



C2122-00412

**World Olive Center for Health**

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Athens: 30/11/2021

Cert. Num: C2122-00412

**CERTIFICATE OF ANALYSIS**

**Brand Name:** PAMAKO MONOVARIETAL  
**Owner:** ANDROULAKIS EFTYCHIOS  
**Variety:** TSOUNATI  
**Origin:** AGRILES CHANIA CRETE GREECE  
**Harvesting Period:** October 2021  
**Oil Press:** ANDROULAKIS EFTYCHIOS

Analysis Date: 26/11/2021

Production Date: 10/10/2021

**Chemical Analysis**

Oleocanthal	478	mg/Kg
Oleacein	272	mg/Kg
Oleocanthal+Oleacein (index D1)	750	mg/Kg
Ligstroside aglycon (monoaldehyde form)	270	mg/Kg
Oleuropein aglycon (monoaldehyde form)	292	mg/Kg
Ligstroside aglycon (dialdehyde form)*	647	mg/Kg
Oleuropein aglycon (dialdehyde form)**	121	mg/Kg
Free Tyrosol	10	mg/Kg
Total tyrosol derivatives	1.404	mg/Kg
Totalhydroxytyrosol derivatives	686	mg/Kg
Total polyphenols analyzed	2.090	mg/Kg

**Comments:**

The levels of oleocanthal and oleacein are higher than the average values (135 and 105 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 41,8mg 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 that has been submitted to EFET and published in J Agric Food Chem, 2012, 60,11696, J Agric Food Chem, 2014,62, 600-607 & Molecules, 2020, 25, 2449. \*Oleomissional+Oleuropeindial

\*\*Ligstrodial+Oleokoronal

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