent, third-party verification

Product Category Rules (PCR)

CEN standard EN 15804 serves as the Core Product Category Rules (PCR)

Product Category Rules (PCR): EPD International PCR 2011:13 Finished Bovine Leather (V 3.0.4) and and UN CPC code 2912

PCR review was conducted by: Maurizio Fieschi

Life Cycle Assessment (LCA)

LCA accountability: WAP Sustainability Consulting, LLC

Third-party verification

Independent third-party verification of the declaration and data, according to ISO 14025:2006, via:

Third-party verifier: Sunil Kumar, SIPL Pvt Ltd.

For SIPL PVT. LTD. .

Syw leyway

Authorised Signatory

Approved by: The International EPD® System

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, or not compliant with EN 15804, 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 EN 15804 and ISO 14025.





Information about EPD owner

Owner of the EPD: Garrett Leather

Contact: Max Brown <mbrown@garrettleather.com>

<u>Description of the organization:</u> Drawing its name from its origin, Garrett Leather came to life in founder Cameron Brown's attic, known as a Garret in old English. Today, after growing from those humble beginnings, Garrett Leather is the leather upholstery partner of choice. Our leather defines the prominent spaces of the business and home and adorns the interiors of what takes us across the blue skies, the open road and the vast ocean.

We specialize in helping interior designers, upholsterers and manufacturers find the perfect leather for the aircraft, automotive, yacht, commercial and interior markets and more. We also offer opportunities for our clients to learn more about the intricacies of leather and its applications. Garrett Leather remains privately-owned and family-run to strengthen our deep commitment to personal attention and care for each of our clients.

Our craft is personal to each of us, and we're intentional in choosing sustainable business partnerships and leading a sustainable practice. We source our leather collections from the highest quality raw material selections throughout Europe. Maintaining strong relationships with the most elite and ethically responsible tanneries, we work together to create purposeful leather products. Product-related or management system-related certifications: Garrett Leather's Buffalo is ISO 9001 compliant.

Name and location of production site(s): Semi Aniline Leathers are produced in Italy and warehoused in Buffalo, NY.

Product information

Product name: Semi Aniline Leathers

<u>Product identification:</u> The products under study represent grain embossed leathers produced in Italy. <u>Product description:</u> Garrett Leather's Italian grain embossed leathers begin with the highest quality raw materials sourced from within Europe. These luxurious leathers showcase nature's true beauty with minimal processing and finishing. Each article has unique aesthetics that accentuate the finest qualities of genuine leather. These collections adorn a wide variety of interiors, including residential, corporate, and hospitality spaces.

UN CPC code: 2912

Geographical scope: Global

<u>Manufacturing Process</u>: Manufacturing begins with raw hide inputs. Any remaining fat and tallow are cut from the hide before the hair is chemically removed. Hides are then washed, dried, treated, and dyed to be ready for commercial use. Grain embossed leather is finished with artificial patterns meant to mimic the natural grain of the hide. This is done through stamping or pressing the treated hide.





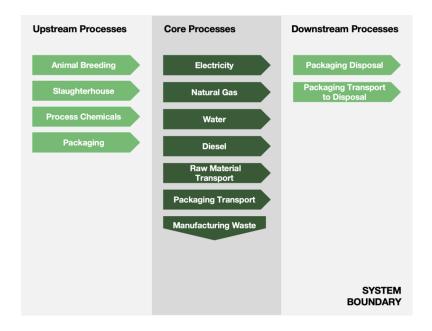
LCA information

<u>Declared unit:</u> The declared unit is the production of 1 m2 of "finished bovine leather", measured according to ISO standard 11646.

Time representativeness: 2023

<u>Database(s)</u> and LCA software used: Agri-footprint 5.0, ecoinvent 3.9.1 and SimaPro 9.5.0.1 <u>Description of system boundaries:</u> Cradle-to-grave (as defined by the PCR)

System diagram:



Assumptions:

• Primary data were not provided for the bovine-related upstream processes. Therefore, generic data from the Agri-footprint dataset, as well as LCI data from Ulya et. al. were used as proxy.

Content information

Product components	Weight, kg	Post-consumer material, weight-%	Biogenic material, weight-% and kg C/kg	
Cattle hide	1.16E+00	0%	0%, 0 kg C/kg and 0 CO2e/kg	
Other chemicals	2.75E-01	0%	0%, 0 kg C/kg and 0 CO2e/kg	
TOTAL	1.43E+00	0%	0%, 0 kg C/kg and 0 CO2e/kg	
Packaging materials	Weight, kg	Weight-% (versus the product)	Weight biogenic carbon, kg C/kg	
PET packaging film	3.81E-03	0.3%	0 kg C/kg	
Wood pallet	1.02E-01	7.1%	5.03E-01 kg C/kg	
Cast iron	1.04E-03	0.1%	0 kg C/kg	
Medium density fiberboard	9.90E-03	0.7%	4.99E-01 kg C/kg	
TOTAL	1.17E-01	8.1%	1.00E+00 kg C/kg	

This product does not contain substances on the candidate list of SVHC for Authorisation at a percentage higher than 0.1% by mass.

