

INTERNATIONAL

OLIVE OIL

COUNCIL

RESOLUTION NO. RES-3/64-IV/91

THE INTERNATIONAL OLIVE OIL COUNCIL,

Having regard to the international trade standard applying to olive oils and olive-pomace oils, COI /T.15/NC no. 1/ Rev. 1 of 19 February 1987 which was unanimously adopted on 19 February 1987 under Resolution no. RES-3/IV-S.ex.6/87 and to the amendment of the trade standard of 18 May 1990 concerning the designation of blends of refined olive oil and virgin olive oil pursuant to the decision the IOOC took at its 62nd session in May 1990 to amend the appropriate provision of the International Agreement on Olive Oil and Table Olives, 1986,

Whereas Resolution no. RES-2/64-IV/91 gives the amended version of Article 26 of the International Agreement on Olive Oil and Table Olives, 1986;

Recognising the need to bring the terms of the international trade standard applying to olive oils and olive-pomace oils, the revised version of which was adopted on 19 February 1987, into line with those of the amended version of Article 26 of the International Agreement on Olive Oil and Table Olives, 1986,

HAS ADOPTED THIS RESOLUTION:

The international trade standard applying to olive oils and olive-pomace oils, COI/T.15/NC no. 1/Rev. 2 of 30 May 1991, attached to this Resolution, replaces and rescinds the trade standard, COI/T.15/NC no. 1/Rev. 1 of 19 February 1987.

Members are requested to adopt all the necessary measures, in the form prescribed by their respective legislations, to ensure the application of the Standard adopted and to notify the Executive Secretariat of such measures when taken.

The governments of non-Member States involved in international trade in olive oils and olive-pomace oils are invited to take into consideration the Standard adopted and to adapt their regulations to the provisions thereof.

Done at Madrid, 30 May 1991

International Trade Standard applying to
olive oils and olive-pomace oils

.....
2. Definitions
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2.1.1.1. Virgin olive oil fit for consumption as it is 1/
includes:

i) Extra virgin olive oil: virgin olive oil that has an organoleptic rating of 6.5 or more and a free acidity, expressed as oleic acid, of not more than 1 gram per 100 grams, with due regard for the other criteria laid down in this standard;

ii) Fine virgin olive oil: virgin olive oil that has an organoleptic rating of 5.5 or more and a free acidity, expressed as oleic acid, of not more than 1.5 grams per 100 grams, with due regard for the other criteria laid down in this standard;

iii) Semi-fine virgin olive oil (or ordinary virgin olive oil): virgin olive oil that has an organoleptic rating of 3.5 or more and a free acidity, expressed as oleic acid, of not more than 3.3 grams per 100 grams, with due regard for the other criteria laid down in this standard.

2.1.1.2 Virgin olive oil not fit for consumption as it is, designated lampante virgin olive oil, is virgin olive oil that has an organoleptic rating of less than 3.5 and/or a free acidity, expressed as oleic acid, of more than 3.3 grams per 100 grams, with due regard for the other criteria laid down in this standard. It is intended for refining or for technical purposes.
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4. Quality criteria

4.1. Organoleptic characteristics

extra virgin olive oil	≥ 6.5
fine virgin olive oil	≥ 5.5
semi-fine virgin olive oil	≥ 3.5
lampante virgin olive oil	< 3.5

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1/ Oil which may be referred to as "natural"

INTERNATIONAL

OLIVE OIL

COUNCIL

COI/T.15/NC no. 1/Rév. 1
19 February 1987

ENGLISH
Original: FRENCH

INTERNATIONAL TRADE STANDARD TO BE APPLIED TO OLIVE
OILS AND OLIVE POMACE OILS

Amendment of 18 May 1990

During its 62nd Session from 14 to 18 May 1990, the International Olive Oil Council agreed to modify the provision of the 1986 International Agreement on olive oil and table olives relating to the designation of the blend of refined olive oil and virgin olive oil: the possibility of designating this blend "pure olive oil" is withdrawn; packers are however allowed to indicate on the label above the designation of the product, either the term "pure" or the term "100% pure" as from 1 January 1991.

