

**هيئة التقييس لدول مجلس التعاون لدول الخليج العربية**  
**GCC STANDARDIZATION ORGANIZATION (GSO)**

**مشروع نهائي**

**GSO 05/FDS/222:2014**

**زيتون المائدة**  
**TABLE OLIVES**

إعداد  
اللجنة الفنية الخليجية لقطاع المواصفات الغذائية والزراعية

هذه الوثيقة مشروع لمواصفة قياسية خليجية تم توزيعها لإبداء الرأي والملاحظات بشأنها ، لذلك فإنها عرضة للتغيير والتبديل، ولا يجوز الرجوع إليها كمواصفة قياسية خليجية إلا بعد اعتمادها من مجلس إدارة الهيئة.

ICS:67.080.10

## تقديم

هيئة التقييس لدول مجلس التعاون لدول الخليج العربية هيئة إقليمية تضم في عضويتها الأجهزة الوطنية للمواصفات والمقاييس في دول الخليج العربية ، ومن مهام الهيئة إعداد المواصفات القياسية الخليجية بواسطة لجان فنية متخصصة .

وقد قامت هيئة التقييس لدول مجلس التعاون لدول الخليج العربية ضمن برنامج عمل اللجنة الفنية رقم 5 " اللجنة الفنية الخليجية لقطاع مواصفات المنتجات الغذائية والزراعية " بتحديث المواصفة القياسية الخليجية رقم GSO 222 : زيتون المائدة .وقامت (دولة الإمارات العربية المتحدة) بإعداد مشروع هذه المواصفة.

وقد اعتمدت هذه المواصفة كلائحة فنية خليجية في اجتماع مجلس إدارة الهيئة رقم ( ) ، الذي عقد بتاريخ هـ ، الموافق / / م .  
على أن تلغى المواصفة رقم ( GSO 2005/222 ) وتحل محلها.

## Foreword

Standardization Organization for GCC (GSO) is a regional Organization which consists of the National Standard Bodies of GCC member States.

One of GSO main functions is to issue Gulf Standard/ Technical regulation through specialized technical committees (TCs).

GSO through the technical program of committee TC No: (5) "Technical Gulf committee for food and agriculture product standards" has updated the GSO standard No. GSO 222 "TABLE OLIVES " The draft standard has been prepared by (United Arab Emirates).

This standard has been approved as Gulf Technical regulation by GSO Board of Directors in its meeting No..../....held on / / H، / /

The approved standard will replace and supersede the standard No.GSO 222:2005.

## TABLE OLIVES

### 1. SCOPE

This Gulf Standard applies to the fruit of the cultivated olive tree (*Olea europaea* L.), as defined in Section 3, which has been suitably treated or processed, and which is offered for direct consumption as table olives, including for catering purposes or olives packed in bulk containers intended for repacking into consumer sized containers. It does not apply to the product when indicated as being intended for further processing.

### 2. COMPLEMENTARY REFERENCES

2. 1 GSO 9: Labeling of prepackaged foodstuffs.
2. 2 GSO 21: Hygienic Regulations for Food Plants and their Personnel.
2. 3 GSO 148: Sugar.
2. 4 GSO 149: Un-bottled drinking water.
2. 5 GSO 177: Methods Of Physical And Chemical Test Of Canned Vegetables.
2. 6 GSO/CAC 193: General Standard for Contaminants and Toxins in Food and Feed.
2. 7 GSO 244: Methods Of Test For Vegetables, Fruits And Their Products, First Part :Organoleptic Examination, Determination Of Net Weight And Drained.
2. 8 GSO 299: Methods of test for vegetables, Fruits and their products -Second part: determination of Moisture, alcohol , insoluble Solids, total ash, calcium, Mineral oil and ascorbic acid.
2. 9 GSO 382, 383: Maximum allowable limits of pesticides residue in agricultural and food products – 1<sup>st</sup> and 2<sup>nd</sup> parts.
2. 10 GSO 839: Food Packages - Part 1: General Requirements.
2. 11 GSO 988: Limits of Radiation Levels Permitted in Foodstuffs- Part 1.
2. 12 GSO 1019: Edible olive oil and olive pomace oil.
2. 13 GSO 1016: Microbiological Criteria of Food Product- Part 1.
2. 14 GSO 1287: Methods of Sampling of Prepackaged Fruit and Vegetable Products.“
2. 15 GSO 1290: Methods of Test for Fruit Juices
2. 16 GSO 1694: General principles of food hygiene
2. 17 GSO 1791: Three Piece Steel Round Cans Used For Canning Food Stuffs.
2. 18 GSO 1843: Food Grade Salt.
2. 19 GSO 1974:Vinger.
2. 20 Gulf standard which the GSO will be approved concerning with food additives.

