

**CODEX STANDARD FOR TABLE OLIVES****CODEX STAN 66-1981**

**This Standard was elaborated jointly with  
The International Olive Oil Council**

The Standard prescribes minimum requirements for table olives. Section 9 of the Standard permits the use of grade designations. In this connection, the Codex Alimentarius Commission agreed at its Seventeenth Session to include in the present publication the higher qualitative classifications of the standards of the International Olive Oil Council for table olives, which are reproduced in the Annex to this Standard, but which do not form part of the Standard. The higher qualitative classifications of the IOOC standards are not affected by the provisions of the Codex Standard.

**1. SCOPE**

This standard applies to the fruit of the cultivated olive-tree (*Olea europaea sativa* Hoffg, Link) which has been suitably treated or processed and which is offered for direct consumption as table olives. It also covers olives packed in bulk containers which are intended for repacking into consumer size containers.

**2. DESCRIPTION****2.1 Product Definition**

Table olives are the sound fruits of suitable varieties<sup>1</sup> of the cultivated olive-tree (*Olea europaea sativa* Hoffg, Link) harvested at an appropriate stage of ripeness and whose quality is such that, when they are processed as specified in Section 2.2.2 of this standard, produce an edible product and ensure its good preservation. Such processing may include the addition of optional ingredients including spices.

**2.2 Product Designations**

Table olives are classified in one of the following olive types, trade treatments and styles:

**2.2.1 Types of olives**

**2.2.1.1 Green olives:** Obtained from fruits harvested during the ripening period, prior to colouring and when they have reached normal size. The colour of the fruit may vary from green to straw yellow.

**2.2.1.2 Olives turning colour:** Obtained from rose, wine-rose or brown-coloured fruits harvested when turning colour, before the stage of complete ripeness is attained.

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<sup>1</sup> The varieties of olives considered to be suitable should be identified when the standard is used.

2.2.1.3 **Black olives:** Obtained from fruits harvested when fully ripe or slightly before full ripeness is reached; they may, according to production region and time of harvesting, be reddish black, violet black, deep violet, greenish black or deep chestnut not only on the skin but also through the flesh.

## 2.2.2 Trade Treatments

### 2.2.2.1 Green olives

- (a) **Treated green olives in brine:** Treated in an alkaline lye and then packed in brine in which they undergo complete natural lactic fermentation (Sevillan style) or partial natural lactic fermentation.

The preservation at a pH value within the limits specified in this standard for table olives not undergoing complete natural fermentation may be ensured by:

- (i) sterilization or pasteurization;
- (ii) the addition of preservatives;
- (iii) refrigeration;
- (iv) treatment with nitrogen or carbon dioxide in treatments without brine.

- (b) **Untreated green olives in brine:** These are placed directly in brine and preserved by natural fermentation.

### 2.2.2.2 Olives turning colour

- (a) **Olives turning colour, treated in brine:** obtained after alkaline treatment and preserved by natural fermentation:

- (i) in brine;
- (ii) by heat treatment;
- (iii) in brine and by heat treatment.

- (b) **Untreated olives turning colour, in brine:** These are placed directly in brine and preserved by natural fermentation and ready for consumption.

2.2.2.3 **Olives darkened by oxidation in brine:** green olives or olives turning colour darkened by oxidation, whose bitterness has been removed by treatment in alkaline lye, which are packed in brine and preserved by heat sterilization.

### 2.2.2.4 Black olives

- (a) **Black olives in brine:** these are firm, smooth and with a glossy skin. Owing to their preparation, they may present slight surface depressions.

- **Treated black olives:** obtained after alkaline treatment and preserved by natural fermentation through one or a combination of the following:

- (i) in brine;
- (ii) by sterilization or pasteurization;
- (iii) by addition of a preservative.