The provisions of the Standard, namely points 2.1.3 Definitions and 10.1.1.1 Labelling are to be amended as follows:

2.1.3: Remove the terms in brackets

10.1.1.1: Remove the terms "or pure olive oil" and indicate in a footnote the following: "the terms "pure" or "100% pure" may figure on the label as a specification of the product".

INTERNATIONAL OLIVE OIL COUNCIL

RESOLUTION NO. RES-3/IV-S.ex.6/87

Revised international trade standard applying to olive oils and olive-pomace oils

Considering the international trade standard applying to olive oils and olive-residue oils COI/T.15/NC no. 1 of 23 April 1985, which was unanimously adopted on 25 April 1985 under Resolution no. RES-1/52-III/85, and the amendment of the aforesaid standard (concerning the period of durability of the oil) which was unanimously adopted at the 55th session on 19 December 1986;

Considering the International Agreement on Olive Oil and Table Olives, 1986, in particular Chapter IX thereof headed "Designations and definitions of olive oils and olive-pomace oils. Indications of source and appellations of origin";

Considering article 43 of the International Agreement on Olive Oil and Table Olives, 1986, according to which the International Olive Oil Council is responsible for drawing up standards connected with olive products in compliance with the objectives for the standardisation of olive oil and olive-pomace oil;

The International Olive Oil Council

Acknowledges the need to amend the international trade standard applying to olive oils and olive-residue oils, as adopted on 25 April 1985 and amended on 19 December 1986, in order to adapt it to the terms of the International Agreement on Olive Oil and Table Olives, 1986;

Adopts the international trade standard applying to olive oils and olive-pomace oils, ref. no. COI/T.15/NC no. 1/Rev. 1 of 19 February 1987, which has been revised accordingly;

Recommends its Members to make whatever arrangements are appropriate, in accordance with their legislation, for the implementation of the adopted standard, and requests them to notify the Executive Secretariat of such arrangements as soon as they are made;

Requests the governments of non-Member states involved in the international trade in olive oil and olive-pomace oil to take into account the adopted standard and to adapt their regulations to the provisions thereof.

Madrid, 19 February 1987

INTERNATIONAL OLIVE OIL COUNCIL

COI/T.15/NC no. 1/Rev. 1
19 February 1987

ENGLISH
Original: FRENCH

INTERNATIONAL TRADE STANDARD APPLYING TO OLIVE OILS AND OLIVE-POMACE OILS

1. SCOPE

This standard applies to extra virgin olive oil, fine virgin olive oil, semi-fine (or ordinary) virgin olive oil, virgin olive oil lampante, refined olive oil, blends of refined olive oil and virgin olive oil, crude olive-pomace oil, refined olive-pomace oil and blends of refined olive-pomace oil and virgin olive oil.

These oils, which are traded at international level, are either intended for human consumption as they are or after refining, or they are intended for technical purposes.

2. DEFINITIONS

2.1. Olive oil is the oil obtained solely from the fruit of the olive tree (*Olea europaea sativa* Hoffm. et Link), to the exclusion of oils obtained using solvents or re-esterification processes and any mixture with oils of other kinds. In no case shall the designation "olive oil" be used to refer to olive-pomace oils.

2.1.1. Virgin olive oil is the oil obtained from the fruit of the olive tree solely by mechanical or other physical means under conditions, particularly thermal conditions, that do not lead to alterations in the oil, and which has not undergone any treatment other than washing, decantation, centrifugation and filtration.

2.1.1.1. Virgin olive oil fit for consumption as it is ^{1/} includes:

- i) extra virgin olive oil: virgin olive oil of absolutely perfect taste and odour having a maximum acidity, in terms of oleic acid, of 1 gram per 100 grams;

^{1/} Oil which may be referred to as "natural".

ii) fine virgin olive oil: virgin olive oil of absolutely perfect taste and odour having a maximum acidity, in terms of oleic acid, of 1.5 grams per 100 grams;

iii) semi-fine virgin olive oil (or ordinary virgin olive oil): virgin olive oil of good taste and odour having a maximum acidity, in terms of oleic acid, of 3 grams per 100 grams, with a margin of tolerance of 10% of the acidity indicated.

