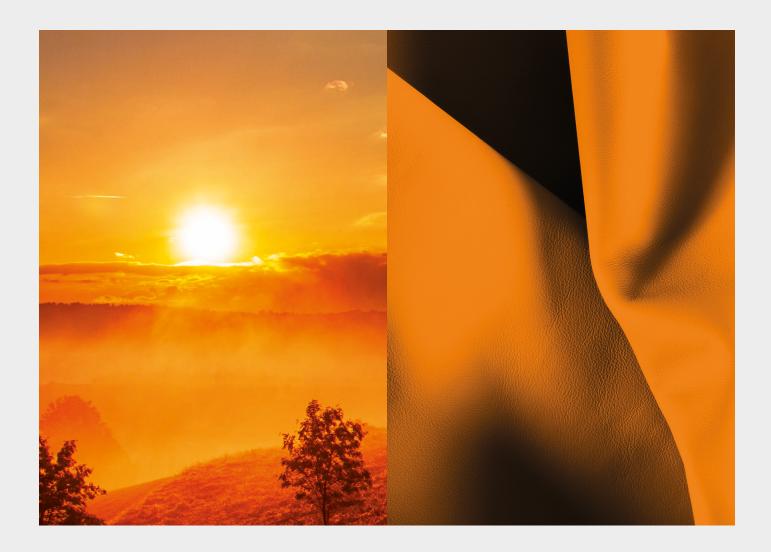
## ENVIRONMENTAL PRODUCT DECLARATION







In accordance with ISO 14025 for LEATHER FOR FURNITURE, FOOTWEAR AND LEATHER GOODS from DANI S.P.A.

PROGRAMME:

The International EPD\* System www.environdec.com

PROGRAMME OPERATOR: EPD International AB EPD REGISTRATION NUMBER:

S-P-01053

**PUBLICATION DATE:** 2017-07-13

VALID UNTIL:

2025-06-28

REVIEW DATE:

2021-09-21

## EPD

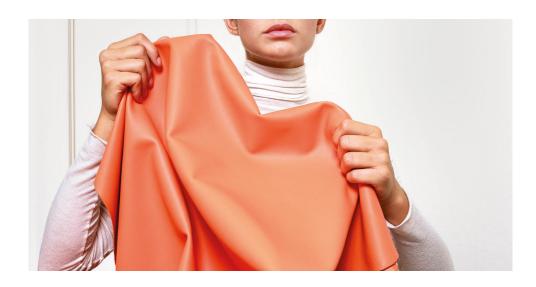
#### PROGRAMME INFORMATION

## **Programme**

The International EPD\* System

EPD International AB Box 210 60 SE-100 31 Stockholm Sweden

www.environdec.com info@environdec.com



EPDs within the same product category but from different programmes may not be comparable.

Product category rules (PCR): Finished bovine leather, 2011:03, version 3.0, UN CPC 2912

PCR review was conducted by: The Technical Committeee of the International EPD\* System; Chair of the PCR review: Maurizio Fieschi, info@environdec.com

 $\underline{\underline{Independent\ third\text{-}party\ verification\ of\ the\ declaration\ and\ data,\ according\ to\ ISO\ 14025:2006:}$ 

⊠ EPD process certification

☐ EPD verification

Third party verifier: SGS Itala Spa, via Caldera 21 – 20153 Milano

In case of accredited certification bodies: Accredited by: Accredia n.006H

Procedure for follow-up of data during EPD validity involves third party verifier:

X Yes

 $\square$  No

The EPD owner has the sole ownership, liability, and responsibility for the EPD. EPDs within the same product category but from different programmes may not be comparable.

#### **COMPANY INFORMATION**

#### Owner of the EPD

Filippo Longo

filippo\_longo@gruppodani.it

Dani S.p.A. Via della Concia, 186 Arzignano Tel. +39 0444 471211

# Description of the organisation

From its origins in 1950 as a small family-run tannery, Dani is now an international company with global positioning. We can rely on:

- 1,200 Employees
- 170M Euros in international revenues
- 3 Full cycle tanneries and headquarters in Italy
- 3 Operations plants for cutting & sewing
- 2 Sales facilities in the USA and China
- 2 Instant Service stocks in Italy and the USA

