



Economic Commission for Europe**Steering Committee on Trade Capacity and Standards****Working Party on Agricultural Quality Standards****Specialized Section on Standardization of Fresh Fruit and Vegetables****Sixty-seventh session**

Geneva, 13-15 May 2019

Item 3 (a) of the provisional agenda

Revision of Standards**Revised Standard for Citrus Fruit****Submitted by the secretariat**

The following document reflects all agreed changes from 2018 as well as the open issues (placed in square brackets) for discussion at the 2019 session of the Specialized Section.

At its 2018 session, the Specialized Section confirmed its decision of 2017 to keep the format of the current Standard. To simplify the revision process, the following working document contains separate parts for each species.

This document is submitted according to ECE/CTCS/2017/10 section II c and ECE/CTCS/2018/2 section VII a.

Grapefruit and pummelos**I. Definition of produce ¹**

This standard applies to:

- grapefruit of varieties (cultivars) grown from the species *Citrus paradisi* Macfad.,
- pummelos or Shaddock of varieties (cultivars) grown from the species *Citrus maxima* (Burm.) Merr.

[Note: concerning hybrids, refer to wording in current standard.] to be supplied fresh to the consumer, citrus fruit for industrial processing being excluded:

¹ All information on botanical names is taken from the GRIN database. See www.ars-grin.gov

II. Provisions concerning quality

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

However, if applied at stages following export, products may show in relation to the requirements of the standard:

- a slight lack of freshness and turgidity
- for products graded in classes other than the “Extra” Class, a slight deterioration due to their development and their tendency to perish.

The holder/seller of products may not display such products or offer them for sale, or deliver or market them in any manner other than in conformity with this standard. The holder/seller shall be responsible for observing such conformity.

A. Minimum requirements

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

- intact
- 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 bruising and/or extensive healed overcuts
- [healed overcuts missing in Codex STAN 219 and 214]
- free of signs of shrivelling and dehydration
- free of damage caused by low temperatures or frost [addition from Codex STAN 219]
- free of abnormal external moisture
- free of any foreign smell and/or taste.

The development and condition of the grapefruit and pummelos must be such as to enable them:

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

B. Maturity requirements

The grapefruit and pummelos must be sufficiently developed and display satisfactory maturity and/or ripeness, account being taken of criteria proper to the variety, the time of picking and the growing area.

Maturity of grapefruit and pummelos is defined by the following parameters² specified as follows:

² The determination of juice content and sugar content is based on the OECD guidelines on objective tests. See <http://www.oecd.org/agriculture/fruit-vegetables/publications/oecd-guidelines-fruit-vegetables.htm>.

	<i>Minimum juice content (per cent)</i>	<i>Minimum sugar content (°Brix)</i>	<i>Colouring</i>
Grapefruit and hybrids with grapefruit appearance	35		Must be typical of the variety. Fruit with a greenish colour (green in Oroblanco) is allowed, provided it satisfies the minimum requirements as to juice content
Oroblanco	35	9	
Pummelos (Shaddock) and hybrids with pummelo appearance	35 [Proposal 8 by South Africa]	8	Must be typical of the variety on at least two thirds of the surface of the fruit

Remark by Germany: Whether the sentence proposed for deletion is necessary while the minima of colouring are defined should be discussed.

Remark by South Africa: disagrees with the deletion of the abovementioned sentence, as sometimes when grapefruit are harvested mature but not yet fully coloured, they can be shipped slightly greener (instead of degreening) to still “reach the colour typical of the variety at their destination point”

Grapefruit and pummelos meeting the minimum maturity requirements may be “degreened”. This treatment is only permitted if the other natural organoleptic characteristics are not modified.

Red-pulp fleshed varieties of grapefruit may have reddish patches on the skin. [addition from Codex STAN 219] [[Move to colour requirements for different classes.?](#)]

C. Classification

Grapefruit and pummelos are classified in three classes, as defined below:

(i) "Extra" Class

Grapefruit and pummelos in this class must be of superior quality. They must be characteristic of the variety.

They 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.

(ii) Class I

Grapefruit and pummelos in this class must be of good quality. They must be characteristic of the variety.