2.1.1.2. Virgin olive oil not fit for consumption as it is, designated virgin olive oil lampante, is an off-taste and/or off-smelling virgin olive oil or an oil with an acidity, in terms of oleic acid, of more than 3.3 grams per 100 grams. It is intended for refining or for technical purposes.

2.1.2. Refined olive oil is the olive oil obtained from virgin olive oils by refining methods which do not lead to alterations in the initial glyceridic structure.

2.1.3. Olive oil (or pure olive oil) is the oil consisting of a blend of refined olive oil and virgin olive oil fit for consumption as it is.

2.2. Olive-pomace oil is the oil obtained by treating olive pomace with solvents, to the exclusion of oils obtained by re-esterification processes and any mixture with oils of other kinds. It can be classified as follows:

2.2.1. Crude olive-pomace oil: olive-pomace oil intended for refining with a view to its use in food for human consumption or for technical purposes.

2.2.2. Refined olive-pomace oil: obtained from crude olive-pomace oil by refining methods which do not lead to alterations in the initial glyceridic structure. It is intended for human consumption either as it is or else in blends with virgin olive oil.

2.2.3. Olive-pomace oil: blend of refined olive-pomace oil and virgin olive oil fit for consumption as it is. In no case shall this blend be called "olive oil".

3. PURITY CRITERIA

The chemical identity characteristics forming the purity criteria are applicable to edible and non-edible olive and olive-pomace oils.

3.1. Sterol content

(% of the sum of beta-sitosterol, campesterol and stigmasterol)

	<u>Olive oils</u>	<u>Olive-pomace oils</u>
- beta-sitosterol	$\geq 93\%$	$\geq 93\%$
- campesterol	$\leq 4.0\%$	$\leq 4.0\%$

Should a component having the same retention time as cholesterol be detected upon chromatographic analysis, its content shall not exceed 0.5% of the sterol fraction.

3.2. Fatty acid composition using gas-liquid chromatography (% m/m of methyl esters):

Oleic acid	55.0 - 83.0
Palmitic acid	7.5 - 20.0
Linoleic acid	3.5 - 21.0
Stearic acid	0.5 - 5.0
Palmitoleic acid	0.3 - 3.5
Linolenic acid	0.0 - 1.5
Myristic acid	0.0 - 0.1
Arachidic acid	max. 0.8
Behenic acid	max. 0.2
Lignoceric acid	max. 1.0
Heptadecanoic acid	max. 0.5
Heptadecenoic acid	max. 0.6
Erucic acid	} not present in discernible amounts
Lauric acid	

3.3. Saturated fatty acid content in the 2-position in the triglycerides: Maximum acceptable level being the sum of the palmitic and stearic acids:

- virgin olive oil	$\leq 1.5\%$
- refined olive oil	$\leq 1.8\%$
- pure olive oil	$\leq 1.8\%$
- crude olive-pomace oil	$\leq 2.2\%$ *
- refined olive pomace oil	$\leq 2.2\%$

* Provisional limit pending the outcome of analyses of which the IOOC Executive Secretariat will have to be notified by Members.

	Olive oils	Olive-pomace oils
3.4. <u>Saponification value</u> (mg KOH/g oil)	184 - 196	182 - 193
3.5. <u>Unsaponifiable matter</u> (Using light petroleum)	≤ 15 g/kg	≤ 30 g/kg
3.6. <u>Bellier index</u>	≤ 17 ^{1/}	-
3.7. <u>Olive-residue oil test</u>	negative	-
3.8. <u>Semi-siccative oils test</u>	negative	negative

