

TEST REPORT

	<i>CLIENT</i>	ASTAR I LLC
	<i>Attention to</i>	
μ	<i>Certificate number</i>	2246-20-01277-01
μ/	<i>Date Reported</i>	19/2/2020
μ	<i>Sample Description</i>	0,2
μ	<i>Sample Code</i>	20-01277
μ	<i>Sampling container</i>	(Package Product)
μ	<i>Sampler</i>	(CLIENT)
μ	<i>Sample Transport</i>	(Client)
μ/	<i>Date of sampling</i>	19/2/2020
μ/	<i>Date of sample received</i>	19/2/2020
μ	<i>Condition of sample received</i>	(Normal)
	<i>Start of Analysis</i>	19/2/2020
	<i>End of Analysis</i>	19/2/2020

EN ISO/IEC 17025 (, 46/27-11-2001).
μ μ μ μ μ μ (*) Accredited tests are represented by the symbol (*).

TEST RESULTS

μ	Parameters	μ		[**]	Method
		Result	Units	Limits [**]	
- CHEMICAL ANALYSIS					
*	() <i>Acidity (as oleic acid)</i>	0.22	% (w/w)	0.8	2568/91 (μ μ)
*	μ <i>Peroxide Value</i>	6.9	mEq O2/kg	20.0	2568/91 (μ μ)
*	232 <i>232</i>	1.59		2.50	2568/91 (μ μ)
*	268 <i>268</i>	0.14		0.22	2568/91 (μ μ)

XHMIKOTECHNIKH
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ΤΗΛ: 28310 25412 ΦΑΞ: 28310 50626
Α.Φ.Μ.: 081756348 ΔΟΥ ΡΕΘΥΜΝΟΥ

(Fafoutakis Manolis)

μ - μ μ μ - μ
(Chemist - Head of Chemical Department of Olive Oil - Food)

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(Spantidaki Maria)

μ MSc-
(Chemist MSc - Technical Manager)

μ	Parameters	μ		[**]	Method
		Result	Units	Limits [**]	
- CHEMICAL ANALYSIS					
*		0.00		0.01	2568/91 (μ μ)
*	Waxes (without C40)	36	mg/Kg	< 150	Commission Regulation (EEC) 2568/91 (Annex XX) & COI/T.20/Doc. No 28 as in force
*	(μ C40)	72	mg/Kg		Commission Regulation (EEC) 2568/91 (Annex XX) & COI/T.20/Doc. No 28 as in force
	Total Polyphenols as gallic acid	194	mg/Kg		IN HOUSE, Photometric

[**]

μ 2568/91
[**] Limits according to European Directive

μ μ
2568/91 as in force concerning extra virgin olive oil.

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Sample Description	0,2
Sample Code	20-01277
Sampling container	(Package Product)
Sampler	(CLIENT)
Sample Transport	(Client)
Date of sampling	19/2/2020
Date of sample received	19/2/2020
Condition of sample received	(Normal)
Start of Analysis	19/2/2020
End of Analysis	19/2/2020

EN ISO/IEC 17025 (), 46/27-11-2001).
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TEST RESULTS

- PESTICIDE ANALYSIS

- ANALYSIS PROFILE

A/A	(METHOD)	(DESCRIPTION)
1	GC-MS/MS	E μμ μ , _05 μ GC-MS/MS, μ ISO 15662:2018. In house multi-residue method, _05 employing GC-MS/MS, based on ISO 15662:2018.

μ - Parameters	μ	Units	Reporting Limit (RL)	MRL	Method
* Chlorpyrifos ethyl	<0.01	mg/Kg	0.01		GC-MS/MS
* Deltamethrin	<0.01	mg/Kg	0.01		GC-MS/MS

1: ("LOD") μ . RL = 0.01 mg/kg μ

NOTE 1: Except the compounds in the above table, all the other pesticides were either not detected or were detected in concentration below the limit of detection ("LOD.") of the method. RL = 0.01 mg/kg

2: μ μμ .

NOTE 2: The following tables show all the analyzed compounds.

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μ - Continuing from previous page

