



OIL U.V. CHEMICAL ANALYSIS

The International Olive Council (IOC) establishes the regulations for olive oil testing with a two method system: a sensorial analysis and a chemical test. While the sensorial analysis is performed by a qualified testing panel formed by trained Olive Oil Sommeliers that look into the organoleptic senses in olive oil, mainly smell and flavour, chemical tests are done in the laboratories where olive oil is analyzed to look for its chemical compositions.

Parameter	Definition	Results	Limits
K232 Light Decay at 232nm	As the process of oxidation has several stages, it is necessary to measure it over time. We have seen that one indicator of primary oxidation is hydro-peroxide. Secondary oxidation refers to more advanced stages of oxidation, which occur after the primary phases. One way of determining the stage of oxidation is to observe its absorption of ultraviolet light. The K232 test indicates the degree of primary oxidation given that it absorbs ultraviolet light at a distance of 232 nanometers.	1.48 K1%/1cm	≤ 2.50 K1%/1cm
K270 Light Decay at 270nm	The K270 test, like the K232 test, indicates oxidation, but at a different distance. In this case the distance is greater. The substances of secondary oxidation are formed from the substances of primary oxidation (ketones, aldehydes and hydroxy acids) and absorb ultra violet light from farther away, that is, at 270 nanometers.	0.15 K1%/1cm	≤ 0.22 K1%/1cm
ΔK Delta K	Is used mainly as a test for purity, i.e. to detect oils that have been adulterated with refined oil. In the refining process, where the oil is decolorized using active silt, compounds called conjugated trienes are formed, which also absorb at 270nm, but which show three high points that are not present when the oil is purely virgin oil. Low absorption rates (K232, K270, ΔK) correspond to good quality olive oils.	0.00032 K1%/1cm	≤ 0.01 K1%/1cm
Peroxide Value	This test determines the state of primary oxidation in an oil before it can be noted as a rancid smell or taste. Oxidation in a virgin olive oil comes from the incorporation of oxygen into the unsaturated fatty acids. When a fat begins to oxidate diverse compounds are formed. This value also indicates that certain nutritional components such as vitamin E may have been affected. The limit for human consumption is 20.	4.21 mEQ O ² /kg	≤ 20 mEQ O ² /kg
Acidity Oleic Acid Content	This test shows the quantity or percentage of free fatty acids in an oil, expressed in oleic acid (%). Fat that is biologically synthesized is neutral, i.e. the oil in a healthy olive that is still on the tree has 0% free acidity. The current standard, regulation (CE) N° 61/2011 states that the degree of acidity for Extra Virgin Olive Oil must be equal to or less than 0.8°	19.5% (0.195)	≤ 80% ≤ (0.8)

Nutrition Facts Valeur nutritive

Per 2 tsp (10 mL)
Pour à thé (10 mL)

Calories 90 % Daily Value*
% valeur quotidienne*

Fat / Lipides 10 g 13 %
Saturated / saturés 1 g +
Trans / trans 0 g 7 %

Carbohydrate / Glucides 0 g

Protein / Protéines 0 g

Not a significant source of saturated fat, trans fat, fibre, sugars, cholesterol, sodium, potassium, calcium, or iron.

Source négligeable de lipides saturés, lipides trans, fibres, sucres, cholestérol, sodium, potassium, calcium et fer.

*5% or less is a little, 15% or more is a lot / *5% ou moins c'est peu, 15% ou plus c'est beaucoup



Harvest Date: 12/18/2023
Test Date: 12/18/2023