4. QUALITY CHARACTERISTICS

	Extra virgin olive oil	Fine virgin olive oil	Semi-fine virgin olive oil	Virgin olive oil lampante ^{2/}	Refined olive oil	Olive oil	Crude olive-pomace oil	Refined olive-pomace oil	Olive-pomace oil
4.1. <u>Organoleptic characteristics</u>									
- odour	absolutely perfect	absolutely perfect	good	off-smelling	acceptable	good		acceptable	acceptable
- taste	absolutely perfect	absolutely perfect	good	off-taste	acceptable	good		acceptable	acceptable
- colour	light yellow to green	light yellow to green	light yellow to green	defective	light yellow	light yellow to green		light yellow to brownish yellow	light yellow to green
- aspect at 20°C for 24 hours	limpid	limpid	limpid		limpid	limpid		limpid	limpid
4.2. <u>Free acidity</u> % m/m expressed in oleic acid	≤ 1.0	≤ 1.5	≤ 3.3	> 3.3	≤ 0.3	≤ 1.5	no limit	≤ 0.3	≤ 1.5
4.3. <u>Peroxide value</u> in milleq. peroxide oxygen per kg/oil	≤ 20	≤ 20	≤ 20	> 20	≤ 10	≤ 20	no limit	≤ 10	≤ 20
4.4. <u>Absorbency in Ultra-Violet</u> (E ^{1%} _{1 cm})									
- at 270 nm	≤ 0.25	≤ 0.25	≤ 0.30 ^{3/}	no limit ^{3/}	≤ 1.10	≤ 0.90		≤ 2.00	≤ 1.70
- ΔE	≤ 0.01	≤ 0.01	≤ 0.01		≤ 0.16	≤ 0.15		≤ 0.20	≤ 0.18

Should this index be higher than 17, the content of arachidic, behenic and lignoceric acid shall be given.

It is not obligatory for the criteria in 4.1, 4.2 and 4.3 to be concurrent; one is sufficient.

After passage of the sample through activated alumina, absorbency at 270 nm shall be equal to or less than 0.11.

5. FOOD ADDITIVES

5.1. Virgin olive oils and crude olive-pomace oils: none permitted.

5.2. Refined olive oil, olive oil, refined olive-pomace oil and olive-pomace oil: alpha-tocopherol permitted to restore natural tocopherol lost in the refining process.

Maximum level: 200 mg/kg of total alpha-tocopherol in the final product.

6. CONTAMINANTS

	Extra virgin olive oil	Fine virgin olive oil	Semi-fine virgin olive oil	Virgin olive oil lampante	Refined olive oil	Olive oil	Crude olive-pomace oil	Refined olive-pomace oil	Olive-pomace oil
6.1. <u>Moisture and volatile matter</u> (% m/m)	≤ 0.2	≤ 0.2	≤ 0.2	≤ 0.3	≤ 0.1	≤ 0.1	≤ 1.5	≤ 0.1	≤ 0.1
6.2. <u>Insoluble impurities</u> (% m/m) in light petroleum	≤ 0.1	≤ 0.1	≤ 0.1	≤ 0.2	≤ 0.05	≤ 0.05		≤ 0.05	≤ 0.05
6.3. <u>Soap test</u>	-	-	-	-	negative	-	-	negative	-
6.4. <u>Flash point</u>	-	-	-	-	-	-	≥ 120°C	-	-

7. HYGIENE

It is recommended that the products intended for human consumption covered by the provisions of this standard be prepared in accordance with the appropriate sections of the General Principles of Food Hygiene recommended by the Codex Alimentarius Commission (CAC/RCP 1 - 1969, Rev. 1).

8. PACKING

Olive oils and olive-pomace oils intended for international trade shall be packed in containers complying with the General Principles of Food Hygiene recommended by the Codex Alimentarius Commission (CAC/RCP 1 - 1969, Rev. 1).

The containers used may be:

8.1. tanks, containers, vats, which permit the transportation in bulk of olive oils and olive-pomace oils;

8.2. metal drums, in good condition, hermetically-sealed, which should be internally covered with a suitable varnish;

8.3. metal tins and cans, lithographed, new, hermetically-sealed, which should be internally covered with a suitable varnish;

8.4. demi-johns, glass bottles or bottles made of suitable macromolecular material.

9. CONTAINER FILLING TOLERANCE

The volume occupied by the contents shall, under no circumstances, be less than 90% of the capacity of the container, except in the case of tin containers with a capacity of, or less than, 1 litre in which the volume occupied shall, under no circumstances, be less than 80% of the capacity of the container; this capacity is equal to the volume of distilled water at 20°C which the container can hold when full.