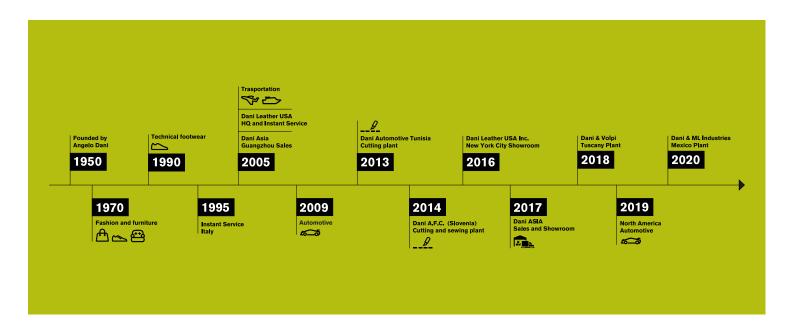
Our leather is used to put into practice bold ideas of stylists and designers, enhancing interiors of highclass cars, adding comfort and visual appeal to the most exclusive interiors. Leather is the result of industrial organisation, artisan skill, passion and creativity. Every day we act following our sustainable business model in which social and territorial inclusion, preservation of natural resources and profitability of investments coexist and sustain one another.

A commitment that is clearly stated in our logo: "Sustainable leather".

We constantly keep in touch with our customers and suppliers, workers and their families, public institutions and local communities, research authorities and universities. Our desire is to understand how the world in which we live evolves and preserve it.

We open our doors to listen to people, understand needs and put forward innovative suggestions together, promoting the virtuous circle that has made Dani into one of the leading companies in the world.

This EPD study concerns the three factories of the furnishings, footwear and leather products division, located in Arzignano at: Via Quarta Strada and via della Concia, 176 - via Quinta strada, 20. Dani leather is the result of a long production cycle carried out entirely in Arzignano.



#### Certifications

We invest in certifications as a communication tool of our daily commitment to improve the safety at workplace, the quality of our products, the reliability of our processes and the environmental impact of our processes. They show the implementation of advanced organisational models and the desire to improve their effectiveness and efficiency.



DANI S.p.A. has obtained the following certificates:



QUALITY SYSTEM ISO 9001



QUALITY SYSTEM IATF 16949



SAFETY SYSTEM ISO 45001



ENVIRONMENTAL SYSTEM ISO 14001



INFORMATION SECURITY SYSTEM ISO 27001



## ENVIRONMENTAL PRODUCT DECLARATION Following the LCA (Life

PRODUCT DECLARATION
Following the LCA (Life
cycle assessment) study, the
following impact categories are
examined; greenhouse effect,
ozone depletion, acidification,
photochemical smog and
eutrophication.
www.environdec.com
Certificate authority: SGS



#### DER BALUE ENGEL (RAL UZ 148) his sets a series of paramet

(RAL UZ 148)
This sets a series of parameters which are lower than those provided for by law, with regard to emissions of substances contained in leather for furnishings.

Certificate authority: RAL



#### LEATHER FROM ITALY FULL CYCLE (UNI EN 16484:2015)

This certifies that all production processes take place in Italy.
Certificate authority: ICEC



#### LEATHER WORKING GROUP (LWG)

is a multi stakeholder group aimed to develop and maintain a protocol that assesses the compliance and environmental performance of tanneries and promotes appropriate environmental commercial practices within the leather sector.

# Name and location of production site

The item Box Land was produced in the DANI SpA plants located in Arzignano (VI).

#### PRODUCT INFORMATION

**Product name** 

Box Land

**Product identification** 

The product is identified as "Other leather, of bovine or equine animals, furless-CPC 2912", according to CPC (Central Product Classification).

## **Product description**

The product covered by this declaration is "finished cowhide", intended as a finished product by the tanning industry, ready to be used as a semi-processed input for the next transformation phases by the various manufacturing industries. The hide can be used as a semiprocessed product for various finished products, such as furniture, clothing, footwear, etc. As the use of "finished cowhide" varies considerably in the final consumer products, no specific product function is defined.

This declaration is based on the production of the analysed article (black Box Land) in the tannery in the reference period (2019) and the result therefore refers to a specific category of manufactured leather. A raw hide could be considered a waste product from the slaughterhouse, and the tanning processes could be considered as a waste recovery process. In compliance with the conservative approach that is requested by the PCR relative to this declaration, the raw hide is considered as a coproduct of cattle breeding, and therefore has an environmental impact relative to that phase as well.

