



World Olive Center for Health

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Athens: 27/12/2023

Cert. Num: C2324-00378

CERTIFICATE OF ANALYSIS

Brand Name: ARMONIA organic evoo
Owner: SAKELLAROPOULOS ORGANIC FARMS
Variety: KORONEIKI
Origin: SPARTI LAKONIA GREECE
Harvesting Period:
Oil Mill:

Analysis Date: 18/12/2023

Production Date:

Chemical Analysis

Oleocanthal	206	mg/Kg
Oleacein	153	mg/Kg
Oleocanthal+Oleacein (index D1)	359	mg/Kg
Ligstroside aglycon (monoaldehyde form)	121	mg/Kg
Oleuropein aglycon (monoaldehyde form)	216	mg/Kg
Ligstroside aglycon (dialdehyde form)*	316	mg/Kg
Oleuropein aglycon (dialdehyde form)**	158	mg/Kg
Free Tyrosol	<5	mg/Kg
Total tyrosol derivatives	653	mg/Kg
Total hydroxytyrosol derivatives	527	mg/Kg
Total polyphenols analyzed	1.180	mg/Kg

Comments:

The levels of oleocanthal and oleacein are higher than the average values (135 and 105 mg/Kg respectively) of the samples included in the international study performed at the University of California, Davis.

The daily consumption of 20 g of the analyzed olive oil provides 23,6mg 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 at the National and Kapodistrian University of Athens 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 & Molecules 2020, 25, 2449.

The results relate to the analyzed sample.

*Oleomissional+Oleuropeindial **Ligstrodiol+Oleokoronal

Magiatis Prokopios

PROKOPIOS MAGIATIS
ASSOCIATE PROFESSOR
UNIVERSITY OF ATHENS
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DEPARTMENT OF PHARMACOLOGY
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ΕΠΩΝΥΜΙΑ ΠΕΛΑΤΗ / NAME OF CUSTOMER : ΒΙΟΛΟΓΙΚΟΙ ΕΛΑΙΩΝΕΣ ΣΑΚΕΛΛΑΡΟΠΟΥΛΟΥ/Sakellaropoulos Organic Farms

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ΚΙΝΗΤΟ / MOBILE:6932309909

ΔΕΙΓΜΑΤΟΛΗΨΙΑ ΑΠΟ / SAMPLING FROM : ΠΕΛΑΤΗ / CUSTOMER

ΚΑΤΑΣΤΑΣΗ ΔΕΙΓΜΑΤΟΣ / STATE OF SAMPLE : ΚΑΝΟΝΙΚΗ / REGULAR

ΗΜΕΡΟΜΗΝΙΑ ΔΕΙΓΜΑΤΟΛΗΨΙΑΣ /
DATE OF SAMPLING : 2023-12-18

ΗΜΕΡΟΜΗΝΙΑ ΠΑΡΑΛΑΒΗΣ /
DATE OF RECEIPT :2023-12-18

ΗΜΕΡΟΜΗΝΙΑ ΕΝΑΡΞΗΣ ΑΝΑΛΥΣΗΣ /
START OF TESTING : 2023-12-18

ΗΜΕΡΟΜΗΝΙΑ ΟΛΟΚΛΗΡΩΣΗΣ ΑΝΑΛΥΣΗΣ /
END OF TESTING : 2023-12-20

ΕΡΓΑΣΤΗΡΙΑ /LABS : ARTA,IOANNINA

ΕΙΔΟΣ ΔΕΙΓΜΑΤΟΣ / KIND OF SAMPLE : ΕΛΑΙΟΛΑΔΟ ΑΡΜΟΝΙΑ Βιολογικό / ARMONIA organic evoo

