

**ANALYSIS CERTIFICATE****Analysis type and demander**

Analysis certificate asked by ATLAS OLIVE OILS - 110 Bd Yacoub Mansour - Casablanca - Morocco

**Product**

Extra virgin olive oil Organic certified / OLIVIE PLUS 30X - Lot N°: COP240620

Export Client: NATURAMEDICATRIX / Belgium

**Arrival date**July 02<sup>nd</sup> 2020**Analysis completion date**July 07<sup>th</sup> 2020**Analytical Results**

- 1) Smell, flavor and taste: Clear oil, of a yellow to green color, fruity and mild taste, free from odors or tastes indicating alteration or pollution of oil.

Defect (Me):

0

Olive flavor and smell (Me):

3.6

**PARAMETER****RESULT****NORMS**

- 2) Transparency (20°C, 24h):

Transparent

- 3) Acidity (Free Fatty Acid %):

0.58

GB23347-2009

- 4) Peroxide value (meq.O<sub>2</sub>/kg):

7.1

GB23347-2009

Residual solvent content in oil:

Non residue.

- 5) Absorbency in ultra-violet :

K270 : 0.15, ΔK : 0.002

- 7) Moisture and volatile matter (%):

0.02

- 8) Insoluble impurity (%):

0.005

- 9) Metal content

Fe: 1.8 mg/kg

Cu : 0.06 mg/kg

- 10) Unsaponifiable matter:

6.0 g/kg

GB23347-2009

- 11) Lignoceric (C24:0):

0.1

GB23347-2009

- 12) Trans Oleic (C18:1T):

0.02%

GB23347-2009

TransLinoleic + Linolenic (C18:2T+ C18:3T) :

0.02%

GB23347-2009

- 13) Wax Content:

79 mg/kg

GB23347-2009

- 14) Lead:

0.01 mg/kg

GB2716-2005

- 15) Pesticide

|             |                                |                                  |
|-------------|--------------------------------|----------------------------------|
| Rogor       | 0.0 mg/kg (absent, no traces)  | GB2763-2005                      |
| Diquat      | 0.00 mg/kg (absent, no traces) | GB2763-2005                      |
| Fenthion    | 0.0 mg/kg (absent, no traces)  | GB2763-2005                      |
| Haloxypop   | 0.0 mg/kg (absent, no traces)  | GB2763-2005                      |
| Procymidone | 0.0 mg/kg (absent, no traces)  | GB2763-2005                      |
| Chlordane   | 0.0 mg/kg (absent, no traces)  | GB2763-2005 /GB2763-2005 (REV-1) |
| Benzopyrene | 0.0 μg/kg (absent, no traces)  | GB2716-2005                      |

**18) FATTY ACID:**

|                       |      |
|-----------------------|------|
| Palmitic (C16:0)      | 14.2 |
| Pamitoleic (C16:1)    | 1.3  |
| Heptadecanoic (C17:0) | 0.22 |
| Heptadecanoic (C17:1) | 0.15 |
| Stearic (C18:0)       | 2.0  |
| Oleic (C18:1)         | 68.1 |
| Linoleic (C18:2)      | 11.4 |
| Linolenic (C18:3)     | 0.3  |
| Aushidic (C20:0)      | 0.25 |
| Gadoleic (C20:0)      | 0.23 |
| Behenic (C20:1)       | 0.1  |
| Lignoceric (C24:0)    | 0.1  |

**19) STEROLS(% in total sterols):**

|                                        |            |
|----------------------------------------|------------|
| Total Sterols mg/kg                    | 1118       |
| Cholesterol                            | 0.1        |
| Brassicasterol                         | 0.07       |
| Campsterol                             | 3.8        |
| ERYTHRODIOL+UVAOL<br>(% total sterols) | 2.5%       |
| Stigmasterol                           | 0.3        |
|                                        |            |
| Stigmastadienol mg/kg                  | 0.10 mg/kg |

## 20) POLYPHENOLS

|                                                                                 |       |
|---------------------------------------------------------------------------------|-------|
| Total Polyphenols mg/kg                                                         | 1259  |
| Tyrosol mg/Kg                                                                   | 132.0 |
| Total Hydroxytyrosol mg/Kg<br>(linked hydroxytyrosol + isolated hydroxytyrosol) | 235.1 |
| Oleuropeine mg/Kg                                                               | 31.4  |

## 21) ADDITIONAL PARAMETERS

|                      |                       |
|----------------------|-----------------------|
| ARSENIC (As)         | 0.00 PPM (no traces)  |
| CADMIUM (Cd)         | 0.00 PPM (no traces)  |
| MERCURY (Hg)         | 0.00 PPM (no traces)  |
| TIN (Sn)             | 1 PPM                 |
| SAPONIFICATION VALUE | 77 /MG KOH/G          |
| IODINE VALUE         | 0.00 WIJS (no traces) |

## 22) MICROBIOLOGY ANALYSIS

| Détermination                                 | 1                  | 2                  |
|-----------------------------------------------|--------------------|--------------------|
| <b>FMAT</b><br>Norme AFNOR (NF V08-051,1999). | 0 UFC/ml NOT FOUND | 0 UFC/ml NOT FOUND |
| <b>Fungus</b><br>Norme AFNOR (NF X 11501).    | 0 UFC/ml NOT FOUND | 0 UFC/ml NOT FOUND |

### Conclusion:

The values resulted meet the specifications demanded for extra virgin olive oils by EC Regulation No. 2568/91, Commission of 11/07/1991 in force from 09/09/1991 and subsequent amendments, and by International Olive Oil Council Trade Standard COI/T.15/NC no.3/Rev.4 november 2009.

We confirm that none traces of pesticide residue and none traces of herbicide residue were found in the extra virgin olive oil submitted by the producer. Also no traces of fungus or bacteria was detected.

Fès, made on July 07th 2020



Laboratory Director

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