



**National and Kapodistrian
University of Athens**

Faculty of Pharmacy
Department of Pharmacognosy & Natural Products Chemistry
Panepistimiopolis Zografou
15771, Athens
Tel: +30 210 72 74052
magiatis@pharm.uoa.gr



Athens, 14/12/2020
Cert.Num: 2021-C00575

CERTIFICATE OF ANALYSIS

Brand Name: L2 (36)21F
Owner: PETRAKIS APOSTOLOS
Variety: TSOUNATI
Origin: EPISKOPI RETHYMNI GREECE

Analysis Date: 04/12/2020

Harvest Period: October 2020

Chemical Analysis

Acidity: 0,38 (<0,8)	
Peroxides: 8 meqO ₂ /Kg (<20)	
K232: 2,129 (<2,5), K270: 0,159 (<0,22), ΔK: 0,0010	
Oleocanthal	142 mg/Kg
Oleacein	84 mg/Kg
Oleocanthal + Oleacein (index D1)	226 mg/Kg
Ligstroside aglycon (monoaldehyde form)	44 mg/Kg
Oleuropein aglycon (monoaldehyde form)	65 mg/Kg
Ligstroside aglycon (dialdehyde form)	516 mg/Kg
Oleuropein aglycon (dialdehyde form)	231 mg/Kg
Free Tyrosol	<5 mg/Kg
Total tyrosol derivatives	702 mg/Kg
Total hydroxytyrosol derivatives	381 mg/Kg
Total polyphenols analyzed	1.083 mg/Kg

Comments :

The levels of oleocanthal are higher than the average values (135 mg/Kg respectively) of the sample included in the international study performed at the University of California, Davis.

The daily consumption of 20 g of the analyzed olive oil provides 21.7 mg of hydroxytyrosol, tyrosol or their derivatives. Olive oils that contain >5 mg per 20 gr belong to the category of oils that protect the blood lipids from oxidative stress according to the Regulation 432/2012 of the European Union.

It should be noted that oleocanthal and oleacein present important biological activity and they have been related with anti-inflammatory, antioxidant, cardioprotective and neuroprotective activity.

The chemical analysis was performed according to the method published in J.Agric. Food Chem., 2012, 60 (47) , pp 11696-11703, J.Agric. Food Chem., 2014 62 (3) , 600-607 and OLIVAE, 2015, 122, 22-33.

*Oleomissional+Oleuropeindial **Ligstrodiol+Oleokoronal

Magiatis Prokopios
PROKOPIOS MAGIATIS
ASSOCIATE PROFESSOR
UNIVERSITY OF ATHENS
FACULTY OF PHARMACY
DEPARTMENT OF PHARMACOGNOSY
AND NATURAL PRODUCTS CHEMISTRY