TRADE STANDARD APPLYING TO TABLE OLIVES
Resolution No. RES-2/91-IV/04

TRADE STANDARD APPLYING TO TABLE OLIVES

THE INTERNATIONAL OLIVE OIL COUNCIL,

Having regard to the International Agreement on Olive Oil and Table Olives, 1986, as amended and extended, 1993, and last prolonged, 2003, particularly the considerations thereof concerning the designations and definitions of table olives and the recommendations on standards relating to the essential composition and quality factors of table olives and the undertakings of the Members,

Having regard to Resolution RES-3/43-III/80 of 28 November 1980 whereby the International Olive Oil Council adopted the unified qualitative standard applying to table olives in international trade under the reference T/OT/Doc. no. 15 of 2 October 1980, which standard underwent minor amendment in May and November 1981 as regards the wording of the text and food additives,

Whereas the Council decided at its 80th session (Nicosia, Cyprus, 7–11 June 1999) to undertake the revision of the 1980 table olive standard in order to update and adapt it to technological and scientific progress and changing commercial practices;

Whereas the Committee on Olive Oil Chemistry and Standards Setting made a relevant proposal at its 12th meeting, within the framework of the 91st session of the Council (Madrid, Spain, 29 November–2 December 2004),

DECIDES

The trade standard applying to table olives, COI/OT/NC no. 1 of December 2004, shall replace and rescind the unified qualitative standard applying to table olives in international trade, T/OT/Doc. no. 15 of 2 October 1980, as revised in 1981.

The Members shall take whatever measures are appropriate, in the manner required by their legislation, to apply the standard adopted and shall notify the Executive Secretariat of any such measures as soon as they are taken.

The non-Member States involved in international trade in table olives shall be invited to take into consideration the standard adopted and to adapt their regulations to the provisions thereof.

Madrid (Spain), 2 December 2004.
TRADE STANDARD APPLYING TO TABLE OLIVES

1. SCOPE

This standard applies to the fruit of the cultivated olive tree (Olea europaea L.) which has been suitably treated or processed and which is offered for trade and for final consumption as table olives.

2. DESCRIPTION

2.1. Product definition

“Table olives” means the product:

(a) prepared from the sound fruits of varieties of the cultivated olive tree (Olea europaea L.) that are chosen for their production of olives whose volume, shape, flesh-to-stone ratio, fine flesh, taste, firmness and ease of detachment from the stone make them particularly suitable for processing;

(b) treated to remove its bitterness and preserved by natural fermentation, or by heat treatment, with or without the addition of preservatives;

(c) packed with or without covering liquid.

2.2. Types of olives

Table olives are classified in one of the following types according to the degree of ripeness of the fresh fruits:

(a) **Green olives**: Fruits harvested during the ripening period, prior to colouring and when they have reached normal size.

(b) **Olives turning colour**: Fruits harvested before the stage of complete ripeness is attained, at colour change.

(c) **Black olives**: Fruits harvested when fully ripe or slightly before full ripeness is reached.
2.3. **Trade preparations**

The bitterness of the olives may be removed by alkaline treatment, by immersion in a liquid to dilute the bitter compound, or by biological processes. The product so obtained may be preserved in brine according to its specific characteristics, in dry salt, in a modified atmosphere, by heat treatment, by preservatives, or by acidifying agents. The colour of green olives may vary from green to straw yellow, that of olives turning colour may vary from rose to wine rose or brown, and the colour of black olives may range from reddish black to violet black, deep violet, greenish black and deep chestnut.

Olives shall undergo the following trade preparations:

(a) **Treated olives:** Green olives, olives turning colour or black olives that have undergone alkaline treatment, then packed in brine in which they undergo complete or partial fermentation, and preserved or not by the addition of acidifying agents:

   (a-1) Treated green olives in brine;
   (a-2) Treated olives turning colour in brine;
   (a-3) Treated black olives.

(b) **Natural olives:** Green olives, olives turning colour or black olives placed directly in brine in which they undergo complete or partial fermentation, preserved or not by the addition of acidifying agents:

   (b-1) Natural green olives;
   (b-2) Natural olives turning colour;
   (b-3) Natural black olives.

(c) **Dehydrated and/or shrivelled olives:** Green olives, olives turning colour or black olives that have undergone or not mild alkaline treatment, preserved in brine or partially dehydrated in dry salt and/or by heating or by any other technological process:

   (c-1) Dehydrated and/or shrivelled green olives;
   (c-2) Dehydrated and/or shrivelled olives turning colour;
   (c-3) Dehydrated and/or shrivelled black olives.