### 3. DEFINITIONS

#### 3. 1 Table olives

Product prepared from the sound fruits of olive tree (*Olea europaea* L) having reached appropriate degree of development for processing 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; treated to remove its bitterness and preserved by natural fermentation, and/or by heat treatment, and/or by other means so as to prevent spoilage and to ensure product stability in appropriate storage conditions with or without the addition of preservatives; packed with or without a suitable liquid packing medium.

**3. 2 Green table olives**

A product prepared from the fruits harvested during the ripening period, prior to colouring and complete ripening, which is sound, firm, resistant to light pressure and varies in colour from bright green to yellowish (straw's colour), treated with alkali during processing, preserved in saline and by natural lactic fermentation or partial natural fermentation, and followed by pasteurisation, sterilisation, or treatment with permitted preservatives, cooling, nitrogen, or carbon dioxide without brine.

**3. 3 Table olives turning colour (vintage green olives)**

Fruits prepared from pink and brown olives harvested before complete ripening, treated with alkali during processing, preserved in brine solution or by heat treatment, or heat-treated brine.

**3. 4 Black table olives**

Table olives prepared from olive fruits harvested when fully ripe and before fruits have become shrivelled or slightly before full ripeness is attained, or when fully ripe and after fruits have become shrivelled on the tree.

Olives are firm, smooth, with a glossy skin and suffers a slight depression to a slight pressure between the fingers. The colour of the fruits varies from reddish black, violet black, deep violet to deep chestnut. It may be treated with alkali during its processing and may be darkened by oxidation. It is directly preserved by one or more of the following methods:

- in brine solution.
- by pasteurisation or sterilisation.
- by appropriate preservatives.
- by addition of suitable preservatives.

**3. 5 Treated Table Olives**

Tables olives (green, black, or turning colour olives) treated with sodium hydroxide solution from 3 to 8 times (0.5% to 2% concentration) to reduce bitterness, and washed thoroughly with water to remove the alkali.

**3. 6 Size grading of whole olives**

Whole olives are graded according to fruits count per kg of the net weight. The size shall be indicated by two whole numbers separated one from the other by a slash (/) representing the minimum and maximum numbers of olive fruits per one kg.

**3. 7 Foreign matter**

Any green parts not detrimental to health and aesthetically undesirable such as severed leaves and stems, not including any materials permitted in this standard.

**3. 8 Olives damage**

A damage to the fruit whether or not accompanied by visible signs. In case of pitted whole olives, damage is observed when the internal flesh tears off, and the pit's cavity or large parts of the fruit's pulp become visible.

**3. 9 Fungi rot**

Damage to olives fruit due to fungi growth (*Macrophoma*, *Gloesporium*) within the fruit, causing dry skin or affecting the fruit's colour.

**3. 10 Stem**

A pedicel (3mm or more in length) attached to olives fruit which shall not be considered as a defect to whole olives.

**3. 11 Stone or fragments of stone (except whole olives)**

An entire olives stone or parts of it weighing a minimum of 5 mg.

**3. 12 Spotted fruits**

Olives showing spots or markings spreading over an area exceeding 9 mm<sup>2</sup> of the entire surface area of the fruit, which collectively or solely may or may not have penetrated the flesh in a way affecting the shape or quality of olives.

### 3. 13 Deformed fruits

Olives damaged due to skin rupture which causes the internal flesh to become visible.

## 4. PRODUCT DESIGNATION

Table olives products are classified in one of the following olive types and trade preparations / treatments:

4.1 Table olives are classified according to the degree of ripeness of the fresh fruits as follows:

- a. Green olives.
- b. Olives turning colour.
- c. Black olives.

4.2 Table olives are classified according to trade preparations as follows:

### a. Treated Olives:

- Treated green olives.
- Treated olives turning colour.
- Treated black olives.
- Treated green ripe olives.

