COMMISSION DELEGATED REGULATION (EU) 2015/1830

of 8 July 2015

amending Regulation (EEC) No 2568/91 on the characteristics of olive oil and olive-residue oil and on the relevant methods of analysis

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,


Whereas:

(1) Commission Regulation (EEC) No 2568/91 (2) defines the physico-chemical and organoleptic characteristics of olive oil and olive-pomace oil and lays down methods of assessing those characteristics. Those methods and the limit values for the characteristics of oils are regularly updated on the basis of the opinion of chemical experts and in line with the work carried out within the International Olive Council (IOC).

(2) In order to ensure the implementation at Union level of the most recent international standards established by the IOC, the lower limit values for linoleic acid laid down in a note to the second table in Annex I to Regulation (EEC) No 2568/91 should be adjusted. In addition, the reference to 2015 in the timetable for the phased reduction of the fatty acid ethyl ester limit for extra virgin olive oil set out in that Annex should be replaced by a reference to 2016.

(3) The method for the detection of extraneous vegetable oils in olive oils set out in Annex XXa to Regulation (EEC) No 2568/91 is no longer in use. A note to the first table in Annex I to that Regulation referring to that method should therefore be deleted.

(4) Regulation (EEC) No 2568/91 should therefore be amended accordingly,

HAS ADOPTED THIS REGULATION:

Article 1

Annex I to Regulation (EEC) No 2568/91 is replaced by the text set out in the Annex to this Regulation.

Article 2

This Regulation shall enter into force on the third day following that of its publication in the Official Journal of the European Union.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Brussels, 8 July 2015.

For the Commission

The President

Jean-Claude JUNCKER

### OLIVE OIL CHARACTERISTICS

<table>
<thead>
<tr>
<th>Category</th>
<th>Fatty acid ethyl esters (FAEEs) (*)</th>
<th>Acidity (%) (*)</th>
<th>Peroxide index mEq O₂/kg (*)</th>
<th>Waxes mg/kg (**)</th>
<th>2-glyceril monopalmitate (%)</th>
<th>Stigmasta-dienes mg/kg (†)</th>
<th>Difference: ECN42 (HPLC) and ECN42 (theoretical calculation)</th>
<th>K₂₃₂ (*)</th>
<th>K₂₆₈ or K₂₇₀ (*)</th>
<th>Delta-K (*)</th>
<th>Organoleptic evaluation Median defect (Md) (*)</th>
<th>Organoleptic evaluation Fruity median (Mf) (*)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Extra virgin olive oil</td>
<td>FAEEs ≤ 40 mg/kg (2013-2014 crop year) (†)</td>
<td>≤ 0,8</td>
<td>≤ 20</td>
<td>C₄₂ + C₄₄ + C₄₆ ≤ 150</td>
<td>≤ 0,9 if total palmitic acid % ≤ 14 %</td>
<td>≤ 0,05</td>
<td>≤ [0,2]</td>
<td>≤ 2,50</td>
<td>≤ 0,22</td>
<td>≤ 0,01</td>
<td>Md = 0</td>
<td>Mf &gt; 0</td>
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<tr>
<td></td>
<td>FAEEs ≤ 35 mg/kg (2014-2016 crop year) (†)</td>
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<tr>
<td></td>
<td>FAEEs ≤ 30 mg/kg (after 2016 crop years) (†)</td>
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<tr>
<td>2. Virgin olive oil</td>
<td>—</td>
<td>≤ 2,0</td>
<td>≤ 20</td>
<td>C₄₂ + C₄₄ + C₄₆ ≤ 150</td>
<td>≤ 0,9 if total palmitic acid % ≤ 14 %</td>
<td>≤ 0,05</td>
<td>≤ [0,2]</td>
<td>≤ 2,60</td>
<td>≤ 0,25</td>
<td>≤ 0,01</td>
<td>Md ≤ 3,5</td>
<td>Mf &gt; 0</td>
</tr>
<tr>
<td></td>
<td>—</td>
<td>&gt; 2,0</td>
<td>—</td>
<td>C₄₀ + C₄₂ + C₄₄ + C₄₆ ≤ 300 (†)</td>
<td>≤ 0,9 if total palmitic acid % ≤ 14 %</td>
<td>≤ 0,50</td>
<td>≤ [0,3]</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>Md &gt; 3,5 (†)</td>
<td>—</td>
</tr>
<tr>
<td>3. Lampante olive oil</td>
<td>—</td>
<td>≤ 0,3</td>
<td>≤ 5</td>
<td>C₄₀ + C₄₂ + C₄₄ + C₄₆ ≤ 350 (†)</td>
<td>≤ 0,9 if total palmitic acid % ≤ 14 %</td>
<td>—</td>
<td>≤ [0,3]</td>
<td>—</td>
<td>1,10</td>
<td>≤ 0,16</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>4. Refined olive oil</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
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</tr>
<tr>
<td>Category</td>
<td>Category</td>
<td>Fatty acid ethyl esters (FAEEs) (⁴)</td>
<td>Acidity (%) (⁴)</td>
<td>Peroxide index mEq O₂/kg (%)</td>
<td>Waxes mg/kg (**)</td>
<td>2-glyceril monopalmitate (%)</td>
<td>Stigmastadienes mg/kg (¹)</td>
<td>Difference: ECN42 (HPLC) and ECN42 (theoretical calculation)</td>
<td>K₂₃₂ (¹)</td>
<td>K₂₆₈ or K₂₇₀ (¹)</td>
<td>Delta-K (¹)</td>
<td>Organoleptic evaluation Median defect (Md) (¹)</td>
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</tr>
<tr>
<td>5. Olive oil composed of refined and virgin olive oils</td>
<td>—</td>
<td>≤ 1,0</td>
<td>≤ 15</td>
<td>C₄₀ + C₄₂ + C₄₄ + C₄₆ ≤ 350</td>
<td>≤ 0,9 if total palmitic acid % ≤ 14 %</td>
<td>—</td>
<td>≤ [0,3]</td>
<td>—</td>
<td>≤ 0,90</td>
<td>≤ 0,15</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>6. Crude olive-pomace oil</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>C₄₀ + C₄₂ + C₄₄ + C₄₆ &gt; 350 (1)</td>
<td>≤ 1,4</td>
<td>—</td>
<td>≤ [0,6]</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>7. Refined olive-pomace oil</td>
<td>—</td>
<td>≤ 0,3</td>
<td>≤ 5</td>
<td>C₄₀ + C₄₂ + C₄₄ + C₄₆ &gt; 350 (1)</td>
<td>≤ 1,4</td>
<td>—</td>
<td>≤ [0,5]</td>
<td>—</td>
<td>≤ 2,00</td>
<td>≤ 0,20</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>8. Olive-pomace oil</td>
<td>—</td>
<td>≤ 1,0</td>
<td>≤ 15</td>
<td>C₄₀ + C₄₂ + C₄₄ + C₄₆ &gt; 350</td>
<td>≤ 1,2</td>
<td>—</td>
<td>≤ [0,5]</td>
<td>—</td>
<td>≤ 1,70</td>
<td>≤ 0,18</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

