# Environmental Product Declaration

In accordance with ISO 14025 for:

## Olio Extra Vergine di Oliva Toscano IGP

**EPD**<sup>®</sup>

from

### COOPERATIVA AGRICOLA POMONTE



Programme:Programme operator:Programme operator:EEPD registration number:SPublication date:SValid until:S

The International EPD<sup>®</sup> System, <u>www.environdec.com</u> EPD International AB S-P-05870 2022-04-21 2027-04-20







### **Programme information**

	The International EPD <sup>®</sup> System				
Programme:	EPD International AB Box 210 60 SE-100 31 Stockholm Sweden				
	www.environdec.com info@environdec.com				

Product category rules (PCR): Virgin olive oil and its fractions 2010:07 v. 3.0 (UN CPC 21537)

PCR review was conducted by:

The Technical Committee of the International EPD® System, info@environdec.com. Chair of the PCR review: Adriana del Borghi Review dates: 2019-05-20 until 2020-02-10

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

 $\Box$  EPD process certification  $\boxtimes$  EPD verification

Third party verifier: DNV Business Assurance Italy S.r.l.

*In case of accredited certification bodies:* Accredited by: *Accredia* 

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

 $\boxtimes$  Yes  $\Box$  No

Product Life Cycle Assessment and document production by:

innovazioni per la crescita sostenibile Management Consulting

ICStudio S.r.l. Via Vittorio Emanuele, 33 - 50041 Calenzano (FI) www.icsconsulting.it

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**

<u>Owner of the EPD:</u> Cooperativa Agricola Pomonte - 0564 599208 Responsabile del frantoio: Dr. Macchi Angelo Responsabile commerciale: Fatarella Damiano Email: <u>info@agripomonte.it</u> Web site: <u>www.agripomonte.it</u>

#### Description of the organisation:

Cooperativa Agricola Pomonte was born on 23 January 1953 in Pomonte, Grosseto, Tuscany. The company's growth has been constant from 1960 until now, up to equip the production site with a modern oil mill and a centre for the storage and refrigeration of the wheat.

At the end of the 90s, the sale of foodstuffs began and in 2006 a new shop was inaugurated, full of self-made products. In the same period, an additional store was opened in Scansano and in 2001 another one in S. Caterina (Roccalbegna), which operates in various product sectors including food.

In 2008, the olive oil mill and oil marketing activity were taken by Torcular Company in Manciano and after 3 years a new oil mill was installed.

Over the years, the structure has been modernized, preserving the existing technology and supporting the needs of the market, stakeholders and customers.

The environmental efforts have grown over the years, for example:

- two photovoltaic systems were installed in 2010, providing 345 kW of renewable electricity, and satisfying the needs of the facility (the surplus of energy is sent into the national grid);
- the "stone" of the olives is sold for recycling, obtaining an ecological fuel. Moreover, pomace pit is sold as excellent alternative to pellets;
- short supply chain and "kilometre zero" approach were taken as target to reduce the environmental impact and CO<sub>2</sub> emissions.

Name and location of production site:

Località Pomonte, 58054 Scansano, Grosseto (GR), Italy

### **Product information**

Product name: "POMONTE" Olio Extra Vergine di Oliva IGP

<u>Product identification:</u> Certified by Consorzio per la Tutela dell'Olio Extravergine di Oliva Toscano IGP

CPC code: UN CPC 21537

Geographical scope: Italy

Product description:

Extra Virgin Olive Oil obtained directly by mechanical process. Cold-pressed and produced with Tuscany's olives.

Average nutritional values for 100 ml: Energy value: 899 kcal Fat 91.6 g of which saturates 13.8 g Carbohydrate 0 g of which sugar 0 g Protein 0 g Salt 0 g





Variety of olive: Leccino, Moraiolo

<u>Collection system</u>: Hand-picking and mechanical harvesting

Collection period: October-November

Extraction system and filtration: Continuous cycle cold two fases, unfiltered

<u>Colour and taste</u>: From intense green to light green, medium fruit taste, light/average bitter taste, light/average feeling of spicy, medium fruity fragrance

<u>Chemical section:</u> Density 0,916 Acidity 0.15% Peroxides 5.8 Meq. /kg Biophenols 730 mg/kg

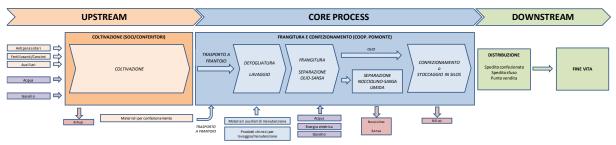
### LCA information

<u>Functional unit / declared unit:</u> 1 litre of product, including its packaging

<u>Time representativeness:</u> Olive oil campaign 2020

Database(s) and LCA software used: SimaPro 9.1.1.1, database Ecoinvent 3.6

#### System diagram:



Description of system boundaries:

Cradle to grave

#### Cut-off rules:

Consumptions and raw materials that generate over 99% of the impacts were considered





#### Data quality:

Most of data were considered site specific, provided directly from the company management system. Proxy processes have a contribution of less than 10% of the overall impacts, in accordance with the EPD standard.