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

- Natural green olives.
- Natural olives turning colour.
- 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:

- Dehydrated and/or shrivelled green olives.
- Dehydrated and/or shrivelled olives turning colour.
- Dehydrated and/or shrivelled black olives.

d. **Olives darkened by oxidation:** Green olives or olives turning colour preserved in brine, fermented or not, and darkened by oxidation with or without alkaline medium. They shall be a uniform brown to black colour. Olives darkened by oxidation shall be preserved in sealed containers and subjected to heat sterilisation.

- 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.

### 4.3 VARIETAL TYPES

Any commercially cultivated variety (cultivar) suitable for processing.

### 4.4 STYLES

Olives may be offered in one of the following styles:

#### 4.4.1 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.

#### 4.4.2 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 longitudinal 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.
- (f) **Chopped or minced olives:** Small pieces of stoned (pitted) olives of no definite shape and practically devoid (no more than 5 per 100 of such units by weight).
- (g) **Broken olives:** Olives broken while being stoned (pitted) or stuffed. They may contain pieces of the stuffing material.

4.4.3 **Stuffed olives:** Stoned (pitted) olives stuffed either with one or more suitable products (carrot, pimiento, onion, almond, celery, anchovy, chopped olive, orange or lemon peel, hazelnut, etc.) or with edible pastes.

4.4.4 **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.

4.4.5 **Olives with capers or medley:** Whole or stoned (pitted) olives, usually small in size, with capers and with or without stuffing.

#### 4.5 OTHER STYLES

Any other presentation of the product should be permitted provided that the product:

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

### 5. ESSENTIAL COMPOSITION AND QUALITY FACTORS

#### 5.1 COMPOSITION

##### 5.1.1 Basic Ingredients

Olives as defined in Sections 3 and 4, with or without liquid packing medium.

**5.1.2 Other Permitted Ingredients**

Other ingredients may be used such as:

- (a) Water as per standard definition in section (2.4).
- (b) Food-grade salts as defined in section (2.18).
- (c) Vinegar as defined in section (2.19).
- (d) Olive oil as per standard in section (2.12).
- (e) Sugars as defined in section (2.3) or natural sweeteners such as honey.
- (f) Any single or combination of edible material used as an accompaniment or stuffing such as, for example, pimienta, onion, almond, celery, anchovy, or pastes thereof.
- (g) Spices and aromatic herbs or natural extracts thereof.

**5.1.3 Packing Media (packing brines)**

This term applies to solutions of food grade salts as defined in *Standard for Food Grade Salt* dissolved in potable water, with or without the addition of all or some of the optional ingredients listed under Section 5.1.2.

Brine shall be clean, free from foreign matter, have characteristic colour flavour and odour and shall comply with the hygiene rules laid down in Section (2.2) and (2.16).

Fermented olives held in a packing medium may contain micro-organisms used for fermentation, notably lactic acid bacteria and yeasts.

Physico-chemical characteristics of the packing brine, or the juice from the pulp after osmotic balance, depending on the applied conservation treatment, shall be as follows:

Table 1

Type and preparation	Minimum sodium chloride content	Maximum pH Limit
Treated olives	5.0%	4.3
Natural olives	6.0%	4.3
Pasteurized treated and natural olives	GMP	4.3
Dehydrated and/or shrivelled olives	8.0%	GMP
Darkened by oxidation with alkaline treatment and green ripe olives	GMP	GMP
GMP: Good Manufacturing Practice		

Trade preparations of table olives not complying with the above physico-chemical characteristics should be appropriately processed to ensure that they comply with the general food safety recommendations as set out in Section (2.16).

The presence of propionic acid and its salts may be observed in table olive trade preparations that have undergone fermentation in conformity with good manufacturing practice.