ΚΩΔΙΚΟΣ / SAMPLE ID: 385302

ΑΡΙΘΜΟΣ ΠΑΡΤΙΔΑΣ / BATCH NUMBER: ΒΙΟΛΟΓΙΚΟΙ ΕΛΑΙΩΝΕΣ ΣΑΚΕΛΛΑΡΟΠΟΥΛΟΥ /
SAKELLAROPOULOS ORGANIC FARMS

ΠΑΡΑΜΕΤΡΟΙ PARAMETERS	ΜΕΘΟΔΟΣ METHOD	ΑΠΟΤΕΛΕΣΜΑ RESULT	ΜΟΝΑΔΑ UNIT	ΟΡΙΟ LIMIT
Οξύτητα - Acidity	ΧΤ 14 ΕΟΚ 1348 /13 Παράρτημα ΙΙ	0,31	%	<0,80%
Αριθμός υπεροξειδίων- Peroxides	ΧΤ-13 ΕΟΚ 2568/91, Παράρτημα ΙΙΙ	3,66	meqO2/Kg	< 20
Κ 232	ΧΤ 15 ΕΟΚ 1348 /13 Παράρτημα ΙΧ	1,485		<2,50
Κ 268	ΧΤ 15 ΕΟΚ 1348 /13 Παράρτημα ΙΧ	0,159		< 0,22
δΚ	ΧΤ 15 ΕΟΚ 1348 /13 Παράρτημα ΙΧ	-0,007		<0,01

notes: Τα στοιχεία και τα δεδομένα για τη δειγματοληψία έχουν δοθεί από τον πελάτη και το εργαστήριο δε φέρει καμιά ευθύνη / The data and data for sampling have been provided by the customer and the laboratory bears no responsibility

FINAL APPROVAL

*Ο κανόνας απόφασης των εργαστηρίων μας είναι α-U>Lmax και έχει συμφωνηθεί με τον πελάτη για τις ως άνω δοκιμές.(u=αβεβαιότητα)

ΣΤΕΦΟΥ ΕΛΠΙΔΑ - Mrs Stefou Elpida

GEN. DIRECTOR

G.D. - ΣΩΤΗΡΗΣ ΤΖΙΜΑΣ - Mr Tzimas Sotiris
Γενικός Διευθυντής

ΟΙ ΑΝΑΛΥΤΕΣ
THE ANALYSTS

ΕΓΚΡΙΣΗ ΑΠΟ
APPROVED BY

2023-12-21

END OF CERTIFICATE 89960



ΕΠΩΝΥΜΙΑ ΠΕΛΑΤΗ / **NAME OF CUSTOMER** : ΒΙΟΛΟΓΙΚΟΙ ΕΛΑΙΩΝΕΣ ΣΑΚΕΛΛΑΡΟΠΟΥΛΟΥ/Sakellaropoulos Organic FarmsΔΙΕΥΘΥΝΣΗ / **ADDRESS**: ΣΚΟΥΡΑ, 23100, ΣΠΑΡΤΗ/ΣΚΟΥΡΑ 23100, SPARTAΤΗΛ / **TEL**: 2731081118**EMAIL**: geosakel@gmail.comΚΙΝΗΤΟ / **MOBILE**: 6932309909ΔΕΙΓΜΑΤΟΛΗΨΙΑ ΑΠΟ / **SAMPLING FROM** : ΠΕΛΑΤΗ / CUSTOMERΚΑΤΑΣΤΑΣΗ ΔΕΙΓΜΑΤΟΣ / **STATE OF SAMPLE** : ΚΑΝΟΝΙΚΗ / REGULAR

ΗΜΕΡΟΜΗΝΙΑ ΔΕΙΓΜΑΤΟΛΗΨΙΑΣ /

ΗΜΕΡΟΜΗΝΙΑ ΠΑΡΑΛΑΒΗΣ /

ΗΜΕΡΟΜΗΝΙΑ ΕΝΑΡΞΗΣ ΑΝΑΛΥΣΗΣ /

ΗΜΕΡΟΜΗΝΙΑ ΟΛΟΚΛΗΡΩΣΗΣ ΑΝΑΛΥΣΗΣ /

DATE OF SAMPLING : 2023-12-18**DATE OF RECEIPT** : 2023-12-18**DATE OF TESTING** : 2023-12-18**ANALYSIS DATE** : 2023-12-20ΕΡΓΑΣΤΗΡΙΑ / **LABS** : ΑΡΤΑ, ΙΟΑΝΝΙΝΑΕΙΔΟΣ ΔΕΙΓΜΑΤΟΣ / **KIND OF SAMPLE** : ΕΛΑΙΟΛΑΔΟ ΑΡΜΟΝΙΑ Βιολογικό / ARMONIA organic evooΚΩΔΙΚΟΣ / **SAMPLE ID** : 385302ΑΡΙΘΜΟΣ ΠΑΡΤΙΔΑΣ / **BATCH NUMBER**: ΒΙΟΛΟΓΙΚΟΙ ΕΛΑΙΩΝΕΣ ΣΑΚΕΛΛΑΡΟΠΟΥΛΟΥ /