- **Untreated black olives:** these are placed directly in brine. They have a fruity flavour which is more marked than that of the treated black olives and they usually retain a slight bitter taste. They are preserved by natural fermentation through one or a

combination of the following:

- (i) in brine;
  - (ii) by sterilization or pasteurization;
  - (iii) by addition of a preservative.
- (b) **Shrivalled black olives:** these are obtained from olives harvested just before they are fully ripe and which, after brief immersion in a weak alkaline solution, are preserved by sprinkling salt in drums which are rotated daily until the olives are required.
- (c) **Untreated naturally shrivalled black olives:** these are obtained from olives harvested when fully ripe, after they have become shrivalled on the tree, and subsequently treated directly in brine.
- (d) **Black olives in dry salt:** these have a shrivalled or furrowed appearance, although the skin is intact.
- **Treated black olives in dry salt:** these are obtained from firm, practically ripe fruit which, following slight alkaline treatment, is preserved in alternating layers of olives and dry salt, or by sprinkling dry salt over the olives.
  - **Untreated black olives in dry salt:** these are obtained from fruit harvested when fully ripe, treated immediately, in alternating layers of olives and dry salt, or by sprinkling dry salt over the olives. They retain a degree of bitterness and a fruity flavour more marked than those of treated olives in dry salt.
  - **Untreated naturally shrivalled black olives in dry salt:** these are obtained from fruits harvested when fully ripe which, after they have become shrivalled on the tree, preserved in alternating layers of olives and dry salt, or by sprinkling dry salt over the olives.
  - **Untreated pierced black olives in dry salt:** these are obtained from fruits harvested when fully ripe which, after the skin has been pierced, are preserved in alternating layers of olives and dry salt, or by sprinkling dry salt over the olives.
- (e) **Dehydrated black olives:** these are obtained from ripe fruit, after having been blanched and partially dehydrated in salt by very gentle heating.

2.2.2.5 **Bruised olives**<sup>2</sup>: these are obtained from whole fruit, fresh or previously treated in brine, subjected to a process whereby the flesh is opened without breaking the stone which remains whole and intact within the fruit. They may be treated in weak lye and are preserved in brine, possibly flavoured, with or without the addition of vinegar. There are four types of bruised olives:

- (i) bruised green olives in brine, untreated;
- (ii) brined untreated green olives, bruised;
- (iii) bruised treated green olives;
- (iv) bruised olives turning colour.

2.2.2.6 **Split olives:** green olives, olives turning colour or black olives split lengthwise by cutting into the skin and part of the flesh, then placed in brine, with or without vinegar; olive oil and aromatic substances may be added. There are two types of split olives;

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<sup>2</sup> Purposely bruised.

- (i) treated, when split after undergoing alkaline treatment;
- (ii) untreated.

2.2.2.7 **Specialities:** olives may be prepared by means distinct from, or additional to, those just set forth. Such specialities retain the name "olive" as long as the fruit used complies with the general definitions laid down in the standard. The names used for these specialities shall be sufficiently explicit to prevent any confusion, in purchasers' or consumers' minds, as to the origin and nature of the product and, in particular, with respect to the designations laid down in this standard.

### 2.2.3 Styles

Olives may be offered in one of the following styles, according to type and trade treatment.

2.2.3.1 **Whole olives:** olives which have their natural shape and from which the stone (pit) has not been removed.

- (a) Without stem: whole olives from which the stem has been removed.
- (b) With stem: whole olives retaining the stem.

2.2.3.2 **Stoned (pitted) olives:** olives from which the stone (pit) has been removed and which essentially retain their natural shape.

2.2.3.3 **Stuffed olives:** stoned (pitted) olives, stuffed either with one or more suitable ingredients (pimiento, onion, almonds, celery, anchovy, olive, orange or lemon peel, hazel-nut, capers, etc.) or pastes prepared therefrom.

2.2.3.4 **Halved olives:** stoned (pitted) or stuffed olives, sliced into two approximately equal parts.

2.2.3.5 **Quartered olives:** stoned (pitted) olives, split into four approximately equal parts along the fruit's major axis.

2.2.3.6 **Divided olives:** stoned (pitted) olives cut lengthwise into more than four approximately equal parts.

2.2.3.7 **Sliced olives:** stoned (pitted) or stuffed olives, sliced into parallel segments of fairly uniform thickness.