¹ Total isomers which could (or could not) be separated by capillary column.
² The limit applies to olive oils produced as from 1 March 2014.
³ Oils with a wax content of between 300 mg/kg and 350 mg/kg are considered to be lampante olive oil if the total aliphatic alcohol content is less than or equal to 350 mg/kg or if the erythrodiol and uvaol content is less than or equal to 3,5 %.
⁴ The median defect may be less than or equal to 3,5 and the fruity median equal to 0.
⁵ Oils with a wax content of between 300 mg/kg and 350 mg/kg are considered to be crude olive-pomace oil if the total aliphatic alcohol content is above 350 mg/kg and if the erythrodiol and uvaol content is greater than 3,5 %.
<table>
<thead>
<tr>
<th>Category</th>
<th>Fatty acid composition (%)</th>
<th>Sterols composition</th>
<th>Total sterols (mg/kg)</th>
<th>Erythrodiol and uvaol (%) (**)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Refined olive oil</td>
<td>≤ 0,03 ≤ 1,00 ≤ 0,60 ≤ 0,40 ≤ 0,20 ≤ 0,20 ≤ 0,20 ≤ 0,30 ≤ 0,5 ≤ 0,1 ≤ 4,0 &lt; Camp.</td>
<td>Cholesterol (%)</td>
<td>93,0 ≤ 0,5</td>
<td>1 000 ≤ 4,5</td>
</tr>
<tr>
<td>5. Olive oil composed of refined and virgin olive oils</td>
<td>≤ 0,03 ≤ 1,00 ≤ 0,60 ≤ 0,40 ≤ 0,20 ≤ 0,20 ≤ 0,20 ≤ 0,30 ≤ 0,5 ≤ 0,1 ≤ 4,0 &lt; Camp.</td>
<td>Brassicasterol (%)</td>
<td>93,0 ≤ 0,5</td>
<td>1 000 ≤ 4,5</td>
</tr>
<tr>
<td>6. Crude olive-pomace oil</td>
<td>≤ 0,03 ≤ 1,00 ≤ 0,60 ≤ 0,40 ≤ 0,30 ≤ 0,20 ≤ 0,20 ≤ 0,10 ≤ 0,5 ≤ 0,2 ≤ 4,0 —</td>
<td>Campsterol (%)</td>
<td>93,0 ≤ 0,5</td>
<td>≥ 2 500 &gt; 4,5 (1)</td>
</tr>
<tr>
<td>7. Refined olive-pomace oil</td>
<td>≤ 0,03 ≤ 1,00 ≤ 0,60 ≤ 0,40 ≤ 0,30 ≤ 0,20 ≤ 0,20 ≤ 0,35 ≤ 0,5 ≤ 0,2 ≤ 4,0 &lt; Camp.</td>
<td>Stella-sterol (%)</td>
<td>93,0 ≤ 0,5</td>
<td>≥ 1 800 &gt; 4,5</td>
</tr>
<tr>
<td>8. Olive-pomace oil</td>
<td>≤ 0,03 ≤ 1,00 ≤ 0,60 ≤ 0,40 ≤ 0,30 ≤ 0,20 ≤ 0,20 ≤ 0,35 ≤ 0,5 ≤ 0,2 ≤ 4,0 &lt; Camp.</td>
<td>Delta-7-stigmassterol (%)</td>
<td>93,0 ≤ 0,5</td>
<td>≥ 1 600 &gt; 4,5</td>
</tr>
</tbody>
</table>

