

ANALYTICAL REPORT Nº: 541.00/20/LET

The results refer exclusively to the sample tested under the conditions in which it was received

information provided by the customer	Customer: KIWA SATIVA UNIPESAOAL LDA	Tel: 217991100
	Address: RUA ROBALO GOUVEIA Nº 1 - 1º A	
	Sample: Extra Virgin Olive Oil	Sampling is the customer's responsibility (The sampling is not included in the scope of accreditation)
	Reference: 107DOP03OAD20	
State of the sample: Suitable		Full bottle? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Received by: 15/01/2020 – 16:10	Beginning of the analysis: 21/01/2020	Conclusion of the analysis: 23/01/2020

Analysis	Method	Limits	Results	Date
Determination of Free Fatty Acids, Cold method - Volumetric analysis (% Oleic acid)	Regulation (EEC) nº 2568/91, Annex II and Implementing Regulation (EU) 2016/1227	≤ 0,80 ¹⁾	0,14 ± 0,01	22/01/2020
Determination of Peroxide Index - Volumetric analysis (meq O ₂ /Kg)	Regulation (EEC) nº 2568/91, Annex III and Implementing Regulation (EU) 2016/1784	≤ 20,0 ¹⁾	6,6 ± 1,1	22/01/2020
Determination of the Composition of Sterols, Erythrodiol + Uvaol (%)	Cholesterol	≤ 0,5 ¹⁾	0,2 ± 0,2	23/01/2020
	Brassicasterol	≤ 0,1 ¹⁾	0,0 ± 0,1	
	Campesterol	≤ 4,0 ¹⁾	2,6 ± 0,3	
	Stigmasterol	<Campesterol ¹⁾	0,6 ± 0,1	
	β-sitosterol (apparent)	≥ 93,0 ¹⁾	95,8 ± 0,8	
	Δ-7-stigmastenol	≤ 0,5 ¹⁾	0,1 ± 0,1	
Total Sterols (mg/Kg)		≥ 1000 ¹⁾	1278 ± 64	
Erythrodiol + Uvaol (%)		≤ 4,5 ¹⁾	1,3 ± 0,3	

LOQ – Limit of Quantification

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** Testing service provided by an Accredited laboratory;

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1) Regulation (EEC) nº 2568/91 and subsequent amendments;

2) NP 972:1989;

3) Regulation (EEC) nº 835/2011 and subsequent amendments.

4) Decree nº 1135/95;

5) Codex Stan 33-1981;

6) Decree nº 1198/1991.

The reported uncertainty is an expanded uncertainty calculated using a coverage factor K = 2, which gives a level of confidence of approximately 95%.

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Analysis		Method	Limits	Results	Date
Determination of Fatty Acids Methyl Esters (%)	C14:0	Regulation (EEC) n ^o 2568/91, Annex X and Implementing Regulation (UE) 2015/1833	≤ 0,03 ¹⁾	≤0,01 (LQ)	23/01/2020
	C16:0		7,50 – 20,00 ¹⁾	11,58 ± 0,56	
	C16:1		0,30 – 3,50 ¹⁾	0,72 ± 0,10	
	C17:0		≤ 0,40 ¹⁾	0,15 ± 0,02	
	C17:1		≤ 0,60 ¹⁾	0,24 ± 0,05	
	C18:0		0,50 – 5,00 ¹⁾	3,44 ± 0,48	
	C18:1		55,00 – 83,00 ¹⁾	75,47 ± 3,62	
	C18:2		2,50 – 21,00 ¹⁾	6,90 ± 1,10	
	C18:3		≤ 1,00 ¹⁾	0,73 ± 0,08	
	C20:0		≤ 0,60 ¹⁾	0,41 ± 0,05	
	C20:1		≤ 0,50 ¹⁾	0,21 ± 0,03	
	C22:0		≤ 0,20 ¹⁾	0,10 ± 0,03	
	C24:0		≤ 0,20 ¹⁾	0,04 ± 0,01	
	C18:1 Trans		≤ 0,05 ¹⁾	<0,03 (LQ)	
C18:2 e C18:3 Trans	≤ 0,05 ¹⁾	<0,03 (LQ)			
Organoleptic Characteristics *	Median Fruity (Mf) and Median defect (Md)	Annex XII ¹⁾	Mf = 0,0 and Md > 0,0 ¹⁾	Extra Virgin Classification: 7,75	21/01/2020
	Median Fruity (Mf)		Mf > 0,0 ¹⁾	5,6 (Green)	
	Median Bitter		–	3,1	
	Median Pungent		–	2,6	
	Median Defect (Md)		Md = 0,0	0,0	
	Defect		–	---	
Spectrophotometric investigation in the Ultraviolet	K232	Regulation (EEC) n ^o 2568/91, Annex IX and Implementing Regulation (EU) 2015/1833	≤ 2,50 ¹⁾	1,60 ± 0,12	22/01/2020
	K268		≤ 0,22 ¹⁾	0,12 ± 0,01	
	ΔK		≤ 0,01 ¹⁾	0,00 ± 0,003	

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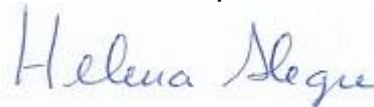
Analysis			Method	Limits	Results	Date
Triglycerides (%) *	ECN42	LLL + PoLL	Annex XVIII ¹⁾	-	0,1	23/01/2020
		OLLn + PoOLn		-	0,2	
		PLLn		-	0,0	
	ECN44	OLL		-	1,4	
		PLL		-	0,4	
		POLn + PPo Po		-	0,4	
	ECN46	POL+StLL+PoOP		-	4,5	
		PPL		-	0,5	
	ECN48	OOO		-	42,9	
		POO+StLL+PPoO		-	23,0	
		PPO+PLSt		-	3,1	
	ECN50	StOO		-	6,7	
		PStO+StLSt		-	1,6	
		PPSt		-	0,8	

Observations/Opinions (not included in the scope of accreditation):

According to Regulation 2568/91 and subsequent amendments, the sample analysed presents, for the test performed, characteristics of Extra Virgin Olive Oil.

Report issued by:

Technical Supervisor



(Helena Alegre)

Date: 29/04/2020 Hour: 13:00

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