(d) **Olives darkened by oxidation:** Green olives or olives turning colour preserved in brine, fermented or not, darkened by oxidation in an alkaline medium and preserved in hermetically sealed containers subjected to heat sterilisation; they shall be a uniform black colour.

   (d-1) Black olives.
(e) **Specialities:** Olives may be prepared by means distinct from, or additional to, those set forth above. Such specialities retain the name “olive” as long as the fruit used complies with the general definitions laid down in this 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 products and, in particular, with respect to the designations laid down in this standard.

2.4. **Styles**

2.4.1. According to the manner in which they are placed in the container 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.

2.4.2. Olives may be offered in one of the following styles:

2.4.2.1. **Whole olives**

(a) **Whole olives:** Olives, with or without their stem, which have their natural shape and from which the stone (pit) has not been removed.

(b) **Cracked olives:** Whole olives subjected to a process whereby the flesh is opened without breaking the stone (pit) which remains whole and intact inside the fruit.

(c) **Split olives:** Whole olives that are split lengthwise by cutting into the skin and part of the flesh.

2.4.2.2. **Stoned (pitted) olives**

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

(b) **Halved olives:** Stoned (pitted) or stuffed olives sliced into two approximately equal parts, perpendicularly to the major axis of the fruit.

(c) **Quartered olives:** Stoned (pitted) olives split into four approximately equal parts along and perpendicularly to the major axis of the fruit.

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

(e) **Sliced olives:** Stoned (pitted) or stuffed olives sliced into segments of fairly uniform thickness.
2.4.2.3 **Stuffed olives:** Stoned (pitted) olives stuffed either with one or more suitable products (pimiento, onion, almond, celery, anchovy, olive, orange or lemon peel, hazelnut, capers, etc.) or with natural pastes prepared therefrom.

2.4.2.4 **Salad olives:** Whole broken or broken-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.

2.4.2.5 **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.

2.4.2.6 **Olive paste:** Exclusively olive flesh, finely crushed.

2.4.2.7 **Other styles:** Any other presentation of the product shall be permitted provided that the product:

(i) is sufficiently distinctive from the other styles laid down in this standard;

(ii) meets all relevant requirements of this standard, including requirements relating to limits for defects, drained weight, and any other requirements which are applicable to the various styles;

(iii) is adequately described on the label to avoid confusing or misleading the consumer.

2.5. **Sizing**

The olives are size-graded according to the number of fruits per kilogramme or hectogramme.

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

<table>
<thead>
<tr>
<th>Size Grade</th>
<th>Drained Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>60/70</td>
<td>121/140</td>
</tr>
<tr>
<td>71/80</td>
<td>141/160</td>
</tr>
<tr>
<td>81/90</td>
<td>161/180</td>
</tr>
<tr>
<td>91/100</td>
<td>181/200</td>
</tr>
<tr>
<td>101/110</td>
<td>211/230</td>
</tr>
<tr>
<td>111/120</td>
<td>241/260</td>
</tr>
<tr>
<td>121/140</td>
<td>271/290</td>
</tr>
<tr>
<td>141/160</td>
<td>301/320</td>
</tr>
<tr>
<td>161/180</td>
<td>331/350</td>
</tr>
<tr>
<td>181/200</td>
<td>361/380</td>
</tr>
</tbody>
</table>

* Above 410, the interval is 50 fruits.*
Different scales may nevertheless be applied according to agreements between the parties concerned.

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

Size-grading shall be compulsory for olives in the whole, stoned (pitted) and stuffed styles.

In the case of stoned (pitted) olives or stuffed olives (after removing the stuffing), the size shown shall be the one corresponding to the original whole olive. For the purpose of checking, the number of stoned (pitted) olives in one kilogramme shall be multiplied by a coefficient set by each producing country.

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.

3. ESSENTIAL COMPOSITION AND QUALITY FACTORS

3.1. Composition

3.1.1. Basic ingredients

Olives as defined in sections 1 and 2, with or without covering liquid.

3.1.2. Packing brines

This term applies to solutions of food grade salts dissolved in potable water, with or without the addition of all or some of the ingredients listed under section 3.1.3.