μ/ - Certificate Number : 2246-20-01277-02
- Date of Reporting : 19/2/2020

- ANNEX

1: μ GC-MS/MS
TABLE 1: AGRICULTURAL DRUG RESIDUES analyzed by GC-MS/MS

ACTIVE COMPOUND	ACTIVE COMPOUND	ACTIVE COMPOUND	ACTIVE COMPOUND
Acetochlor	Chloroneb	Endosulfan	Oxadiazon
Acibenzolar-S-methyl	Chlorothalonil	Endosulfan	Oxyfluorfen
Alachlor	Chlorpropham	Epoxiconazole	Pacllobutrazol
Alanycarb deg.	Chlorpyrifos ethyl	Ethion	Parathion
Aldrin	Chlorpyrifos methyl	Ethoprophos	Parathion methyl
Ametryn	Clomazone	Etofenprox	Penconazole
Amitraz	Clothianidin	Etrifos	Pendimethalin
Atrazine	Coumaphos	Fenamiphos	Permethrin
Azaconazole	Cyfluthrin	Fenarimol	Phenthoate
Azamethiphos	Cyhalothrin	Fenitrothion	Phorate
Azinphos ethyl	Cypermethrin	Fenoxycarb	Phosalone
Azinphos methyl	Cypermethrin alpha	Fenthion-metabolite	Phosmet
Azoxystrobin	Cyproconazole	Fenvalerate	Phosphamidon
Benalaxyl	Cyprodinil	Fludioxonil	Piperonyl butoxide
Bendiocarb	DDD-o,p'	Flusilazole	Pirimicarb
Benfluralin	DDD-p,p'	Flutolanil	Pirimiphos methyl
Benfuracarb	DDE-o,p'	Flutriafol	Prochloraz
Bifenazate	DDE-p,p'	Fluvalinate	Procymidone
Bifenox	DDT-o,p'	HCH-	Profenofos
Bifenthrin	DDT-p,p'	HCH-	Propachlor
Biphenyl	Deltamethrin	HCH- (Lindane)	Propanil
Bitertanol	Demeton S methyl	HCH-	Propargite
Boscalid	Demeton S methyl sulphone	Heptachlor	Propyzamide
Bromacil	Desmedipham	Heptachlor endo epoxide	Pyrazophos
Bromophos ethyl	Diazinon	Heptachlor exo epoxide	Pyrimethanil
Bromophos methyl	Dichlobenil	Hydroxycarbofuran-3	Pyriproxyfen
Bromopropylate	Dichlofluanid	Iprodione	Quinalphos
Bromuconazole	Dichloran	Kresoxim methyl	Quintozene
Bupirimate	Dichlorvos	Leptophos	Tebuconazole
Buprofezin	Diclobutrazol	Linuron	Tebufenpyrad
Butralin	Diclofop-methyl	Malathion	Tefluthrin
Cadusafos	Dicloran	Metalaxyl	Tetradifon
Carbofuran	Dicofol	Methacrifos	Tetramethrin
Carbophenothion	Dicrotophos	Methamidophos	Tolclofos methyl
Carbosulfan	Dieldrin	Methidathion	Triadimefon
Carboxin	Diethofencarb	Methoxychlor	Triadimenol
Carfentrazone ethyl	Difenoconazole	Metolachlor	Triazophos
Chlordane cis	Diflufenican	Mevinphos	Tricyclazole
Chlordane trans	Dimethoate	Monocrotophos	Triflumizole
Chlorfenson	Diniconazole	Myclobutanil	Trifluralin
Chlorfenvinphos	Endosulfan sulfate	Nitrofen	Vinclozolin

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Condition of sample received	(Normal)
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EN ISO/IEC 17025 (), 46/27-11-2001).

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TEST RESULTS

- FATTY ACIDS PROFILE

Parameters	Result	Units	Limits [**]	Method
	* C14:0 (Myristic)	0.01	% TFA	0.03
* C16:0 (Palmitic acid)	13.14	% TFA	7.50-20.00	Commission Regulation (EEC) 2568/91 (Annex X) & COI/T.20/Doc. No 33 as in force
* C16:1 (Palmitoleic acid)	0.97	% TFA	0.30-3.50	Commission Regulation (EEC) 2568/91 (Annex X) & COI/T.20/Doc. No 33 as in force
* C17:0 (Heptadecanoic)	0.04	% TFA	0.40	Commission Regulation (EEC) 2568/91 (Annex X) & COI/T.20/Doc. No 33 as in force
* C17:1 (cis-10-Heptadecanoic)	0.07	% TFA	0.60	Commission Regulation (EEC) 2568/91 (Annex X) & COI/T.20/Doc. No 33 as in force
* C18:0 (Stearic acid)	2.57	% TFA	0.50-5.00	Commission Regulation (EEC) 2568/91 (Annex X) & COI/T.20/Doc. No 33 as in force
* C18:1 (Oleic acid)	76.34	% TFA	55.00-83.00	Commission Regulation (EEC) 2568/91 (Annex X) & COI/T.20/Doc. No 33 as in force
* C18:2 (Linoleic acid)	4.99	% TFA	2.50-21.00	Commission Regulation (EEC) 2568/91 (Annex X) & COI/T.20/Doc. No 33 as in force

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μ - Continuing from previous page

μ/

μ - Parameters	μ	Units	[**]	Method
	Result		Limits [**]	
* C18:3 (Linolenic acid)	0.82	% TFA	1.0	Commission Regulation (EEC) 2568/91 (Annex X) & COI/T.20/Doc. No 33 as in force
* C20:0 (Arachidic acid)	0.48	% TFA	0.6	Commission Regulation (EEC) 2568/91 (Annex X) & COI/T.20/Doc. No 33 as in force
* C20:1 (Eicosenoic acid)	0.31	% TFA	0.5	Commission Regulation (EEC) 2568/91 (Annex X) & COI/T.20/Doc. No 33 as in force
* C22:0 (Behenic acid)	0.17	% TFA	0.2	Commission Regulation (EEC) 2568/91 (Annex X) & COI/T.20/Doc. No 33 as in force
* C24:0 (Lignoceric acid)	0.08	% TFA	0.2	Commission Regulation (EEC) 2568/91 (Annex X) & COI/T.20/Doc. No 33 as in force
μ trans (C18:2T) & trans (C18:3T)	0.008	% TFA	0.05	
μ trans	0.015	% TFA	0.05	
μ	16.49	% TFA		
	77.69	% TFA		
	5.82	% TFA		

[**]

μ 2568/91

[**] Limits according to European Directive

μ μ

2568/91 as in force concerning extra virgin olive oil.

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μ MSc-
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μ 20-01277
- Reporting Limit (μ)

	Reporting Limit (LOQ)	Limit of Detection (LOD)	(mg/kg)
Chlorpyrifos-ethyl	0.01	0.003	0.001-0.003
Deltamethrin	0.01	0.003	0.004

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