Results of the environmental performance indicators

Mandatory impact category indicators according to EN 15804

Indicator	Unit	Upstream	Core	Downstream	Total	
GWP-fossil	kg CO₂ eq.	7.51E+00	1.35E+01	4.64E-03	2.10E+01	
GWP-biogenic	kg CO₂ eq.	3.97E+00	1.95E-01	3.70E-02	4.20E+00	
GWP- luluc	kg CO₂ eq.	5.53E-01	1.21E-02	2.93E-06	5.66E-01	
GWP- total	kg CO₂ eq.	1.20E+01	1.37E+01	4.16E-02	2.58E+01	
ODP	kg CFC 11 eq.	3.54E-01	8.23E-02	2.56E-05	4.36E-01	
AP	mol H⁺ eq.	1.34E-03	8.85E-04	5.41E-07	2.22E-03	
EP-freshwater	kg P eq.	1.51E-01	2.78E-02	5.39E-05	1.79E-01	
EP- marine	kg N eq.	1.54E+00	2.95E-01	8.87E-05	1.84E+00	
EP-terrestrial	mol N eq.	1.79E-02	1.03E-01	4.31E-05	1.21E-01	
POCP	kg NMVOC eq.	4.53E-08	2.47E-07	8.02E-11	2.92E-07	
ADP-minerals&metals*	kg Sb eq.	4.57E-05	1.22E-05	1.43E-08	5.78E-05	
ADP-fossil*	MJ	5.90E+01	2.03E+02	6.56E-02	2.62E+02	
WDP*	m^3	2.83E+00	4.78E+00	8.60E-04	7.61E+00	
GWP-fossil = Global Warming Potential fossil fuels; GWP-biogenic = Global Warming Potential biogenic; GWP-luluc = Global Warming Potential land use and land use change; ODP = Depletion potential of the stratospheric ozone layer; AP = Acidification potential, Accumulated Exceedance; EP-freshwater = Eutrophication potential, fraction of nutrients reaching freshwater end compartment; EP-marine = Eutrophication potential, fraction of nutrients reaching marine end compartment; EP-terrestrial = Eutrophication potential, Accumulated Exceedance; POCP = Formation potential of tropospheric ozone; ADP-minerals&metals = Abiotic depletion potential for non-fossil resources; ADP-fossil = Abiotic depletion for fossil resources potential; WDP = Water (user) deprivation potential, deprivation-weighted water consumption						

^{*} 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. The estimated impact results are only relative statements, which do not indicate the endpoints of the impact categories, exceeding threshold values, safety margins and/or risks.

Resource use indicators

Indicator	Unit	Upstream	Core	Downstream	Total	
PERE	MJ	1.03E+01	8.41E+00	1.50E-03	1.87E+01	
PERM	MJ	3.30E+00	1.37E-01	0.00E+00	3.44E+00	
PERT	MJ	1.36E+01	8.55E+00	1.50E-03	2.21E+01	
PENRE	MJ	5.88E+01	1.97E+02	6.56E-02	2.56E+02	
PENRM	MJ	1.68E-01	1.68E-01	0.00E+00	3.36E-01	
PENRT	MJ	5.90E+01	1.97E+02	6.56E-02	2.56E+02	
SM	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
RSF	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
NRSF	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
FW	m^3	8.73E+01	1.67E+01	6.39E-03	1.04E+02	
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 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 re-sources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Use of net fresh water						

Waste indicators

Indicator	Unit	Upstream	Core	Downstream	Total
Hazardous waste disposed	kg	2.08E-04	3.58E+00	3.86E-07	3.58E+00
Non-hazardous waste disposed	kg	3.68E-01	1.62E+00	3.44E-02	2.02E+00
Radioactive waste disposed	kg	5.99E-05	1.54E-04	2.56E-08	2.14E-04

Output flow indicators

Indicator	Unit	Upstream	Core	Downstream	Total
Components for re-use	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Material for recycling	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Materials for energy recovery	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Exported energy, electricity	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Exported energy, thermal	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00

Additional environmental information

Garrett Leather has pursued sustainability verifications and ratings for its products, including GREENGUARD GOLD, MindClick rating, Declare and LBC Red List free, REACH Compliance, and ratings by the leather working group.

Details on additional sustainability certifications and ratings for products can be found on <u>Garrett Leather's website</u>.

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