Brine shall be clean, free from unauthorised foreign matter and shall comply with the hygiene rules laid down in section 6 of this standard.
3.1.2.1. **Physico-chemical characteristics of the packing brine or of the juice after osmotic balance**

<table>
<thead>
<tr>
<th>Preparation</th>
<th>Minimum sodium chloride content %</th>
<th>Maximum pH limit</th>
<th>Minimum lactic acidity % lactic acid</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SCC, MAT PR, R P, S</td>
<td>SCC, MAT PR, R P, S</td>
<td>SCC, MAT PR, R P, S</td>
</tr>
<tr>
<td>Treated olives</td>
<td>5</td>
<td>4</td>
<td>4.0</td>
</tr>
<tr>
<td>Natural olives</td>
<td>6</td>
<td>6</td>
<td>4.3</td>
</tr>
<tr>
<td>Dehydrated and/or shrivelled olives</td>
<td>10</td>
<td>10</td>
<td>GMP</td>
</tr>
<tr>
<td>Olives darkened by oxidation</td>
<td>GMP</td>
<td>GMP</td>
<td>GMP</td>
</tr>
</tbody>
</table>

SCC: Specific chemical characteristics

MAT: Modified atmosphere

PR: Addition of preservatives

R: Refrigeration

P: Pasteurisation

S: Sterilisation

GMP: Good manufacturing practice

Note 1: Trade preparations of table olives not complying with the above physico-chemical characteristics may only be marketed if they are made according to traditional methods the food safety of which is guaranteed by an official body which authorises their distribution and sale.

Note 2: The presence of propionic acid and of its salts may be observed in table olive trade preparations that have undergone fermentation in conformity with good manufacturing practice.
### 3.1.2.2. Characteristics of the thermal pasteurisation and sterilisation treatment applied to table olives

<table>
<thead>
<tr>
<th>Preparation</th>
<th>Minimum microbially lethal units (PU)</th>
<th>Minimum sterility value (Fo)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PU$_{62.4^\circ C}^{525}$</td>
<td>Fo$_{121^\circ C}^{10}$</td>
</tr>
<tr>
<td>Treated olives</td>
<td>15</td>
<td>-</td>
</tr>
<tr>
<td>Natural olives</td>
<td>15</td>
<td>-</td>
</tr>
<tr>
<td>Dehydrated and/or shrivelled olives</td>
<td>15</td>
<td>-</td>
</tr>
<tr>
<td>Olives darkened by oxidation</td>
<td>-</td>
<td>15</td>
</tr>
</tbody>
</table>

**P:** Pasteurisation

**S:** Sterilisation

**$PU_{n}^{z}$:** Pasteurisation units, defined as the cumulative lethal rate during heat processes performed at temperatures below $100^\circ C$. Propionic bacteria shall be considered the reference microorganisms for table olives, for which the equation of the thermal death time is defined by a reference temperature equal to $62.4^\circ C$ and a $z$ curve of 5.25.

**Rt:** The reference temperature is the temperature corresponding to a decimal reduction time which, together with the $z$ curve, defines the logarithmic representation of the T.D.T. curve of a given microorganism.

**$z$:** Curve that plots the logarithmic representation of the thermal death times according to temperature (T.D.T. curve); it is equivalent to the number of degrees necessary for the curve to traverse one log cycle.

**$Fo_{n}^{z}$:** Cumulative sterility value: integral, or sum of the partially lethal rates, obtained during sterilisation and expressed as exposure time at a reference temperature. When the reference temperature Rt is fixed at $121^\circ C$ and the $z$ curve at $10^\circ C$, the $Fo$ value applicable to olives darkened by oxidation is obtained.

- **Decimal reduction time:** heating time, in minutes, required to reduce the active population of a bacterial suspension by one tenth.

- **Thermal death time:** heating time, at a specific temperature and in specific conditions, required to reduce the initial microbial population by a factor of $10^{12}$.

- **Lethal rate:** reciprocal of the number of minutes of heat exposure required to destruct a given microorganism at a specific temperature.
3.1.3. Other ingredients

Other ingredients may be used such as:

(a) Water;
(b) Food-grade salts;
(c) Vinegar;
(d) Olive oil;
(e) Sugars;
(f) Any single or combination of edible material used as an accompaniment or stuffing such as, for example, pimiento, onion, almond, celery, anchovy, capers, or pastes thereof;
(g) Spices and aromatic herbs or natural extracts thereof;
(h) Authorised additives (including flavourings).

3.2. Quality criteria

Table olives shall have the characteristic taste, smell, colour and texture of the product and shall comply with the hygiene rules laid down in section 6 of this standard.

