

**COMMISSION IMPLEMENTING REGULATION (EU) No 543/2011**

of 7 June 2011

laying down detailed rules for the application of  
Council Regulation (EC) No 1234/2007 in respect of the fruit and  
vegetables and processed fruit and vegetables sectors.

**CONSOLIDATED TEXT: Annex I; Part 2 of Part B**

**MARKETING STANDARD FOR CITRUS FRUIT**

**I. DEFINITION OF PRODUCE**

This standard applies to the following varieties (cultivars) of fruit, classified as "citrus fruit", to be supplied fresh to the consumer, citrus fruit for industrial processing being excluded:

- lemons grown from the species ***Citrus limon* (L.) Burm. f.**,
- mandarins (***Citrus reticulata* Blanco**), including satsumas (***Citrus unshiu* Marcow**), clementines (***Citrus clementina* hort. ex Tanaka**), common mandarins (***Citrus deliciosa* Ten.**) and tangerines (***Citrus tangerina* Tan.**) grown from these species and hybrids thereof,
- oranges grown from the species ***Citrus sinensis* (L.) Osbeck**.

**II. PROVISIONS CONCERNING QUALITY**

The purpose of the standard is to define the quality requirements for citrus fruit after preparation and packaging.

**A. Minimum requirements**

In all classes, subject to the special provisions for each class and the tolerances allowed, the citrus fruit must be:

- intact,
- free of bruising and/or extensive healed overcuts,
- sound; produce affected by rotting or deterioration such as to make it unfit for consumption is excluded,
- clean, practically free of any visible foreign matter,
- practically free from pests,
- free from damage caused by pests affecting the flesh,

- free of signs of shrivelling and dehydration,
- free of damage caused by low temperature or frost,
- free of abnormal external moisture,
- free of any foreign smell and/or taste.

The development and condition of the citrus fruit must be such as to enable it:

- to withstand transportation and handling, and
- to arrive in satisfactory condition at the place of destination.

## **B. Maturity requirements**

The citrus fruit must have reached an appropriate degree of development and ripeness, account being taken of criteria proper to the variety, the time of picking and the growing area.

Maturity of citrus fruit is defined by the following parameters specified for each species below:

- minimum juice content,
- minimum sugar/acid ratio<sup>1</sup>,
- colouring.

The degree of colouring shall be such that following normal development the citrus fruit reach the colour typical of the variety at their destination point.

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<sup>1</sup> Calculated as described in the OECD guidance on objective tests.

	Minimum juice content (%)	Minimum sugar/acid ratio	Colouring
<b>Lemons</b>	20		Must be typical of the variety. Fruit with a green (but not dark green) colour is allowed, provided it satisfies the minimum requirements as to juice content.
<b>Satsumas, clementines, other mandarin varieties and their hybrids</b>			
Satsumas	33	6.5 : 1	Must be typical of the variety on at least one third of the surface of the fruit.
Clementines	40	7.0 : 1	
Other mandarin varieties and their hybrids	33	7.5 : 1 <sup>2</sup>	
<b>Oranges</b>			
Blood oranges	30	6.5 : 1	Must be typical of the variety. However, fruit with light green colour not exceeding one fifth of the total surface area of the fruit is allowed, provided it satisfies the minimum requirements as to juice content.
Navels group	33	6.5 : 1	
Other varieties	35	6.5 : 1	
Mosambi, Sathgudi and Pacitan with more than one fifth green colour	33		Oranges produced in areas with high temperatures and high relative humidity conditions during the developing period having a green colour exceeding one fifth of the surface area of the fruit are allowed, provided they satisfy the minimum requirements as to juice content.
Other varieties with more than one fifth green colour.	45		

Citrus fruit meeting these maturity requirements may be "degreened". This treatment is only permitted if the other natural organoleptic characteristics are not modified.

### C. Classification

Citrus fruit is classified in three classes, as defined below:

#### (i) "Extra" Class

Citrus fruit in this class must be of superior quality. It must be characteristic of the variety and/or commercial type.

It must be free from defects, with the exception of very slight superficial defects, provided these do not affect the general appearance of the produce, the quality, the keeping quality and presentation in the package.

<sup>2</sup> For the varieties Mandora and Minneola the minimum sugar/acid ratio is 6.0:1 until the end of the marketing year commencing 1 January 2023.

## **(ii) Class I**

Citrus fruit in this class must be of good quality. It must be characteristic of the variety and/or commercial type.