2.2.3.8 **Chopped or minced olives:** small pieces of stoned (pitted) olives of no definite shape and practically devoid<sup>3</sup> of identifiable stem-insertion units, as well as of slice fragments.

2.2.3.9 **Broken olives:** olives accidentally broken whole being stoned (pitted) or stuffed. They may contain stuffing material.

2.2.3.10 **Salad olives:** these are broken olives or a mixture of broken olives and stoned (pitted) olives with or without capers, plus stuffing material, where the olives are the most numerous compared with the entire product marketed in this style.

2.2.3.11 **Olives with capers:** whole or stoned (pitted) olives, usually small in size, with capers and with or without stuffing, where the olives are the most numerous compared with the entire product marketed in this style.

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<sup>3</sup> "Practically devoid" means no more than 5 per 100 of such units.

2.2.3.12 **Other Styles:** any other presentation of the product shall be permitted provided that the product:

- (i) is sufficiently distinctive from other styles laid down in this standard;
- (ii) meets all relevant requirements of this standard, including requirements relating to limitations on defects, drained weight, and any other requirements in this standard which are applicable to that style in the standard which most closely resembles the style or styles intended to be provided for under this provision;
- (iii) is adequately described on the label to avoid confusing or misleading the consumer.

2.2.3.13 **According to the manner in which they are placed in the container,** the olives may be presented as follows:

- (a) **Place-packed:** when the olives are placed, in the transparent rigid packs containing same, either in orderly symmetrical fashion or forming geometrical shapes.
- (b) **Random (thrown) packed:** when the olives are not placed in orderly fashion in the packs containing same.

## 2.2.4 Size grading

2.2.4.1 The olives are size-graded by count of the number of fruits per kilogramme or hectogramme.

The size scale, in one kilogramme, is as follows:

60/70	121/140	201/230
71/80	141/160	231/260
81/90	161/180	261/290
91/100	181/200	291/320
101/110		321/350
111/120		351/380
		381/410 <sup>4</sup>

Solely where stuffed olives are concerned, as from size 201/220 the interval is 20 fruits up to size 401/420.

2.2.4.2 Size-grading shall be compulsory for olives in the "whole"<sup>5</sup>, "stoned" (pitted), "stuffed" and "halved" styles.

2.2.4.3 Within each size as defined above, it is stipulated that after having removed, from a sample of 100 olives, the olive having the largest horizontal diameter and the olive having the smallest horizontal diameter, the difference between the horizontal diameters of the remaining olives may not exceed 4 mm.

2.2.4.4 In the case of stoned (pitted) olives, the size shown is the one corresponding to the original whole olive. To ascertain same, the number of stoned olives in one kilogramme shall be multiplied by a coefficient set by each producing country. The figure obtained by this operation shall fall within the interval defined by the two numbers expressing the size of the original whole olive, with a one-size tolerance.

2.2.4.5 Within each size and after having removed, from a sample of 100 olives, the olive having the largest horizontal diameter and the olive having the smallest horizontal diameter, the maximum permitted tolerance

<sup>4</sup> Above 410, the interval is 50 fruits.

<sup>5</sup> Whole olives include "bruised" olives and "split" olives.

shall be:

- 10% for sizes with a 10-fruit interval;
- 5% for sizes with a 20-fruit interval;
- 2% for sizes with a 30 or more fruit interval.

### 3. ESSENTIAL COMPOSITION AND QUALITY FACTORS

#### 3.1 General conditions

Subject to the tolerances given in the standard, table olives shall be:

- Sound
- Clean
- Free from abnormal odour or taste
- Suitably ripe
- Free from defects liable to affect edibility or correct preservation
- Free from foreign matter; permitted ingredients are not considered as foreign matter
- Show no sign either of any deterioration under way or of any abnormal fermentation
- Size-graded (as concerns whole<sup>6</sup>, stoned (pitted), stuffed and halved olives)
- Of one variety in one and the same pack
- Of uniform colour, except for seasoned olives<sup>7</sup> and those turning colour.