**5.2 QUALITY REQUIREMENTS**

5.2.1 Table olives should have normal colour, flavour, odour and texture characteristic of the finished product.

5.2.2 Manufacturing and trading of finished products shall be according to provisions

- mention in standards laid in section (2.2) and (2.16).
- 5.2.3 The olives and brine shall be devoid of any microbiological deterioration and extraneous taste and smell caused by fermentation.
- 5.2.4 Food additives permitted in the standard laid in section (2.20) may be used in products.
- 5.2.5 Toxins and contaminants in the products shall not exceed the maximum allowed levels of the Gulf Standard laid in section (2.6).
- 5.2.6 Microbiological levels in the product should not exceed the maximum allowed levels of Gulf Standard in section (2.13).
- 5.2.7 The products shall comply with the maximum residue limits allowed for pesticides established by the Gulf Standard in section (2.9).
- 5.2.8 Radioactive levels in the products shall not exceed the maximum allowed limits of Gulf Standard laid in section (2.11).
- 5.2.9 The percentage of heavy metal contaminant elements should not exceed their corresponding levels below (part per million):

Table 2

Lead	Cadmium	Mercury	Arsenic (inorganic)	Arsenic	Tin
0.1	0.05	0.03	0.06	1.0	150

- 5.2.10 Table olives in whole, stoned and stuffed styles shall comply with the minimum quality requirements in the second category in the Table 3 of Section (5.2.13). Other styles shall comply with Table 4 in Section (5.2.13).
- 5.2.11 Table olives shall be uniform in size. (The olives are size-graded by count of the number of fruits per kilogramme as in the table below.)

Table 3

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

\* Above 410, the interval is 50 fruits.

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

Size-grading may be applied 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.

Alternatively, the maximum permitted tolerance shall be:

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

#### 5.2.12 Trade Categories:

Classification of table olives is optional; however, if classified, the following designations apply:

(a) **"Extra" or "Fancy" or "A"**

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 appropriate varieties may be classified in this category.

(b) **"First", "1st", "Choice" or "Select" or "B"**

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.

(c) **"Second", "2<sup>nd</sup>" or "Standard" or "C"**

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 this general standard.

#### 5.2.13 Defects and Allowances:

A) The maximum defect tolerances for each category should not exceed the values in the following table:

Table 4

"Extra" or "Fancy" or "A"			"First", "1st", "Choice" or "Select" or "B"			"Second", "2 <sup>nd</sup> " or "Standard" or "C"			Classification
Green olives	Olives darkened by oxidation	Olives turning colour, Black olives	Green olives	Olives darkened by oxidation	Olives turning colour, Black olives	Green olives	Olives darkened by oxidation	Olives turning colour, Black olives	
Stoned (pitted) olives and Stuffed olives									
1	1	2	1	1	2	1	1	2	Stone and stone fragments
3	3	3	5	5	5	7	7	7	Broken fruits
Stuffing defect									

1	1	1	2	2	2	5	5	5	Packed
3	3	3	5	5	5	7	7	7	Not Packed
Whole Stoned (pitted) olives and Stuffed olives									
4 <sup>2</sup>	4	6	6	6	8	10	6	12	Skin blemish
2	2	3	4	4	6	8	8	10	Deformed fruits
2	2	4	3	3	6	6	6	10	Atrophic fruits
4	4	6	6	6	8	10	10	12	Abnormal texture
4	4	6	6	6	8	10	10	12	Unnatural color
3	3	3	5	5	5	6	6	6	Stems
12	12	12	17	17	17	22	22	22	Total defects
Total defects/kg or part									
1	1	1	1	1	1	1	1	1	Foreign matter
Tolerance is assessed in a sample of 200 grams of olives that have been taken in accordance with the appropriate sampling plan with an acceptable quality level (AQL) of 6.5.									

B) Maximum allowed defect limits for Broken, Chopped, Minced, Sliced and Other Segmented Styles of Olives shall not exceed the following values:

Table 5

Defects	Green olives	Treated olives darkened by oxidation	Turning Colour olives Natural black olives
Harmless extraneous matter (unit)	2	2	2
Stems (unit)	4	6	5
blemish/ shrivelled fruit %	25	25	25
Stone and stone fragments	1.0	1.0	1.0
Soft fruits /Extreme softness	12/6	10/5	10/5
Broken fruits	50	50	50
Tolerance is assessed in a sample of 300 grams of olives that have been taken in accordance with the appropriate sampling plan with an acceptable quality level (AQL) of 6.5.			

#### 5.2.14 CLASSIFICATION OF “DEFECTIVES”

A container that fails to meet one or more of the applicable quality requirements, as set out in Section 5.2 (except those based on sample averages), should be considered as a “defective”.