The following slight defects, however, may be allowed provided these do not affect the general appearance of the produce, the quality, the keeping quality and presentation in the package:

- a slight defect in shape,
- slight defects in colouring, including slight sunburn,
- slight progressive skin defects, provided they do not affect the flesh,
- slight skin defects occurring during the formation of the fruit, such as silver scurfs, russets or pest damage,
- slight healed defects due to a mechanical cause such as hail damage, rubbing or damage from handling,
- slight and partial detachment of the peel (or rind) for all fruit of the mandarin group.

## **(iii) Class II**

This class includes citrus fruit which does not qualify for inclusion in the higher classes but satisfies the minimum requirements specified above.

The following defects may be allowed, provided the citrus fruit retains its essential characteristics as regards the quality, the keeping quality and presentation:

- defects in shape,
- defects in colouring, including sunburn,
- progressive skin defects, provided they do not affect the flesh,
- skin defects occurring during the formation of the fruit, such as silver scurfs, russets or pest damage,
- healed defects due to a mechanical cause such as hail damage, rubbing or damage from handling,
- superficial healed skin alterations,
- rough skin,

- a slight and partial detachment of the peel (or rind) for oranges and a partial detachment of the peel (or rind) for all fruit of the mandarin group.

### **III. PROVISIONS CONCERNING SIZING**

Size is determined by the maximum diameter of the equatorial section of the fruit or by count.

#### **A. Minimum size**

The following minimum sizes apply:

<b>Fruit</b>	<b>Diameter (mm)</b>
Lemons	45
Satsumas, other mandarin varieties and hybrids	45
Clementines	35
Oranges	53

#### **B. Uniformity**

Citrus fruit may be sized by one of the following options:

(a) To ensure uniformity in size, the range in size between produce in the same package shall not exceed:

- 10 mm, if the diameter of the smallest fruit (as indicated on the package) is < 60 mm
- 15 mm, if the diameter of the smallest fruit (as indicated on the package) is ≥ 60 mm but < 80 mm
- 20 mm, if the diameter of the smallest fruit (as indicated on the package) is ≥ 80 mm but < 110 mm
- there is no limitation of difference in diameter for fruit ≥ 110 mm.

(b) When size codes are applied, the codes and ranges in the following tables must be respected:

<b>Fruit</b>	<b>Size code</b>	<b>Diameter (mm)</b>
<b>Lemons</b>	0	79 – 90
	1	72 – 83
	2	68 – 78
	3	63 – 72
	4	58 – 67
	5	53 – 62
	6	48 – 57
	7	45 – 52
<b>Satsumas, clementines, and other mandarin varieties and hybrids</b>	1-XXX	78 and above
	1-XX	67 – 78
	1 or 1-X	63 – 74
	2	58 – 69
	3	54 – 64
	4	50 – 60
	5	46 – 56
	6 <sup>3</sup>	43 – 52
	7	41 – 48
	8	39 – 46
	9	37 – 44
	10	35 – 42
<b>Oranges</b>	0	92 – 110
	1	87 – 100
	2	84 – 96
	3	81 – 92
	4	77 – 88
	5	73 – 84
	6	70 – 80
	7	67 – 76
	8	64 – 73
	9	62 – 70
	10	60 – 68
	11	58 – 66
	12	56 – 63
	13	53 – 60

<sup>3</sup> Sizes below 45 mm refer to clementines only.

Uniformity in size is achieved by the above-mentioned size scales, unless otherwise stated as follows:

For fruit in bulk bins and fruit in sales packages of a maximum net weight of 5 kg, the maximum difference must not exceed the range obtained by grouping three consecutive sizes in the size scale.

(c) For fruit sized by count, the difference in size should be consistent with (a).

#### **IV. PROVISIONS CONCERNING TOLERANCES**

At all marketing stages, tolerances in respect of quality and size shall be allowed in each lot for produce not satisfying the requirements of the class indicated.

##### **A. Quality tolerances**

###### **(i) "Extra" Class**

A total tolerance of 5 %, by number or weight, of citrus fruit not satisfying the requirements of the class, but meeting those of Class I is allowed. Within this tolerance, not more than 0.5 % in total may consist of produce satisfying the requirements of Class II quality.

###### **(ii) Class I**

A total tolerance of 10 %, by number or weight, of citrus fruit not satisfying the requirements of the class, but meeting those of Class II is allowed. Within this tolerance, not more than 1 % in total may consist of produce satisfying neither the requirements of Class II quality nor the minimum requirements, or of produce affected by decay.