3.2.1. Qualitative classification

Subject to the defects and tolerances mentioned in section 3.2.2 of this standard, table olives are classified in one of the following three trade categories:

“Extra” or “Fancy”: The high quality olives endowed to the maximum extent with the characteristics specific to the variety and trade preparation are considered as belonging to this category. Notwithstanding, and providing this does not affect the overall favourable aspect or organoleptic characteristics of each fruit, they may have very slight colour, shape, flesh-firmness or skin defects.

Whole, split, stoned (pitted) and stuffed olives of the best varieties may be classified in this category, providing their size exceeds 351/380.

“First”, “1st”, “Choice” or “Select”: This category covers good quality olives with a suitable degree of ripeness and endowed with the characteristics specific to the variety and trade preparation. Providing this does not affect the overall favourable aspect or individual organoleptic characteristics of each fruit, they may have slight colour, shape, skin or flesh-firmness defects.

All the types, preparations and styles of table olives may be classified in this category, except for chopped or broken olives and olive pastes.

“Second”, “2nd” or “Standard”: This category includes good quality olives which, although they cannot be classified in the two previous categories, comply with the general conditions defined for table olives under section 3.1 of this standard.
3.2.2. Definitions and tolerances of defects

3.2.2.1. Definitions of defects

(a) **Harmless extraneous material**: 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 authorised in the standard.

(b) **Blemished fruit**: Olives with marks on the skin that are more than 9 mm² in surface area and that may or may not penetrate through to the flesh.

(c) **Mutilated fruit**: Olives damaged by tearing the epicarp to such an extent that a portion of the mesocarp becomes visible.

(d) **Broken fruit**: Olives damaged to such an extent as to affect their normal structure.

(e) **Shrivelled fruit**: Olives that are so abnormally wrinkled as to affect their appearance. The slight superficial wrinkles displayed by certain trade preparations shall not be considered a defect.

(f) **Abnormal texture**: Olives which are excessively or abnormally flabby or tough in comparison with the trade preparation in question and with the average of a representative sample of the lot.

(g) **Abnormal colour**: Olives the colour of which is distinctly different from the characteristic colour of the trade preparation in question and from the average of a representative sample of the lot.

(h) **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.

(i) **Defective stuffing**: Olives presented in the stuffed olive style which are totally or partly empty in comparison with the trade preparation in question and with the average of a representative sample of the lot.

(j) **Stone (pit) or stone (pit) fragments (except for whole olives)**: Whole stones (pits), or stone (pit) fragments measuring more than 2 mm along their longest axis.

3.2.2.2. Tolerances for defects

The maximum defect tolerances for each trade category, by type of olive and for olives darkened by oxidation, are as follows:
Whole, stoned (pitted) or stuffed olives:

<table>
<thead>
<tr>
<th></th>
<th>Extra category</th>
<th>First category</th>
<th>Second category</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Green olives</td>
<td>Olives darkened by oxidation</td>
<td>Olives darkened by oxidation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Olives turning colour and black olives</td>
<td>Olives turning colour and black olives</td>
</tr>
<tr>
<td>Stoned (pitted) or stuffed olives</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maximum tolerances as % of fruit:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stones (pits) and/or stone (pit) fragments</td>
<td>1 1 2 1 1 2</td>
<td>1 1 2 1 1 2</td>
<td>1 1 2 1 1 2</td>
</tr>
<tr>
<td>Broken fruit</td>
<td>3 3 3 5 5 5 7 7 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Defective stuffing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>. place-packed</td>
<td>1 1 1 2 2 2 - - -</td>
<td></td>
<td></td>
</tr>
<tr>
<td>. random-packed</td>
<td>3 3 3 5 5 5 7 7 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Whole olives, stoned (pitted) or stuffed</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maximum tolerance as % of fruit:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blemished fruit</td>
<td>4 4 6 6 6 8 10 6 12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mutilated fruit</td>
<td>2 2 3 4 4 6 8 8 10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shrivelled fruit</td>
<td>2 2 4 3 3 6 6 6 10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Abnormal texture</td>
<td>4 4 6 6 6 8 10 10 12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Abnormal colour</td>
<td>4 4 6 6 6 8 10 10 12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stems</td>
<td>3 3 3 5 5 5 6 6 6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cumulative maximum of tolerances for these defects</td>
<td>12 12 12 17 17 17 22 22 22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maximum tolerance as units per kg or fraction:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Harmless extraneous material</td>
<td>1 1 1 1 1 1 1 1 1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The tolerances shall be assessed in a minimum sample of 200 olives taken in accordance with the Codex Sampling Plans for Prepackaged Foods (AQL 6.5) (CODEX STAN 233-1969).
- Olives presented in the halved, quartered, divided, sliced, chopped or minced, broken, salad olive (except when prepared with whole olives) and olive paste styles: the presence of a stone (pit) or stone (pit) fragment shall be tolerated in every 300 grammes of net drained content of olive flesh.