#### 3.2 Optional ingredients

3.2.1 Water

3.2.2 Salt (sodium chloride)

3.2.3 Vinegar

3.2.4 Olive oil

3.2.5 Sugars

3.2.6 Any single or combination of edible material suitable as stuffing such as but not limited to, pimiento, onion, almond, celery, anchovy, capers, etc. or pastes prepared therefrom.

3.2.7 Spices and extracts thereof and aromatic herbs.

#### 3.3 Packing brines

3.3.1 The brines used shall be obtained by dissolving food grade salt in potable water, with or without the addition of authorized substances, flavoured or not with various spices or plants.

3.3.2 Brine shall be clean, free from abnormal odours or tastes and unauthorized foreign matter; the clarified original brine may be used in bulk containers. Brine held in glass containers shall, apart from being clean, also be transparent.

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<sup>6</sup> Whole olives include "bruised" olives and "split" olives.

<sup>7</sup> This term applies to olives having undergone special treatment, viz.: by adding to the covering liquid some aromatic vegetable substances (which are not considered, either total or partially, as foreign matter in the case of olives thus prepared and called "Aliñadas" in Spanish) and possibly vinegar.

3.3.3 In the case of green olives that have undergone natural lactic fermentation, the brine shall have a minimum 0.4% m/m acidity in terms of lactic acid.

3.3.4 Minimum sodium chloride contents and maximum pH limits of brine, according to type and treatment:

Type and treatment	Minimum sodium chloride content	Maximum pH limit
Green olives in brine, treated or untreated:		
- in hermetically-sealed containers	5%	4.0
- In non-hermetically-sealed containers	6%	4.5
"Seasoned" green olives:		
- in hermetically-sealed containers	4%	4.0
- in non-hermetically-sealed containers	6%	4.5
Olives turning colour:		
- all treatments	6%	-
Black olives:		
- in brine	7%	-
- in dry salt	10%	-

In the case of pasteurized olives of all types and treatments, the sodium chloride content of the brine may be reduced to 2%, but the maximum pH limit shall be 4.3. The covering liquid may be free from sodium chloride if the maximum pH limit is reduced to 4. In the case of black olives, the sodium chloride content of the brine may be reduced to 5% but the maximum pH limit shall be 5.5.

In the case of sterilized olives, the minimum sodium chloride content of the brine shall not be limited and the maximum pH limit shall be set at 8.

3.3.5 The cell juice of olives preserved in nitrogen or carbon dioxide without brine shall comply, as concerns the sodium chloride concentration and pH, with the related stipulations for olives in brine preserved in hermetically-sealed containers.

### 3.4 Quality criteria

Table olives shall comply with the minimum quality criteria corresponding to the defect tolerances given in Section 3.4.2 of this standard<sup>8</sup>.

#### 3.4.1 Definitions of defects

- (a) **Harmless extraneous material:** Means any vegetable matter not injurious to health, nor aesthetically undesirable, for example leaves, separated stems, but not including substances the addition of which has been authorized in the standard.
- (b) **Blemishes not affecting the flesh:** Superficial marks which affect the epicarp (bruises, blows, stains induced by brushing against branches, etc.) but do not penetrate into the mesocarp and are not the consequences of disease.
- (c) **Damage affecting the flesh:** Means imperfection or damage to the mesocarp which may or may not be associated with superficial marks. In the case of whole stoned (pitted) olives: olives so damaged by tearing of the mesocarp that the stone cavity or a large part of the mesocarp is visible.
- (d) **Shrivelled:** Means olives in the styles of whole, whole stuffed, whole stoned (pitted), halved or quartered (except for those styles and types that are characteristically shrivelled): that is, so wrinkled as to materially affect the appearance of the fruit.
- (e) **Soft or fibrous:** Means olives which are excessively or abnormally flabby or fibrous in comparison with the trade type.
- (f) **Abnormal colour:** Means olives the colour of which is distinctly different from the characteristic colour of the trade type in question and from the average of the fruit in the container.
- (g) **Cryptogamic and mould damage:** Lustreless fruits and those with scattered, more or less dark stains caused by the mycelium of certain fungi (*Macrophoma*, *Gloesporium*, etc.), growing either within the olive and leading to dehydration of the tissues, or on the skin and affecting the colour of the fruit.
- (h) **Damage caused by insects (other than *Dacus oleae*) with exit hole:** Deformed fruits and those with abnormal stains or whose mesocarp has an abnormal aspect.
- (i) **Damage caused by abnormal cultivation practices:** Fruits whose epicarp has been accidentally burned.
- (j) ***Dacus oleae* damage:** Fruit damaged by *Dacus oleae*, with exit hole.
- (k) **Stems:** Stems attached to the olives and which measure more than 3 mm in length when measured from the shoulder of the olive. Not considered a defect in whole olives presented with stem attached.
- (l) **Defective stuffing (in the case of stuffed olives):** Blemished tissue or defective colouring of the