###### **(iii) Class II**

A total tolerance of 10 %, by number or weight, of citrus fruit satisfying neither the requirements of the class nor the minimum requirements is allowed. Within this tolerance, not more than 2 % in total may consist of produce affected by decay.

##### **B. Size tolerances**

For all classes: a total tolerance of 10 %, by number or weight, of citrus fruit corresponding to the size immediately below and/or above that (or those, in the case of the combination of three sizes) mentioned on the packages is allowed.

In any case, the tolerance of 10 % applies only to fruit not smaller than the following minima:

Fruit	Diameter (mm)
Lemons	43
Satsumas, other mandarin varieties and hybrids	43
Clementines	34
Oranges	50

## **V. PROVISIONS CONCERNING PRESENTATION**

### **A. Uniformity**

The contents of each package must be uniform and contain only citrus fruit of the same origin, variety or commercial type, quality and size, and appreciably of the same degree of ripeness and development.

In addition, for the "Extra" Class, uniformity in colouring is required.

However, a mixture of citrus fruit of distinctly different species may be packed together in a sales package, provided they are uniform in quality and, for each species concerned, in variety or commercial type and origin.

The visible part of the contents of the package must be representative of the entire contents.

### **B. Packaging**

The citrus fruit must be packed in such a way as to protect the produce properly.

The materials used inside the package must be clean and of a quality such as to avoid causing any external or internal damage to the produce. The use of materials, particularly of paper or stamps bearing trade specifications is allowed provided the printing or labelling has been done with non-toxic ink or glue.

Stickers individually affixed on the produce shall be such that, when removed, they neither leave visible traces of glue, nor lead to skin defects.

If the fruit is wrapped, thin, dry, new and odourless<sup>4</sup> paper must be used.

The use of any substance tending to modify the natural characteristics of the citrus fruit, especially its taste or smell<sup>5</sup>, is prohibited.

Packages must be free of all foreign matter. However, a presentation where a short (not wooden) twig with some green leaves adheres to the fruit is allowed.

<sup>4</sup> The use of preserving agents or any other chemical substance liable to leave a foreign smell on the skin of the fruit is permitted where it is compatible with the applicable European Union provisions.

<sup>5</sup> See Foot Note 3.



## **VI. PROVISIONS CONCERNING MARKING**

Each package must bear the following particulars, in letters grouped on the same side, legibly and indelibly marked, and visible from the outside.

### **A. Identification**

The name and the address of the packer and/or the dispatcher.

This mention may be replaced:

- for all packages with the exception of pre-packages, by the officially issued or accepted code mark representing the packer and/or the dispatcher, indicated in close connection with the reference "Packer and/or Dispatcher" (or equivalent abbreviations);
- for pre-packages only, by the name and the address of a seller established within the Union indicated in close connection with the mention "Packed for:" or an equivalent mention. In this case, the labelling shall also include a code representing the packer and/or the dispatcher. The seller shall give all information deemed necessary by the inspection body as to the meaning of this code.

### **B. Nature of produce**

- Common name of the species if the produce is not visible from the outside.
- Name of the variety, for oranges.
- For the mandarins' group:
  - Satsumas: "Satsumas", which may be followed by the variety
  - Clementines: "Clementines", which may be followed by the variety and, where appropriate, by either the indication "seedless" for seedless clementines (no seeds), clementines (1 to 10 seeds), or clementines "with seeds" for clementines with more than 10 seeds
  - Other mandarins and their hybrids: name of the variety.
- "Mixture of citrus fruit" or equivalent denomination and common names of the different species, in case of a mixture of citrus fruit of distinctly different species.
- "Seedless" (optional)<sup>6</sup>.

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<sup>6</sup> Seedless citrus fruit may occasionally contain seeds.

### **C. Origin of produce**

- Country of origin<sup>7</sup> and, optionally, district where grown, or national, regional or local place name.
- In the case of a mixture of citrus fruit of distinctly different species of different origins, the indication of each country of origin shall appear next to the name of the species concerned.

### **D. Commercial specifications**

- Class.
- Size expressed as:
  - Minimum and maximum sizes (in mm) or
  - Size code(s) followed, optionally, by a minimum and maximum size or count.
- When used, mention of the preserving agent or other chemical substances used at post-harvest stage.

### **E. Official control mark (optional)**

Packages need not to bear the particulars mentioned in the first subparagraph, when they contain sales packages, clearly visible from the outside, and all bearing these particulars. These packages shall be free from any indications such as could mislead. When these packages are palletised, the particulars shall be given on a notice placed in an obvious position on at least two sides of the pallet.

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<sup>7</sup> The full or commonly used name shall be indicated.