Allocation:

The allocation of water and energy consumption was carried out according to the mass principle. As suggested by the PCR, for the co-products production, the allocation was solved with the economic principle.

### **Content declaration**

#### Product

Materials / chemical substances	Litre	%	Environmental / hazardous properties
Olio Extra Vergine di Oliva Toscano IGP	1	100	-

#### Packaging

<u>Distribution and consumer packaging:</u> Glass bottle 75 cl (580 gr with 75% of recycled glass pre-consumer) Label (0,3 gr) Cap for bottle (2 gr)



### **Environmental performance**

The emission factors are consistent with the methodologies available on www.environdec.com

### Potential environmental impact of IGP Olive Oil bottle 75 cl

PARAMETER		UNIT	Upstream	Core	Downstream	TOTAL
Global warming potential (GWP)	Fossil	kg CO <sub>2</sub> eq.	2,87E+00	3,98E-01	1,83E-01	3,45E+00
	Biogenic	kg CO2 eq.	6,48E-03	9,30E-04	2,05E-05	7,43E-03
	Land use and land transformation	kg CO2 eq.	1,62E-03	5,05E-04	1,84E-05	2,14E-03
	TOTAL	kg CO2 eq.	2,88E+00	3,99E-01	1,83E-01	3,46E+00
Acidification pote	Acidification potential (AP)		3,84E-02	1,74E-03	1,06E-03	4,12E-02
Eutrophication potential (EP)		kg PO <sub>4</sub> <sup>3-</sup> eq.	2,99E-02	6,72E-04	1,85E-04	3,08E-02
Photochemical oxidant formation potential (POFP)		kg NMVOC eq.	1,11E-02	1,53E-03	1,81E-03	1,45E-02
Abiotic depletion potential – Elements		kg Sb eq.	1,07E-04	9,45E-06	1,14E-06	1,18E-04
Abiotic depletion potential – Fossil resources		MJ, net calorific value	2,25E+01	6,81E+00	2,54E+00	3,18E+01
Water scarcity potential		m <sup>3</sup> eq.	1,16E+01	5,35E-01	2,39E-03	1,21E+01

### Use of resources IGP Olive Oil bottle 75 cl

PARAMETER		UNIT	Upstream	Core	Downstream	TOTAL
Primary energy resources – Renewable Used as raw materials TOTAL		MJ, net calorific value	1,674	1,578	0,010	3,262
	MJ, net calorific value	0	0	0	0	
	TOTAL	MJ, net calorific value	1,674	1,578	0,010	3,262
Primary energy resources – Non- renewable Use as energy carrier Used as raw materials TOTAL	Use as energy carrier	MJ, net calorific value	23,578	7,729	2,549	33,855
		MJ, net calorific value	0	0	0	0
	TOTAL	MJ, net calorific value	23,578	7,729	2,549	33,855
Secondary material		kg	0,580	0	0	0,580
Renewable secondary fuels		MJ, net calorific value	0	0	0	0
Non-renewable secondary fuels		MJ, net calorific value	0	0	0	0
Net use of fresh water		m <sup>3</sup>	0,002	0,016	0,010	0,028



### Waste production and output flows

#### Waste production IGP Olive Oil bottle 75 cl

PARAMETER	UNIT	Upstream	Core	Downstream	TOTAL
Hazardous waste disposed	kg	0,003	0	0	0,003
Non-hazardous waste disposed	kg	0	0,003	0,782	0,785
Radioactive waste disposed	kg	0	0	0	0

#### Output flows IGP Olive Oil bottle 75 cl

PARAMETER	UNIT	Upstream	Core	Downstream	TOTAL
Components for reuse	kg	0	0	0	0
Material for recycling	kg	0	0,002	0,604	0,605
Materials for energy recovery	kg	0	0	0	0
Exported energy, electricity	MJ	0	0	0	0
Exported energy, thermal	MJ	0	0	0	0
By-products	kg	0	11,399	0	11,399
Land use *	m²a	45,2116	0,0363	0,0021	45,250

\*values calculated for the reference year (average life time of the harvested area equal to 25 years)



### References

- Product Category Rules: Virgin olive oil and its fractions 2010:07 v. 3.0, product group UN CPC 21537, valid until 2024-03-31PCR 2010:07
- General programme instructions of the international EPD system, v. 3.02, based on ISO 14025, dated 2018-11-06
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- IPCC, 2013: Climate Change 2013: The Physical Science Basis. Stocker, T.F. et al. Cambridge, United Kingdom and New York, NY, USA, 1535 pp
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