**UN CPC code** 

"Other leather, of bovine or equine animals, furless- CPC 2912.

Geographical scope

Global

#### **Declared unit**

The declared unit is the production of 1 m<sup>2</sup> of "finished bovine leather", measured according to

ISO standard 11646.

The declared unit is represented by 1 m2 of finished bovine leather, produced from fresh raw

cow hide wet-blue tanned

### Time representativeness

2019

## Database(s) and LCA software used

Agrifootprint 4.0, Ecoinvent 3.5, SimaPro

**UPSTREAM** 

CORE

DOWNSTREAM









Farming, breeding and slaughtering

Production

Packaging end-of-life processes

### System diagram

## **UPSTREAM** module: • Raw materials extraction for farming and cattle breeding

List of the processes making up the

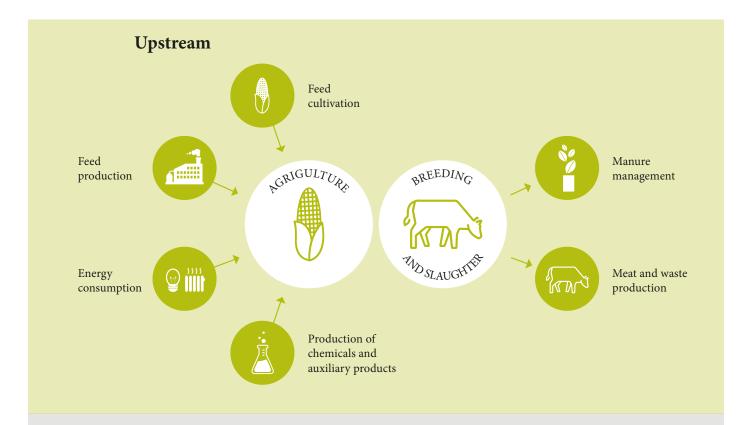
- Farming
- Cattle breeding
- Transportation of animals to the slaughterhouse
- Slaughterhouse
- Production of chemicals and accessories used to manufacture leather
- Production of primary and secondary packaging materials

#### List of the processes making up the CORE module:

- Transportation of raw materials to the production factory
- Electricity and heat energy consumption in the production stage
- Fresh water consumption in the production stage
- Maintenance activities
- Processes required for manufacturing the finished bovine leather
- Emissions to air and water
- Production waste
- Transportation of waste and by-products

#### List of the processes making up the DOWNSTREAM module:

• End-of-life of the packaging used to ship the finished leather





### **Downstream**



# Description of system boundaries

Cradle-to-grave

## **Excluded lifecycle stages**

- Transportation of the finished leather to the customer
- Use phase
- End-of-life of the finished product

### Contribution of generic data

With regard to the contribution of generic quality data to overall impacts, the following approach was used: generic data (not selected) is considered as data used for the packaging disposal scenario, chemicals with generic quality data used to manufacture black Box Land. The contribution of generic data (not selected) is in any case below the 10% threshold permitted by the PCR, for all impact categories.

### More information

Name and contact information of LCA practitioner: A equilibria Srl, info@aequilibria.com

#### **CONTENT DECLARATION**

#### **Product**

Chemicals in finished bovine leather subjects to legal limits

SUBSTANCE	UNITS OF MEASUREMENT (parts per million)	TOTAL	LEGAL LIMITS	
CHROME	ppm	▼ 3*	<b>▼</b> 3 <sub>A</sub>	
FORMALDEHYDE	ppm	▼ 10	▼ 75 <sub>B</sub>	
PENTACHLOROPHENOL	ppm	▼ 0.05	▼ 1 <sub>c</sub>	
AZO DYES	ppm	▼ 30*	▼ 30 <sub>D</sub>	

\*limit of detection

A Reg. 1907/06/EC (REACH) (Amended by Reg. 301/2014/EC)

B Japanase Law 112 for the control of household products containing harmful substances

C Reg 1907/06/EC (REACH)

D Reg 1907/06/EC (REACH)