SAKELLAROPOULOS ORGANIC FARMS

ANALYSES	INSTRUMENT	METHODS	RESULT	(see note)	UNIT
Pesticides Table I	LC MSMS	LCMSMS	< LOQ except of table I	0,01	mg/kg
Pesticides Table II	GCMSMS	GCMSMS	< LOQ except of table II	0,01	mg/kg

Note : LOD= 0,003 mg/Kg , LOQ = 0,01mg/kg

Total Number of Substances Quantified :	0
Approved substances :	OK
The sample according to the substances that were tested and MRL is :	Acceptable

Η Biolab δεν φέρει καμία ευθύνη για τα παραπάνω επιτρεπόμενα όρια που προέρχονται από το συγκεκριμένο ιστοχώρο της E.E. - The BIOLAB laboratories assumes no responsibility for the above MRL derived from the website E.U.



TOTAL SUBSTANCES

TABLE 1- LCMSMS

Acetamiprid, Ametoctradin, Ametryn, Aminocarb, Amitraz, Anilofos, Aspon, Azaconazole, Azamethiphos, Azoxystrobin, Beflubutamid, Benalaxyl, Benoxacor, Bensulfuron Methyl, Bensulide, Benthiavalicarb-isopropyl, Benzovindiflupyr, Brodifacoum, Bupirimate, Buprofezin, Butafenacil, Buturon, Carbenazim, Carbofuran, Carboxin, Carfentrazone-ethyl, Chlorfluzuron, Chlorotoluron, Chloroxuron, Chlorsulfuron, Clethodim, Climbazole, Clodinafop-Propargyl, Clomazone, Clothianidin, Crufomate, Cycloxydim, Cycluron, Cyflumetofen, Cyproconazole, Cyprodinil, Cyromazine, Demeton-S-methyl sulfoxide, Desmedipham, Diafenthiuron, Diclobutrazol, Dicrotophos, Difenacoum, Difenconazole, Diflubenzuron, Dimefuron, Dimethachlor, Dimethenamid, Dimethirimol, Dimethoate, Dimethomorph, Dioxacarb, Ditalimfos, Diuron, Edifenphos, Emamectin-benzoate, Etoxazole, Ethofumesate, Ethoprophos, Fenamiphos, Fenamiphos Sulfone, Fenamiphos sulfoxide, Fenazaquin, Fenbuconazole, Fenfuram, Fenhexamid, Fenoxycarb, Fenpropidin, Fenpropimorph, Fenpyrazamine, Fenpyroximate, Fensulfthion, Fenthion oxonsulfoxide, Fenthion Sulfoxide, Fenthion-oxon, Fenthion-sulfone, Fenuron, Fipronil, Fipronil-desulfinyl, Fipronil-Sulfone, Flonicamid, Fluazinam, Flubendiamide, Fludioxonil, Flufenacet, Flufenoxuron, Fluometuron, Fluopicolide, Fluopyram, Fluoxastrobin, Fluquinconazole, Flurprimidol, Flurtamone, Flusilazole, Flutolanil, Flutriafol, Fluxapyroxad, Forchlorfenuron, Formetanate