

O Olive Extra Virgin Olive Oil:

P.D.O. (Protected Designation of Origin) Messara, Crete

Our extra virgin olive oil is directly obtained from the olive fruit of the *Koroneiki* variety (*Olea europa* var *Mastoids* or *Olea europa* var *Microcarpa*) and solely by mechanical means. The olive oil has a rich green colour, which gradually matures to yellow-green. Its flavour while the taste exhibits abundant fruitiness, some bitterness, delicate pungency with exceptional harmony and a high persistence.

O olive Quality Control

PARAMETERS	RESULT	LIMITS	
Acidity	0,23%	0,60%	
Ultraviolet Absorption			
K 268	0,140	0,22	
K 232	1,557	2,50	
DK	-0,005	0,01	
Peroxide Value meq02/kg	4,3	20,0	
Fruitiness	4,6	>0	
Bitterness	5,5	-	
Pungency	4,5	-	

Geographical Region

The olive trees which produce PDO Messara olive oil are cultivated in the Messara region, which includes the largest plain on the island of Crete. Messara extends to the south-west of the Iraklion Prefecture, south of Mount Psiloritis and north of Mount Kofinas, and bordered by the Libyan Sea. Its eastern plain extends to the geographical borders of the Asterousia Municipality, while the western part of the plain reaches Messara Bay in the borderline with the Iraklion Prefecture. The

region administratively belongs to the Municipality of Festos, the municipal district of Rouvas, Gortynas and Kofinas, partly to the Municipality of Gortynas and the Municipality of Archanes–Asterousia. The rivers that cross the Messara plain are the Geropotamos and the Anapodiaris. The Geropotamos flows across the plain from east to west, emptying into the bay through two branches. The sources of the Anapodiaris, which is the longest river in Crete (40km), is on Mount Dikti and the Monofatsi highlands emptying into the Libyan Sea. This demarcated geographical region has an average altitude of 150m., is coastal and can be described as hilly lowland.

These geographical characteristics of the area, which lies in the southernmost olive-growing region of the European continent, shape certain microclimatic conditions for unique olive agriculture, conditions which are not found elsewhere in Crete or Greece in general.

Harvesting

The harvest of the *Koroneiki* variety olive fruit begins early in December and is completed by the end of February. The natural maturation stage of the olive fruit signifies the beginning of the harvesting period. Namely, the olive skin turns from yellow-green to red-purple, and half of the flesh turns the same red-purple colour. The olive fruit is hand-picked from the trees, using ladders to reach the upper branches and a rake-like device, which is dragged over the branches by causing the olives to fall onto large fabric nets spread on the ground around the tree. Picking is usually avoided in rainy weather.

The olive fruit, carried from the olive groves to the oil press of the demarcated region, is carried out in sacks suitable also for food storage, where the air is sufficient, preventing fungus from growing. During transportation and

storage, sacks are placed upright next to each other so that the air is properly oxygenated, eliminating any chance of anaerobic fermentation. Storage, which lasts for a limited time – just before pressing – takes place in clean, properly ventilated, dry and cool rooms (in a temperature of 7-8°C, and no higher than 15°C) either in the olive mills or in private properties. Since milling begins at most 48 hours after harvest, it is guaranteed that the total transportation and storage time will be less than 48 hours. Consequently, the ideal circumstances in terms of harvesting time and quality of transportation and storage of the olive fruit account for the maintainance of the ideal acidity and high polyphenol levels in olive oil produced later. The lower the acidity measured in an extra virgin olive oil, the higher its quality. Furthermore, polyphenols are anti-oxidants, which primarily determine the suitability of the oil in cooking , and which also attach aromas of bitterness and pungency to the olive oil.

Milling/Extraction process

The procedure starts with grinding the olives into a paste in hammer mills. Then, the next step includes the kneading of the paste which, lasts about 30 minutes. During this phase the temperature of the olive paste is strictly kept at 27-33°C. Thirdly, separating olive oil from the rest of the olive components takes place in three-phase centrifuges. During extraction, olive oil, vegetable water, olive stones and solids are separated. Temperatures again do not exceed 27°C, a parameter which defines the milling as a “cold press”. Cold pressing actually prevents oxidation, while it also preserves all flavors and aromas in the oil yield. Regarding the centrifuges, they are cleaned regularly, so that humidity and other solids are removed.

Storage

Storage takes place in stainless steel tanks kept in properly ventilated rooms with a temperature of around 23°C. During storage, and every three months, plant oils and sediments which have sunk to the bottom are removed, while the olive oil is transferred into a new container. The oil is decanted via a low intake valve with a low speed pump. This way the olive oil is the least exposed to air and thus oxygen. Every oil press keeps records of the filling dates of the oil containers.

Standardization and Packing

The standardization and packing of P.D.O. Messara extra virgin oil takes place in authorized standardisation units in the Messara region or in authorized private units either within or outside the region. These procedures comply with the current legislation requirements which ensure excellent sustenance of the olive oil and are recorded in special registers. *O Olive* is standardized in a private unit in Kalessa in Iraklion Prefecture in accordance with all regulations (HACCP and ISO22000) and is registered in the archives of the P.D.O. Messara estate. *O Olive* is then transferred to 250ml and 500ml glass bottles with screw tops, 2lt and 5lt cans; bottling meets the official standards for food storage. Finally, our label includes information such as the expiration date, qualitative characteristics, its nutritional value and the standardisation information.