(1) Other fatty acids content (%): palmitic: 7,50-20,00; palmitoleic: 0,30-3,50; heptadecanoic: ≤ 0,30; heptadecenoic: ≤ 0,30; stearic: 0,50-5,00; oleic: 55,00-83,00; linoleic: 2,50-21,00.
(2) See the Appendix to this Annex.
(3) App β-sitosterol: Delta-5,23-stigmastadienol + cholesterol + beta-sitosterol + sitosterol + delta-5-avenasterol + delta-5,24-stigmastadienol.
(4) Oils with a wax content of between 300 mg/kg and 350 mg/kg are considered to be lampante olive oil if the total aliphatic alcohol content is less than or equal to 350 mg/kg or if the erythrodiol and uvaol content is less than or equal to 3,5 %.
(5) Oils with a wax content of between 300 mg/kg and 350 mg/kg are considered to be crude olive-pomace oil if the total aliphatic alcohol content is above 350 mg/kg or if the erythrodiol and uvaol content is greater than 3,5 %.

Notes:
(a) The results of the analyses must be expressed to the same number of decimal places as used for each characteristic. The last digit must be increased by one unit if the following digit is greater than 4.
(b) If just a single characteristic does not match the values stated, the category of an oil can be changed or the oil declared impure for the purposes of this Regulation.
(c) If a characteristic is marked with an asterisk (*), referring to the quality of the oil, this means the following: — for lampante olive oil, it is possible for both the relevant limits to be different from the stated values at the same time, — for virgin olive oils, if at least one of these limits is different from the stated values, the category of the oil will be changed, although they will still be classified in one of the categories of virgin olive oil.
(d) If a characteristic is marked with two asterisks (**), this means that for all types of olive-pomace oil, it is possible for both the relevant limits to be different from the stated values at the same time.
Appendix

DECISION TREE

**Campesterol** decision tree for virgin and extra virgin olive oils:

4.0 % < Campesterol ≤ 4.5 %

- Stigmasterol ≤ 1.4 %
- Δ-7-stigmasterol ≤ 0.3 %

The other parameters shall comply with the limits fixed in this Regulation.

**Delta-7-stigmasterol** decision tree for:

- Extra virgin and virgin olive oils

0.5 % < Δ-7-stigmasterol ≤ 0.8 %

- Campesterol ≤ 3.3 %
- App. β-sitosterol/(campest + Δ7stig) ≥ 25
- Stigmasterol ≤ 1.4 %
- ΔECN42 ≤ 0.1 |

The other parameters shall comply with the limits fixed in this Regulation.

- Olive-pomace oils (crude and refined)

0.5 % < Δ-7-stigmasterol ≤ 0.7 %

- ΔECN42 ≤ 0.40 |
- Stigmasterol ≤ 1.4 %
- Rest of parameters inside limits’