HCl, Fosthiazate, Fuberidazole, Furalaxyl, Griseofulvin, Haloxyfop-methyl ESTER, Hexaconazole, Hexaflumuron, Hydramethylnon, Imazalil, Imazapic, Imazapyr, Imazaquin, Imazethapyr, Imibenconazole, Imidacloprid, Iaconazole, Isafenphos-methyl, Isoprocarb, Isoproturon, Isopyrazam, Isoxadifen-ethyl, Isoxathion, Lenacil, Linuron, Lufenuron, Mandipropamid, Mefenacet, Mepanipyrim, Mepronil, Mesosulfuron methyl, Metaflumizone, Metalaxyl M, Metalaxyl, Metamitron, Metconazole, Methabenzthiazuron, Methamidophos, Methiocarb Sulfoxide, Methoprotryne, Methoxyfenozide, Metobromuron, Metosulam, Metoxuron, Metribuzin, Metsulfuron-Methyl, Mexacarbate, Molinate, Monocrotophos, Monolinuron, Monuron, Myclobutanil, Neburon, Nicosulfuron, Nitenpyram, Norflurazon, Novaluron, Nuarimol, Ofurace, Omethoate, Oxadixyl, Oxycarboxin, Paclobutrazol, Paraoxon, Penconazole, (Monceren) Pencycuron, Penflufen, Penoxsulam, Penthiopyrad, Phenmedipham, Phosphamidon, Picolinafen, Picoxystrobin, Pinoxaden, Piperophos, Pirimicarb Desmethyl, Pirimicarb, Prometon, Prometryne, Propamocarb, Propaquizafop, Propiconazole, Proquinazid, Prosulfocarb, Pyracarbolid, Pyraclostrobin, Pyridaben, Pyridalyl, Pyridaphenthion, Pyrifenox, Pyrimethanil, Pyriminobac-methyl(E), Pyriofenone, Pyriproxyfen, Pyroxsulam, Quinoclamine, Quinoxifen, Rotenone, Sebuthylazine, Secbumeton, Sedaxane, Sethoxydim, Siduron, Silthiofam, Simazine, Simeconazole, Spinetoram, Spinosad (Spinosyn A), Spinosad (Spinosyn D), Spirotetramat, Spiroxamine, Sulfotep, Tebuconazole, Tebufenozide, Tebufenpyrad, Tebutam, Tebuthiuron, Teflubenzuron, Temephos, Tepraloxydim, Terbumeton, Terbutryn, Tetraconazole, Thiabendazole, Thiacloprid, Thiamethoxam, Thidiazuron, Thifensulfuron-methyl, Thiobencarb, Thiophanate-methyl, Tolfenpyrad, Tralkoxydim, Triadimefon, Triasulfuron, Triazamate, Trichlorfon, Tricyclazole, Trifloxystrobin, Trifloxysulfuron (sodium), Triflumuron, Triflusulfuron-methyl, Uniconazole, Vamidothion, Warfarin, Zoxamide, BAC-C8, BAC-C10, BAC-C12, BAC-C14, BAC-C16, DDAC-C8, DDAC-C10, DDAC-C12