4. **FOOD ADDITIVES AND PROCESSING AIDS**

The following may be used singly or in any combination:

**Maximum level: g/kg**

(expressed as m/m weight of flesh)

#### 4.1. Preservatives

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

#### 4.3. Antioxidant

4.3.1. L-ascorbic acid  
limited by GMP

#### 4.4. Stabilisers (to maintain the colour of olives darkened by oxidation)

4.4.1. Ferrous gluconate  
0.15 g/kg as total Fe

4.4.2. Ferrous lactate  
0.15 g/kg as total Fe

#### 4.5. Flavouring agents

4.5.1. Natural flavours as defined by the Codex Alimentarius  
limited by GMP

#### 4.6. Flavour enhancer

4.6.1. Monosodium glutamate  
5 g/kg

4.6.2. Others defined by the Codex Alimentarius for this product

#### 4.7. Firming agents

4.7.1. Calcium chloride  
limited by GMP

4.7.2. Calcium lactate  
limited by GMP

4.7.3. Calcium citrate  
limited by GMP
4.8. **Thickeners and agglutinants** (solely for pastes intended for stuffing)

4.8.1. Food-grade thickeners and agglutinants, as defined by the Codex Alimentarius, limited by GMP for this product

4.9. **Other additives**

4.9.1. Other additives as defined by the Codex Alimentarius for this product

4.10. **Processing aids**

4.10.1. Cultures of lactic microorganisms limited by GMP
4.10.2. Nitrogen limited by GMP
4.10.3. Carbon dioxide limited by GMP
4.10.4. Manganese lactate limited by GMP
4.10.5. Manganese gluconate limited by GMP
4.10.6. Sodium or potassium hydroxide limited by GMP
4.10.7. Hydrochloric acid limited by GMP

5. **CONTAMINANTS**

Table olives shall comply with the contaminant limits fixed for this product by the Codex Alimentarius Commission.

6. **HYGIENE**

6.1. It is recommended that table olives 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, Rev. 3 – 1997, Amd. 1999), with the *Recommended Code of Hygienic Practice for Low-Acid and Acidified Low-Acid Canned Foods* (CAC/RCP 23-1979, Rev. 2-1993) and with other pertinent Codex documents such as Codes of Hygiene Practice and other Codes of Practice.

6.2. The products should comply with any microbiological criteria established in accordance with the *Principles for the Establishment and Application of Microbiological Criteria for Foods* (CAC/GL 21-1997).

6.3. To the extent possible in good manufacturing practice, the olives shall be free from any objectionable matter.

6.4. The olives and brine shall be devoid of any microbiological deterioration caused in particular by putrid, butyric or “zapatera” fermentation.
6.5. When tested by appropriate methods of sampling and examination, table olives:

- shall be free from pathogenic and/or contaminant microorganisms likely to develop in the product in normal storage conditions; and

- shall be free from substances from microorganisms in amounts which may represent a hazard to health.

Fermented olives held in bulk in a covering liquid may contain microorganisms used for fermentation, notably lactic bacteria and yeasts. The number of such microorganisms (lactic bacteria and/or yeasts) in a selective culture medium may, for each one, be up to $10^9$ colony-forming units/ml of brine or per gramme of flesh depending on the level of fermentation.

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

7. CONTAINERS

The containers used may be made of metal, tin, glass, plastic materials or of any other material, except wood, which complies with existing technical and health requirements. Containers shall be such as to ensure correct preservation of the olives and shall not transmit harmful substances to the preserved product.

Transparent containers shall not produce optical effects liable to change the appearance of the product contained therein.

Except for non-returnable containers which must be original 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 containers may be re-used providing they are in good condition.

8. FILLING

8.1. Minimum fill

The container should be well filled with the product (including packing medium) and should occupy not less than 90% of the water capacity of the container. The water capacity of the container is the volume of distilled water at 20°C which the sealed container will hold when completely filled. (For non-metallic rigid containers such as glass jars, the basis for the determination should be calculated on the weight of distilled water at 20°C which the sealed container will hold when completely filled less 20 ml).
8.1.1. Classification of ‘defectives’

A container that fails to meet the requirements for minimum fill (90% of container capacity) of section 8.1. should be considered a ‘defective’.