## ENVIRONMENTAL PERFORMANCE

## Potential environmental impact









PARAMETER		UNIT	UPSTREAM	CORE	DOWNSTREAM	TOTAL
(6)	Fossil	kg CO₂ eq.	15.64	5.84	0.02	21.50
	Biogenic	kg CO <sub>2</sub> eq.	13.42	0.01	0.00	13.44
	Land use and land transformation	kg CO₂ eq.	4.21	3.36E-03	1.50E-06	4.21
	TOTAL	kg CO₂ eq.	33.27	5.86	0.02	39.15
Acidification potentia	al (AP)	kg SO₂ eq.	0.51	0.02	8.21E-05	0.53
Eutrophication poter	ntial (EP)	kg PO₄³- eq.	0.21	7.46E-03	1.98E-05	0.22
Formation potential of tropospheric ozone		kg NMVOC eq.	9.62E-02	1.57E-02	1.34E-04	0.11
Abiotic depletion por	tential – Elements	kg Sb eq.	3.08E-05	1.14E-05	9.77E-09	4.22E-05
Abiotic depletion por resources	tential – Fossil	MJ, net calorific value	124.51	79.43	0.20	204.14
Water scarcity poter	ntial	m³ eq.	6.67	6.29	0.00	12.97

## Use of resources









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PARAMETER		UNIT	UPSTREAM	CORE	DOWNSTREAM	TOTAL
Use as energy carrier  Primary energy resources – Renewable  Used as raw materials  TOTAL	0,	MJ, net calorific value	18.14	5.95	0.00	24.09
		MJ, net calorific value	0.00	0.00	0.00	0.00
	TOTAL	MJ, net calorific value	18.14	5.95	0.00	24.09
Primary energy resources – Nonrenewable Used mater	Use as energy carrier	MJ, net calorific value	157.01	96.35	0.21	253.57
	Used as raw materials	MJ, net calorific value	0.00	0.00	0.00	0.00
	TOTAL	MJ, net calorific value	157.01	96.35	0.21	253.57
Secondary material		kg	0.00	0.00	0.00	0.00
Renewable seconda	ry fuels	MJ, net calorific value	0.00	0.00	0.00	0.00
Non-renewable secondary fuels		MJ, net calorific value	0.00	0.00	0.00	0.00
Net use of fresh wat	er	m <sup>3</sup>	0.31	0.23	0.00	0.54

## Waste production

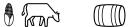






PARAMETER	UNIT	UPSTREAM	CORE	DOWNSTREAM	TOTAL
Hazardous waste disposed	kg	INA	0.02	INA	0.02
Non-hazardous waste disposed	kg	INA	0.33	INA	0.33
Radioactive waste disposed	kg	INA	0.00	INA	0.00

## **Output flows**







		₩ UU VU	di in		
PARAMETER	UNIT	UPSTREAM	CORE	DOWNSTREAM	TOTAL
Components for reuse	kg	INA	0.00	0.00	0.00
Material for recycling	kg	INA	0.24	0.14	0.37
Materials for energy recovery	kg	INA	0.00	0.02	0.02
Exported energy, electricity	МЈ	INA	0.00	INA	0.00
Exported energy, thermal	МЈ	INA	0.00	INA	0.00

The result tables shall only contain values or the letters "INA" (Indicator Not Assessed). It is not possible to specify INA for mandatory indicators. INA shall only be used for voluntary parameters that are not quantified because no data is available.

## Other environmental indicators







PARAMETER	UNIT	UPSTREAM	CORE	DOWNSTREAM	TOTAL
Chromium	kg	0.35	INA	INA	0.35
Formaldehyde	kg	0.00	INA	INA	0.00

#### ADDITIONAL INFORMATION

- $\checkmark \ \, \text{The finished bovine leather is of the following type: "corrected grain leather"};$
- ✓ The finished bovine leather analysed belongs to the following category: "pigmented leather".

# DIFFERENCES FROM PREVIOUS EPD VERSIONS

Some values of potential environmental impacts and use of resources have been updated with respect to previous published EPD, due to a calculation error. The owner of the EPD has been updated.

Please note that EPDs developed for the same category of product but following different programs may not be comparable.

#### REFERENCES

General Programme Instructions of the International EPD® System. Version 3.0. PCR 2011:03. Finished Bovine Leather. Version 3.0 Rapporto di LCA dell'articolo Box Land colore nero (rev 1 del 29/05/2020) - Dani Spa ISO 11646:2014, Leather - measurement of area Agri-footprint version 4.0 Ecoinvent version 3.5