#### 5.2.15 LOT ACCEPTANCE

A lot should be considered as meeting the applicable quality requirements referred to in Section 5.2 when:

- A. for those requirements which are not based on averages, the number of “defectives”, as defined in Section 5.2.6, does not exceed the acceptance number (c) of the appropriate sampling plan with an AQL of 6.5; and

B. the requirements of Section 5.2, which are based on sample averages, are complied with.

## 6. WEIGHTS AND MEASURES

When packing table olives the following shall be taken into consideration:

6.1 Olives shall be packed in hygienic, suitable, new, clean, sound and leak-proof containers made of materials which do not impart any foreign odour or taste to the olives, resistant to corrosion and do not react with the product contained therein.

6.2 Containers made of transparent materials shall not disguise the real appearance of olives.

6.3 Containers shall comply with the Gulf standard mentioned in (2.10) and (2.17).

6.4 Olives shall be covered with the brine solution. The size of olives and the packing medium should occupy no less than 90% of the water capacity of the container, otherwise the sample is deemed defective if this requirement is not met.

6.5 A lot will be considered as meeting the requirements of water capacity when the number of “defectives” does not exceed the acceptance number (c) of the appropriate sampling plan with an AQL of 6.5.

6.6 The drained weight of the product should not be less than the following percentages laid in Table 5, calculated on the basis of water capacity of the container:

Table 6

Styles	Minimum drained weight
Whole olives	50%
Stoned (pitted) and stuffed olives	40%

6.7 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:

Table 7

(a) Containers with drained weight less than 200 g	5%
(b) Containers with drained weight between 200 and 500 g	4%
(c) Containers with drained weight between 500 and 1,500 g	3%
(d) Containers with drained weight in excess of 1,500 g	2%

The requirements for minimum drained weight should be deemed to be complied with when the average drained weight of all containers examined is not less than the minimum required, provided that the number of “defectives” as defined in Section 7.1.4 does not exceed the appropriate acceptance number (c) of the Sampling Plan with an AQL of 6.5.

Any container that fails to meet these tolerances shall be considered a “defective” for the purposes of this section.

## 7. TRANSPORTATION AND STORAGE

### 7.1 Transportation

The containers shall be transported in such a way as to avoid their damage or spoilage. Transportation means shall be so designed as to protect olive containers from contamination

and they shall not be previously used for transportation of insecticides, fungicides or any toxic or harmful substances.

## 7.2 Storage

Table olives shall be stored in well ventilated stores far away from contamination sources and high temperature.

## 8. SAMPLING AND TEST METHODS

8.1 Sampling shall be carried out according to the Gulf standard mentioned in (2.14).

8.2 Tests shall be carried out on the representative sample taken according to Gulf standard mentioned in (2.5), (2.7), (2.8) and (2.15), and the following methods:

Provision	Method	Principle	type
Drained weight	AOAC 968.30 (Codex general method for processed fruits and vegetables)	Sieving Gravimetry	I
Fill of containers	CAC/RM 46-1972 (for glass containers) (Codex general method for processed fruit and vegetables) and ISO 90.1:1999 (for metal containers) (Codex general method for processed fruit and vegetables) NMKL 179:2005 ) (Codex general method for processed fruit and vegetables)	Weighing	I
			II
pH of brine	AOAC 981.12 (Codex general method for processed fruits and vegetables)	Potentiometry	III
	ISO 1842:1991 (Codex general method for processed fruits and vegetables)		IV
	AOAC 971.27 (Codex general method)		II
Salt in brine	ISO 3634:1979 “chloride expressed as sodium chloride” Codex general method for processed ) (fruits and vegetables	Potentiometry	III
Lead	AOAC 972.25 (Codex general method)	AAS (Flame absorption)	III
Tin	AOAC 980.19 (Codex general method)	AAS	II
DETERMINATION OF WATER CAPACITY OF CONTAINERS (CAC/RM 46-1972) <ol style="list-style-type: none"> <li>1 SCOPE This method applies to glass containers.</li> <li>2 DEFINITION The water capacity of a container is the volume of distilled water at 20°C which the sealed container will hold when completely filled.</li> <li>3 PROCEDURE               <ol style="list-style-type: none"> <li>3.1 Select a container which is undamaged in all respects.</li> </ol> </li> </ol>			

- 3.2 Wash, dry and weigh the empty container.
- 3.3 Fill the container with distilled water at 20°C to the level of the top thereof, and weigh the container thus filled.
- 4 CALCULATION AND EXPRESSION OF RESULTS
- Subtract the weight found in 3.2 from the weight found in 3.3. The difference shall be considered to be the weight of water required to fill the container. Results are expressed as ml of water.