8.1.2. Lot acceptance

A lot will be considered as meeting the requirements of section 8.1. when the number of ‘defectives’ as defined in section 8.1.1. does not exceed the acceptance number (c) of the appropriate sampling plan in the *Codex Alimentarius Sampling Plans for Prepackaged Foods* (AQL-6.5) (CODEX STAN 233-1969).

8.2. Net drained weight tolerances

The tolerance concerning the net drained weight mentioned on the container shall not exceed the following percentage scale, providing the sample's mean net drained weight is equal to, or in excess of, said declared weight:

- 5% for containers with drained weight less than 200 grammes;
- 4% for containers with drained weight between 200 and 500 grammes;
- 3% for containers with drained weight between 500 and 1,500 grammes;
- 2% for containers with net drained weight in excess of 1,500 grammes.

9. LABELLING AND POINT-OF-SALE DISPLAYS

9.1. Labelling of retail containers

Table olives shall be labelled in accordance with the *Codex General Standard for the Labelling of Prepackaged Foods* (CODEX STAN 1-1985, Rev. 1-1991, Amd. 2001).

In addition to any inscriptions that may be required by the regulations of the importing country, the following are compulsory on packs and containers:

9.1.1. Name of the product

The name of the product shall be "olives" or "table olives".

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

9.1.1.1. The type of olive as described in section 2.2. of the standard. This may be replaced by the terms in use in the country of sale. This declaration shall not be compulsory on transparent packs.
9.1.1.2. The trade preparation as described in section 2.3. of the standard. This may be replaced by the trade preparation in use in the country of sale.

9.1.1.3. The style as described in section 2.4.2. of the standard. This declaration may be limited to the declarations in use in the country of sale; it 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).

9.1.1.4. If the olives are presented in accordance with the provisions on other styles (section 2.4.2.7. of the standard), the label shall contain in close proximity to the name of the product such additional words or phrases that will avoid misleading or confusing the consumer.

9.1.1.5. The size of "whole", "stoned (pitted)", "stuffed" and "halved" olives. The size may be declared according to existing practice in the country of sale; this declaration shall not be compulsory on transparent packs.

9.1.1.6. The trade category

1 Reservation entered by the Fédération des industries condimentaires-Europe and the Fédération des industries condimentaires-France.

9.1.2. List of ingredients

Labelling shall include the full list of ingredients which shall be listed in descending order of ingoing weight (m/m) at the time of the manufacture of the product.

9.1.3. Net contents and net drained weight

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

The declaration of net contents represents the quantity at the time of packaging and is subject to enforcement by reference to an average system of quality control.

9.1.3.2. For olives packed in brine, the net drained weight shall be declared in the metric system ("Système International" units) by weight.

The declaration of net drained weight is subject to enforcement by reference to an average system of quality control.
9.1.4. Name and address

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

9.1.5. Country of origin

9.1.5.1. The country of origin of the product shall be declared if its omission would mislead or deceive the consumer.

9.1.5.2. When the product undergoes processing in a second country which changes its nature, the country in which the processing is performed shall be considered to be the country of origin for the purposes of labelling.

9.1.6. Lot identification

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

9.1.7. Date marking and storage instructions

9.1.7.1. The date of minimum durability shall be declared by the month and year by the words "Best before end…".

The declaration shall be accompanied by the date itself or by a reference to where it is given.

The month and year shall be declared in uncoded numerical sequence except that the month may be indicated by letters in those countries where such use will not confuse the consumer.

9.1.7.2. In addition to the date of minimum durability, any special conditions for the storage of the product shall be declared on the label if the validity of the date depends thereon.

9.1.7.3. Any specific instructions for storing containers, once opened, shall be declared, in particular as regards keeping the container in the refrigerator.

9.2. Display of the price per kilogramme at the point of retail sale

The price per kilogramme (in relation to the net drained weight for products sold in a covering liquid and to the net weight for other preparations) shall be displayed at the point of retail sale in order to ensure fair competition between manufacturers and market transparency.
9.3. **Labelling of non-retail containers**

Information for non-retail containers shall be given on the container, or in the accompanying documents, except that the name of the product, lot identification and 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 a mark is clearly identifiable with the accompanying documents.

10. **METHODS OF ANALYSIS AND SAMPLING**

The methods of analysis and sampling shall be those recommended by the Codex Alimentarius Commission.