TABLE 2- GCMSMS



2,3,5,6-Tetrachloroaniline, 2,4'-DDD, 2,4'-DDE, 2,4'-DDT, 2-Phenylphenol, 4,4'-DDD, 4,4'-DDE, 4,4'-DDE, 4,4'-DDT, 4,4'-Dichlorobenzophenone, 4,4'-Methoxychlor olefin, Acetochlor, Acrinathrin, Alachlor, Anthraquinone, Atrazine, Azoxystrobin*, Benfluralin, Boscalid*, Bromfenvinphos, Bromophos-ethyl, Bromophos-methyl, Bromopropylate, Carbophenothion, Carfentrazone ethyl, Chlorbense, Chlorfenson, Chlorfenvinphos 1, Chlorfenvinphos 2, Chlorbenzilate, Chloroneb, Chloroneb, Chlorothalonil, Chlorpropham, Chlorpyrifos, Chlorpyrifos methyl, Chlorthal-dimethyl, Chlorthiophos 1, Chlorthiophos 2, cis-Chlordane, cis-Nonachlor, cis-Permethrin, Clomazone, Cycloate, Cyfluthrin, Cymiazol*, Cypermethrin, Cyproconazole*, Cyprodinil, Deltamethrin, Diallylate 1, Dicloran, Difenconazole*, Dimethachlor, Diphenamid, Diphenylamine, Endosulfan ether, Endosulfan I, Endosulfansulfate, EPN, Esfenvalerate*, Ethalfuralin, Ethion, Ethylan, Etridiazole, Fenamiphos, Fenarimol, Fenchlorphos, Fenitrothion, Fenpropathrin, Fenpropathrin, Fenson, Fenthion, Fenvalerate 1, Fenvalerate 2, Fipronil, Fipronil sulfone*, Fipronil desulfanyl*, Fluazifop-P-butyl, Flucythrinate 1, Flucythrinate 2, Flucythrinate 2, Fludioxonil, Fluquinconazole, Flutolanil, Flutriafol, Fonofos, Heptachlor, Heptachlor epoxide, Indoxacarb*, Iodofenphos, Isodrin, Isopropalin, Lenacil, Leptophos, Malathion, Metazachlor, Methoxychlor, Methyl parathion, Metolachlor, Mevinphos, MGK 264 1, MGK 264 2, Mirex, Myclobutanil, N-(2,4-Dimethylphenyl)formamide, Napropamide*, Nitralin, Nitrofen, Norflurazon, Oxadiazon, Oxyfluorfen, Paclbutrazol, Pebulate, Penconazole, Pentachloroaniline, Pentachloroanisole, Pentachlorobenzonitrile, Pentachlorobenzonitrile, Pentachlorothioanisole, Pentachlorothioanisole, Phenothrin, Phosalone, Phosmet, Piperonyl butoxide, Pirimiphos ethyl, Pirimiphos methyl, Pretilachlor, Procymidone, Propachlor, Propanil, Propargite, Propiconazole*, Propisochlor, Propyzamide, Prothiofos, Pyrazophos, Pyridaben, Pyridaphenthion, Pyrimethanil, Pyriproxyfen, Quinalphos, Spirodiclofen*, Spiromesifen*, Sulfotep, Tau-fluvalinate, Tebuconazole, Tebufenpyrad, Tecnazene, Tefluthrin, Terbacil, Terbufos, Terbutylazine, Tetrachlorvinphos, Tetraconazole*, Tetradifon, Tetramethrin, Tolclofos-methyl, Tolyfluanid, trans-Chlordane, Transfluthrin, trans-Nonachlor, trans-Permethrin, Triadimefon, Triallate, Triazophos, Triflumizole, Trifluralin, Triticonazole*, Vinclozolin, ?±-BHC, ?²-BHC, ?³-BHC, ?⁴-BHC, ?»-Cyhalothrin

*substances of tables are not accredited

FINAL APPROVAL

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ΜΠΑΡΔΑ ΕΛΙΝΑ - Mrs Barda Elina

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THE ANALYSTS

ΕΓΚΡΙΣΗ ΑΠΟ
APPROVED BY

2023-12-21

END OF CERTIFICATE 89960

ΑΠΑΓΟΡΕΥΕΤΑΙ Η ΤΡΟΠΟΠΟΙΗΣΗ Ή Η ΜΕΡΙΚΗ ΑΝΑΠΑΡΑΓΩΓΗ ΤΗΣ ΕΚΘΕΣΗΣ ΔΟΚΙΜΗΣ ΠΑΡΑ ΜΟΝΟ Η ΠΛΗΡΗΣ ΧΩΡΙΣ ΤΗ ΓΡΑΠΤΗ ΕΓΚΡΙΣΗ ΤΗΣ ΒΙΟΛΑΒ. ΤΑ ΑΠΟΤΕΛΕΣΜΑΤΑ ΤΟΥ ΠΙΣΤΟΠΟΙΗΤΙΚΟΥ ΣΧΕΤΙΖΟΝΤΑΙ ΜΟΝΟ ΜΕ ΤΑ ΣΥΓΚΕΚΡΙΜΕΝΑ ΑΝΤΙΚΕΙΜΕΝΑ ΠΟΥ ΥΠΟΒΛΗΘΗΚΑΝ ΣΕ ΔΟΚΙΜΗ / MODIFICATION OR PARTIAL REPRODUCTION OF THE TEST REPORT IS PROHIBITED EXCEPT IN FULL WITHOUT THE WRITTEN APPROVAL OF BIOLAB. THE RESULTS OF THE CERTIFICATE RELATE ONLY TO THE SPECIFIC ITEMS TESTED.

certificate version 4 - 16/09/2022

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