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<sup>8</sup> In international trade, table olives are classified according to their defects and tolerances into three trade categories defined in the Annex. The minimum quality criteria set in this standard correspond to the minimum quality criteria for the "Second" trade category.

stuffing which materially affects the appearance of the product; olives which do not contain stuffing or which are incompletely stuffed; olives which have been stuffed other than through the centre along the approximate line from the main axis to the base of the olive.

- (m) **Stone or stone fragments (except for whole olives):** Means a whole stone (pit), or pieces of stone (pit) which weigh at least 5 mg.

### 3.4.2 Tolerances for Defects

The defects defined in Section 3.4.1 shall not exceed the limits prescribed in the table below for each type of olive:

List of defects	Maximum tolerance as percentage of fruits		
	Green olives	Olives turning colour and olives darkened by oxidation	Black olives
	Harmless foreign matter: 1 unit per kilogramme		
(a) Blemishes not affecting flesh	7	10	12
(b) Damage affecting flesh	5	5	8
(c) Shrivelled fruits	5	5	10
(d) Soft or fibrous fruit	10	12	12
(e) Abnormal colour	10	10	10
(f) Cryptogamic and mould damage	10	10	10
(g) Damage by insects	10	10	12
(h) Damage caused by abnormal cultivation practices	Devoid	Devoid	Devoid
(i) Damage by <i>Dacus Oleae</i>	6	7	10
(j) Stems	5	5	5
Stuffing defects:			
(k) Olives without stuffing:			
- Place-packed	5		
- Random-packed	10		
(l) Defective stuffing	10		
Stones (pits):			
(m) Stoned (pitted) and stuffed olives	2	2	2
(n) Chopped or minced, broken and salad olives (on a 300 gramme basis)	2	2	2
Stone (pit) fragments:			

List of defects	Maximum tolerance as percentage of fruits		
	Green olives	Olives turning colour and olives darkened by oxidation	Black olives
	Harmless foreign matter: 1 unit per kilogramme		
(o) Stoned (pitted) and stuffed olives	2	2	2
(p) Chopped or minced, broken and salad olives (on a 300 gramme basis)	2	2	2
Broken stones (pits):			
(q) Bruised	6	6	
(r) Under no circumstances shall the total tolerance figure exceed	17%	17%	17%

The tolerances laid down for stones (pits) and stone (pit) fragments are not included in the total tolerance figure indicated.

#### 4. **FOOD ADDITIVES**

##### **Maximum level**

(expressed as weight m/m of total weight of olives, including brine)

##### 4.1 **Preservatives**

The following may be used singly or in any combination in olives that are not either fully fermented or preserved by heat sterilization:

4.1.1 Benzoic acid and its sodium and potassium salts 1 g/kg (expressed as benzoic acid)

4.1.2 Sorbic acid and its sodium and potassium salts 0.5 g/kg (expressed as sorbic acid)

##### 4.2 **Acidifying agents**

4.2.1 Lactic acid 15 g/kg

4.2.2 Citric acid 15 g/kg

4.2.3 L(+) Tartaric acid 15 g/kg

4.2.4 Acetic acid Limited by GMP

4.2.5 Carbon dioxide Limited by GMP

4.3	<b>Antioxidant</b>		
	L-Ascorbic acid		0.2 g/kg
4.4	<b>Stabilizers</b>		
4.4.1	Ferrous gluconate (solely to stabilize the colour of treated olives darkened by oxidation)		0.15 g/kg (calculated as total Fe in the fruit)
4.4.2	Ferrous lactate		0.15 g/kg (calculated as total Fe in the fruit)
4.5	<b>Flavouring agents</b>		
	Natural flavours as defined in the Codex Alimentarius	Limited by GMP	
4.6	<b>Flavour enhancer</b> (Solely for olives stuffed with anchovies)		
4.6.1	Monosodium glutamate		5 g/kg
4.7	<b>Thickeners and Agglutinants</b> (Solely for pastes intended for stuffing)		
4.7.1	Sodium alginate		5 g/kg
4.7.2	Carrageenan		Limited by GMP
4.7.3	Carob bean gum		Limited by GMP
4.7.4	Guar gum		Limited by GMP
4.7.5	Xanthan gum		3 g/kg
4.8	<b>Firming agents</b> (Solely for olives stuffed with pastes)		
4.8.1	Calcium chloride )		1.5 g/kg expressed as calcium ions in the stuffed end product
4.8.2	Calcium lactate )		
4.8.3	Calcium citrate )		
4.8.4	Potassium chloride		1.5 g/kg expressed as potassium ions in the stuffed end product

#### 4.9 Others

4.9.1 Sodium or potassium hydroxide Limited by GMP

4.9.2 Hydrochloric acid Limited by GMP

#### 4.10 Processing aids

4.10.1 Cultures of lactic micro-organisms Limited by GMP

4.10.2 Nitrogen limited by GMP

4.10.3 Carbon dioxide limited by GMP

### 5. CONTAMINANTS

Lead (Pb) 1 mg/kg

Tin (Sn) 250 mg/kg, calculated as Sn

### 6. HYGIENE

6.1 It is recommended that the product covered by the provisions of this standard be prepared and handled in accordance with the appropriate sections of the Recommended International Code of Practice - General Principles of Food Hygiene (CAC/RCP 1-1969), and other Codes of Practice recommended by the Codex Alimentarius Commission which are relevant to this product.

6.2 To the extent possible in Good Manufacturing Practice, the product shall be free from objectionable matter.

6.3 When tested by appropriate methods of sampling and examination, the product:

- shall be free from microorganisms in amounts which may represent a hazard to health;
- shall be free from parasites which may represent a hazard to health; and
- shall not contain any substance originating from microorganisms in amounts which may represent a hazard to health.

6.4 Olives preserved by heat sterilization (as in treated olives darkened by oxidation) shall have received a processing treatment sufficient both in time and temperature to destroy spores of *Clostridium botulinum*.

### 7. CONTAINERS

7.1 The containers used may be made of wood, metal, tin, glass, macromolecular materials (plastics), or of any other material, capable of ensuring correct olive preservation and not transmitting toxic substances.

7.2 Metal drums shall be internally covered with epoxyphenol or similar varnishes.

7.3 Tin-plate containers for black-olive packing shall be varnished in the inside, at least on the inside of both covers.

7.4 Transparent containers shall not disguise the appearance of the product contained therein.

7.5 Containers made of macromolecular materials shall comply with prevailing technical health stipulation and be sufficiently resistant for transport purposes.

7.6 Except for non-returnable containers which shall be new and show no signs of deterioration giving reason to believe that the organoleptic conditions or commercial value of the product contained might be subsequently affected, all other wooden and plastic containers may be re-used providing they are in good condition and of guaranteed cleanness.

## 8. WEIGHTS AND MEASURES

### 8.1 Fill of Container

The product, including covering liquid, shall occupy not less than 90% of the water capacity of the container. This capacity is equal to the volume of distilled water at 20°C which the container can hold when completely filled.

The weight of the product contained in each pack shall be the maximum allowed by the processing method, without being prejudicial to the quality of the contents.

### 8.2 Tolerances for Fill of Container

The content (olives and covering liquid) shall in no container be less than 90% of the volume of the container, as defined in section 8.1 of this standard, no tolerance therefore being allowed in this connection.