## 9. LABELLING

Without prejudice to what is stated in the Gulf standard mentioned in 2.1, the following information shall be declared on the package:

- 9.1 Olive type (Green Olives in brine - turning colour olives in brine - Black olives in brine... etc.).
- 9.2 Classification of olives according to style (whole olives - whole stoned olives - whole stuffed olives... etc.).
- 9.3 Type of heat treatment used in preserving.
- 9.4 Olive size (in case of size grading), in case where two or more adjacent sizes are packed together, the statement "mixed sizes" shall be declared, and in case where the size is ungraded, the statement "size ungraded" shall be declared.

## References

Main reference  
Codex Alimentarius Commission  
CAC 66/1981 Revision 2013  
Table olive

**المراجع**  
المرجع الرئيسي  
لجنة دستور الأغذية  
رقم 66/1981مراجعة 2013  
زيتون المائدة

**SAMPLING PLANS**

The appropriate inspection level is selected as follows:

**Inspection level I - Normal Sampling**

**Inspection level II -Disputes, (Codex referee purposes sample size), enforcement or need for better lot estimate**

**SAMPLING PLAN 1 (INSPECTION LEVEL I, AQL = 6.5)**

<b>NET WEIGHT IS EQUAL TO OR LESS THAN 1 KG (2.2 LB)</b>		
<b>Lot Size (N)</b>	<b>Sample Size (n)</b>	<b>Acceptance Number (c)</b>
4,800 or less	6	1
4,801 - 24,000	13	2
24,001 - 48,000	21	3
48,001 - 84,000	29	4
84,001 - 144,000	38	5
144,001 - 240,000	48	6
more than 240,000	60	7
<b>NET WEIGHT IS GREATER THAN 1 KG (2.2 LB) BUT NOT MORE THAN 4.5 KG (10 LB)</b>		
<b>Lot Size (N)</b>	<b>Sample Size (n)</b>	<b>Acceptance Number (c)</b>
2,400 or less	6	1
2,401 - 15,000	13	2
15,001 - 24,000	21	3
24,001 - 42,000	29	4
42,001 - 72,000	38	5
72,001 - 120,000	48	6
more than 120,000	60	7
<b>NET WEIGHT GREATER THAN 4.5 KG (10 LB)</b>		
<b>Lot Size (N)</b>	<b>Sample Size (n)</b>	<b>Acceptance Number (c)</b>
600 or less	6	1
601 - 2,000	13	2
2,001 - 7,200	21	3
7,201 - 15,000	29	4
15,001 - 24,000	38	5
24,001 - 42,000	48	6
more than 42,000	60	7

**SAMPLING PLAN 2 (INSPECTION LEVEL II, AQL = 6.5)**

<b>NET WEIGHT IS EQUAL TO OR LESS THAN 1 KG (2.2 LB)</b>		
<b>Lot Size (N)</b>	<b>Sample Size (n)</b>	<b>Acceptance Number (c)</b>
4,800 or less	13	2
4,801 - 24,000	21	3
24,001 - 48,000	29	4
48,001 - 84,000	38	5
84,001 - 144,000	48	6
144,001 - 240,000	60	7
more than 240,000	72	8
<b>NET WEIGHT IS GREATER THAN 1 KG (2.2 LB) BUT NOT MORE THAN 4.5 KG (10 LB)</b>		
<b>Lot Size (N)</b>	<b>Sample Size (n)</b>	<b>Acceptance Number (c)</b>
2,400 or less	13	2
2,401 - 15,000	21	3
15,001 - 24,000	29	4
24,001 - 42,000	38	5
42,001 - 72,000	48	6
72,001 - 120,000	60	7
more than 120,000	72	8
<b>NET WEIGHT GREATER THAN 4.5 KG (10 LB)</b>		
<b>Lot Size (N)</b>	<b>Sample Size (n)</b>	<b>Acceptance Number (c)</b>
600 or less	13	2
601 - 2,000	21	3
2,001 - 7,200	29	4
7,201 - 15,000	38	5
15,001 - 24,000	48	6
24,001 - 42,000	60	7
more than 42,000	72	8