10. LABELLING

In addition to sections 2, 3 7 and 8 of the Codex General Standard for the Labelling of Pre-packaged Foods (CODEX STAN 1-1985) and the guidelines^{1/} applying to food not intended for direct sale to consumers (which is to undergo industrial processing at a later stage or to be repacked for sale to consumers), the specific provisions providing the following information shall be applied:

10.1 On containers intended for direct sale to consumers or intended for distributors responsible for repacking the product for sale to consumers

10.1.1. Name of the product

The labelling on each container shall indicate the generic name and the specific designation of the product contained, complying in every way with the relevant provisions of this standard.

^{1/} Under elaboration.

10.1.1.1. Olive oils:

- extra virgin olive oil ^{1/}
- fine virgin olive oil ^{1/}
- semi-fine or ordinary virgin olive oil ^{1/}
- refined olive oil
- olive oil or pure olive oil.

10.1.1.2. Olive-pomace oils:

- refined olive-pomace oil
- olive-pomace oil.

10.1.2. Free acidity of oils

The free acidity of oils shall be declared on the label and expressed in terms of oleic acid (percentage m/m or degrees).

10.1.3. Net contents

The net contents shall be declared by weight or volume in the metric system ("Système International" units).

10.1.4. Name and address

The name and address of the manufacturer, packer, distributor, importer, exporter or seller shall be declared.

10.1.5. Country of origin

The name of the country of origin shall be declared. When the product undergoes processing or re-packing, including in small containers, in a second country, the country in which the processing was performed shall be considered the country of origin for the purposes of labelling.

10.1.6. Indications of source and appellations of origin10.1.6.1. Indications of source

The labels of virgin olive oils may indicate their source (country, region or locality) when they have been empowered to do so by their country of origin and when such virgin olive oils have been produced, packed and originate exclusively in the country, region or locality mentioned.

^{1/} Oil which may likewise be referred to as "natural".

The labels for blends of refined olive oil and virgin olive oil shall only indicate the source of the exporting country.

10.1.6.2. Appellations of origin

The labels of extra virgin olive oils may indicate their appellation of origin (country, region or locality) when they have been awarded one, in accordance with the terms provided under the regulations of their country of origin and when such extra virgin olive oil has been produced, packed and originates exclusively in the country, region or locality mentioned.

The labels for blends of refined olive oil and extra virgin olive oil packed and exported by the country providing the extra virgin olive oil may indicate the appellation of origin which would have been given to the extra virgin olive oil in the blend.

10.1.7. Lot identification

Each container shall be embossed or otherwise permanently marked in code or in clear to identify the producing factory and the lot.

10.1.8. Date marking and storage conditions

10.1.8.1. Date of packing

The date of packing shall be declared by the month and year in uncoded numerical sequence.

The month may be indicated by letters in those countries where such use will not confuse the consumer; if the month is December, the expression "end (stated year)" may be used as an alternative.

10.1.8.2. Date of minimum durability

In the case of pre-packaged products intended for the end consumer, the date of minimum durability (preceded by the words "best before end") shall be declared by the month and year in uncoded numerical sequence. The month may be indicated by letters in those countries where such use will not confuse the consumer; if the shelf life of the product is valid to December, the expression "end (stated year)" may be used as an alternative.

The period of durability shall not exceed 12 months after the date of packing. It may however be extended to 18 months for oils packed in metal containers.

10.1.8.3. Storage instructions

Any special conditions for storage shall be declared on the label if the validity of the date of minimum durability depends thereon.

10.2. On forwarding packs of oils intended for human consumption

In addition to the details noted under section 10.1., the following inscription shall appear:

- number and type of containers held in pack.

10.3. On containers allowing the transportation in bulk of olive oils and olive-pomace oils

The labelling on each container shall include:

10.3.1. Name of the product

The name shall indicate the specific designation of the product contained, complying in every way with the provisions of this standard.

10.3.2. Net contents

The net contents shall be declared by weight or volume in the metric system ("Système International" units).

10.3.3. Name and address

The name and address of the manufacturer, distributor or exporter shall be declared.