## 9. LABELLING

In addition to the requirements of the Codex General Standard for the labelling of Prepackaged Foods (CODEX STAN 1-1985)<sup>9</sup> the following specific provisions apply:

### 9.1 The Name of the Food

9.1.1 The name of the food to be declared on the label shall be "Olives" or "Table Olives"<sup>10</sup>

9.1.2 The following, as appropriate, shall be included as part of the name or shall appear in close proximity thereto:

9.1.2.1 The type of olives as described in Section 2.2.1.

9.1.2.2 The trade treatment as described in Section 2.2.2.

9.1.2.3 The style as described in Section 2.2.3, except that this declaration may be omitted on glass jars and plastic sachets; in the case of stuffed olives the style of stuffing shall be specified:

- "olives stuffed with..." (single or combination of ingredients);
- "olives stuffed with ... paste" (single or combination of ingredients).

9.1.2.4 If the product is produced in accordance with the other styles provision (sub-section 2.2.3.12), the label shall contain in close proximity to the name of the product such additional words or phrases that will avoid

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<sup>9</sup> Hereafter referred to as General Standard.

<sup>10</sup> Governments, when notifying their position on the Standard, should indicate the requirements in force in their country.

misleading or confusing the consumer.

9.1.2.5 The size of "whole", "stoned" (pitted) "stuffed" and "halved" olives in accordance with the provisions in Section 2.2.4.

9.1.2.6 The variety of olives.

## 9.2 **Irradiated Foods**

Where table olives have been treated with ionizing irradiation/energy or contain ingredients treated with ionizing radiation/energy they shall be labelled in accordance with the General Standard.

## 9.3 **Non-Retail Containers**

In addition to the General Standard the following specific provisions apply to non-retail containers.

Information above shall be given either on the container or in the accompanying document, except that the name of the food, the lot identification, the name and address of the manufacturer or packer shall appear on the container.

However, lot identification and the name and address of the manufacturer or packer may be replaced by an identification mark provided that such mark is clearly identifiable with the accompanying documents.

## 10. **METHODS OF ANALYSIS AND SAMPLING**

See relevant Codex texts on methods of analysis and sampling.

## ANNEX

**Standard of the International Olive Oil Council Applying to  
Table Olives in International Trade  
T/OT/Doc. no 1.5 of 2 October 1980**

**(Excert: Qualitative classification)**

**Qualitative classification**

Subject to the defects and tolerances indicated in Sections 1, 2 and 3, table olives are classified into one of the following trade categories:

"Extra" or "Fancy": The high quality olives endowed to the maximum extent with the variety's specific characteristics are considered as belonging to this category. Notwithstanding, and providing this does not affect the overall favourable aspect nor each fruit's organoleptic characteristics, they may have slight colour, shape, flesh-firmness or skin defects.

In this category, only the whole, bruised, split, stoned (pitted) and stuffed olives of the best varieties may be exported, providing their size exceeds 351/380.

"First", "Ist", "Choice" or "Select": This category covers good quality olives with a suitable degree of ripeness and endowed with the variety's specific characteristics. Providing this does not affect the overall favourable aspect nor each individual fruit's organoleptic characteristics, they may have slight colour, shape, skin or flesh-firmness defects.

In this trade category all the types, preparations and styles of table olives may be exported, except for "shopped" or "broken" olives and "olive pastes".

"Second", "IInd" or "Standard": This category includes olives complying with the minimum quality criteria specified in Section 3.4.2 of the Codex Standard for Table Olives.

## 1. Defects in, and tolerances for, green olives

List of defects	Maximum tolerance as a percentage of fruits		
	Extra	First	Second or Standard
Harmless foreign matter: 1 unit per kilogramme			
Skin defect not affecting flesh	3	5	7
Skin defect affecting flesh	2	3	5
Shrivelled fruits	1	2	5
Soft or fibrous fruit	2	4	10
Abnormal colour	2	4	10
Cryptogamic damage	2	4	10
Damage by insects <sup>11</sup>	3	5	10
Damage caused by abnormal cultivation practices	Devoid	Devoid	Devoid
Damage by <i>Dacus Oleae</i> (with exit hole)	2	3	6
Stems (except for style with stems)	1	2	5
Stuffing defects:			
Olives without stuffing:			
- Place-packed	1	2	5
- Random-packed	1	4	10
Defective stuffing	3	5	10
Stones (pits):			
Stoned (pitted) and stuffed olives	Devoid	1	2
Broken and salad olives (on a 300 gramme basis)	-	1	2
Stone (pit) fragments:			
Stoned (pitted) and stuffed olives	2	2	2
Broken and salad olives (on a 300 gramme basis)	-	2	2
Broken stones (pits):			
Bruised	3	4	6

Under no circumstances shall the total tolerance figure for each trade category exceed:

Extra:	7 per 100
First:	12 per 100
Second or Standard	17 per 100

The tolerances laid down for stones (pits) and stone (pit) fragments are not included in the total tolerance figures indicated above for the various trade categories.

<sup>11</sup> A greater tolerance may be allowed to take account of heavy onsets, whenever such greater tolerance is not prohibited in the country in which the olives are consumed; said onsets exclude *Dacus* onsets with exit hole.

## 2. Defects in, and tolerances for, olives turning colour and olives darkened by oxidation

List of defects	Maximum tolerance as a percentage of fruits		
	Extra	First	Second or Standard
Harmless foreign matter: 1 unit per kilogramme			
Skin defects not affecting flesh	3	6	10
Skin defects affecting flesh	2	3	5
Shriveled fruits	1	2	5
Excessively soft or fibrous fruit	3	6	12
Abnormal colour	2	4	10
Cryptogamic damage	2	4	10
Damage by insects	3	5	10
Damage caused by abnormal cultivation practices	Devoid	Devoid	Devoid
Damage by <i>Dacus Oleae</i> (with exit hole) <sup>12</sup>	3	5	7
Stems (except for style with stems)	1	2	5
Stones (pits):			
Stoned (pitted) and stuffed olives	Devoid	1	2
Broken and salad olives (on a 300 gramme basis)	-	1	2
Stone (pit) fragments:			
Stoned (pitted) and stuffed olives	2	2	2
Broken and salad olives (on a 300 gramme basis)	-	2	2
Broken stones (pits):			
Bruised	3	4	6

Under no circumstances shall the total tolerance figure for each trade category exceed:

Extra:	7 per 100
First:	12 per 100
Second or Standard:	17 per 100

The tolerances laid down for stones (pits) and stone (pit) fragments are not included in the total tolerance figures indicated above for the various trade categories.

<sup>12</sup> A greater tolerance may be allowed to take account of heavy *Dacus* onsets, whenever such greater tolerance is not prohibited in the country in which the olives are consumed.

## 3. Defects in, and tolerances for, black olives

List of defects	Maximum tolerance as a percentage of fruits		
	Extra	First	Second or Standard
Harmless foreign matter: 1 unit per kilogramme			
Skin defects not affecting flesh	4	7	12
Skin defects affecting flesh	4	6	8
Shriveled fruits (except for naturally shriveled fruits)	4	6	10
Excessively soft or fibrous fruit	3	6	12
Abnormal colour	2	4	10
Cryptogamic damage	2	4	10
Damage by insects	3	6	12
Damage caused by abnormal cultivation practices	Devoid	Devoid	Devoid
Damage by <i>Dacus Oleae</i> (with exit hole) <sup>13</sup>	5	8	10
Stems (except for style with stems)	1	2	5
Stones (pits):			
Stoned (pitted) and stuffed olives	Devoid	1	2
Broken and salad olives (on a 300 gramme basis)	-	1	2
Stone (pit) fragments:			
Stoned (pitted) and stuffed olives	2	2	2
Broken and salad olives (on a 300 gramme basis)	-	2	2

Under no circumstances shall the total tolerance figure for each trade category exceed:

Extra:	7 per 100
First:	12 per 100
Second or Standard:	17 per 100

The tolerances laid down for stones (pits) and stone (pit) fragments are not included in the total tolerance figures indicated above for the various trade categories.

<sup>13</sup> A greater tolerance may be allowed to take account of heavy *Dacus* onsets whenever such greater tolerance is not prohibited in the country in which the olives are consumed.