10.3.4. Country of origin

The name of the exporting country shall be declared.

11. METHODS OF ANALYSIS AND SAMPLING

The methods of analysis and sampling given below are international referee methods.

Prior to the determinations for fixing the purity criteria, virgin olive oil lampante and crude olive-pomace oil shall undergo an alkaline neutralization process complying with paragraph 6 of the IUPAC method (1979, 6th edition) no. 2.210 "Determination of the Fatty Acids in the 2-position in the triglycerides".

11.1. Determination of the fatty acid composition

According to the IUPAC method (1979, 6th edition) no. 2.302 "Gas-Liquid Chromatography of Fatty Acid Methyl Esters" or to the ISO method 5508-1978.

11.2. Determination of the saponification value

According to the IUPAC method (1979, 6th edition) no. 2.202 "Determination of the Saponification Value (S.V.)" or to the ISO method 3657-1977.

11.3. Determination of the unsaponifiable matter

According to the IUPAC method (1966, 5th edition) II.D.5. (II.D.5.1. and II.D.5.2.) "Determination of the Unsaponifiable Matter - Light petroleum method".

The results are expressed in g/unsaponifiable matter per kg/oil.

11.4. Determination of the Bellier index

According to the method CAC/RM 20-1970 mentioned in point 8.7. of the Recommended International Standard for Olive Oil, Virgin and Refined, and for Refined Olive-Residue Oil, CODEX STAN 33-1981.

11.5. Olive-residue oil test

According to the method CAC/RM 22-1970 mentioned in point 8.9. of the Recommended International Standard for Olive Oil, Virgin and Refined, and for Refined Olive-Residue Oil, CODEX STAN 33-1981.

11.6. Semi-siccative oils test

According to the method CAC/RM 21-1970 mentioned in point 8.8. of the Recommended International Standard for Olive Oil, Virgin and Refined, and for Refined Olive-Residue Oil, CODEX STAN 33-1981.

11.7. Determination of the sterol content

According to the IUPAC method (1979, 6th edition) no. 2.403 "Identification and Determination of Sterols by Gas-Liquid Chromatography" solely using SE 30 packing material.

11.8. Determination of the fatty acids in the 2-position in the triglycerides

According to the IUPAC method (1979, 6th edition) no. 2.210 "Determination of the Fatty Acids in the 2-position in the Triglycerides of Oils and Fats".

11.9. Determination of the organoleptic characteristics

Method being considered.

11.10. Determination of the free acidity

According to the IUPAC method (1979, 6th edition) no. 2.201 "Determination of the Acid Value (A.V.) and the Acidity", 1-4.6.

11.11. Determination of the peroxide value

According to the IUPAC method (1979, 6th edition) no. 2.501 "Determination of the Peroxide Value (P.V.)" or to the ISO method 3960-1977.

11.12. Determination of the absorbency in Ultra-Violet E $\frac{1\%}{1 \text{ cm}}$

According to the method CAC/RM 26-1970 mentioned in point 8.15 in the Recommended International Standard for Olive Oil, Virgin and Refined, and for Refined Olive-Residue Oil, CODEX STAN 33-1981, "Determination of Specific Extinction in Ultra-Violet".

11.13. Determination of the alpha-tocopherol

According to the IUPAC method (6th edition, 1st supplement: Part 4, 1981) no. 2.404 "Identification and determination of tocopherols".

11.14. Determination of the moisture and volatile matter

According to the IUPAC method (1979, 6th edition) no. 2.601 "Determination of the Moisture and Volatile Matter" or to the ISO method 662-1980.

11.15. Determination of the insoluble impurities in light petroleum

According to the IUPAC method (1979, 6th edition) no. 2.604 "Determination of the Insoluble Impurities" or to the ISO method 663-1981.

11.16. Soap test

According to the method "Soap Test" CAC/RM 27-1970, mentioned in point 8.19 in the Recommended International Standard for Olive Oil, Virgin and Refined, and for Refined Olive-Residue Oil, CODEX STAN 33-1981.

11.17. Determination of the flash point

According to the AOCS Cc 9b-55 method, amended in 1977.