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 [missing in Codex STAN 219 and]
- 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

(iii) Class II

This class includes grapefruit and pummelos that do not qualify for inclusion in the higher classes but satisfy the minimum requirements specified above.

The following defects may be allowed, provided the grapefruit and pummelos retain their 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 [missing in Codex STAN 219]
- 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 [missing in Codex STAN 219]
- rough skin. [missing in Codex STAN 214]

III. Provisions concerning sizing

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

Remark by South Africa: diameter and count are the standard methods used for sizing. There is no OECD guideline for fruit weight of citrus fruit.

The minimum sizes are set as:

- 70 mm for grapefruit and hybrids
- 100 mm for pummelos and hybrids.[addition from Codex STAN ¶14]

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

- (a) When sized by diameter
 - 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
 - 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:

	<i>Code</i>	<i>Diameter</i>
Grapefruit and hybrids	0	>139
	1	109 – 139
	2	100 – 119
	3	93 – 110
	4	88 – 102
	5	84 – 97
	6	81 – 93
	7	77 – 89
	8	73 – 85
9	70 - 80	

	<i>Code</i>	<i>Diameter</i>
Pummelos and hybrids	0	>170
	1	156 – 170
	2	148 – 162
	3	140 – 154
	4	132 – 146
	5	123 – 138
	6	116 – 129
7	100 – 118	

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).

Remark by Germany: Uniformity in size is not required in mixtures of grapefruit and/or pummelos with distinctly different citrus fruit species.

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 per cent, by number or weight, of grapefruit and pummelos not satisfying the requirements of the class but meeting those of Class I is allowed. Within this tolerance not more than 0.5 per cent in total may consist of produce satisfying the requirements of Class II quality.

(ii) Class I

A total tolerance of 10 per cent, by number or weight, of grapefruit and pummelos not satisfying the requirements of the class but meeting those of Class II is allowed. Within this

tolerance not more than 1 per cent 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 per cent, by number or weight, of grapefruit and pummelos satisfying neither the requirements of the class nor the minimum requirements is allowed. Within this tolerance not more than 2 per cent in total may consist of produce affected by decay.

B. Size tolerances

For all classes: a total tolerance of 10 per cent, by number or weight, of grapefruit and pummelos corresponding to the size immediately below and/or above that (or those, in the case of the combination of three sizes) mentioned on the package is allowed

In any case, the tolerance of 10 per cent applies only to fruit not smaller than 67 mm for grapefruit and hybrids and 98 mm for pummelos and hybrids.

Remark by South Africa: Retain this sentence as there is currently an allowance for minimum size.

V. Provisions concerning presentation

A. Uniformity

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

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

However, a mixture of grapefruit and/or pummelos with 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 and origin. However, in case of those mixtures uniformity in size is not required.

Remark by Germany: The paragraph on mixtures of species is not part of Codex STAN 219. The visible part of the contents of the package must be representative of the entire contents.

B. Packaging

The grapefruit and pummelos 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 to the produce shall be such that, when removed, they neither leave visible traces of glue, nor lead to skin defects. Information lasered on single fruit should not lead to flesh or skin defects.

If the fruit is wrapped, thin, dry, new and odourless³ paper must be used.

The use of any substance tending to modify the natural characteristics of the citrus fruit, especially in taste or smell, is prohibited.

³ 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 regulations of the importing country.

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.

VI. Provisions concerning marking

Each package⁴ must bear the following particulars, in letters grouped on the same side, legibly and indelibly marked, and visible from the outside:

A. Identification

Packer and/or dispatcher/exporter:

Name and physical address (e.g. street/city/region/postal code and, if different from the country of origin, the country) or a code mark officially recognized by the national authority⁵ if the country applying such a system is listed in the UNECE database.

B. Nature of produce⁶

- “Grapefruit”, “Pummelos” / Shaddock” if the produce is not visible from the outside
- “Mixture of citrus fruit” or equivalent denomination and common names of the different species, in case of a mixture of grapefruit and/or pummelos with citrus fruit of distinctly different species
- Name of the variety (optional)

The name of a variety may be replaced by a synonym. A trade name⁷ can only be given in addition to the variety name [proposal by South Africa] or the synonym.

- flesh colour “white”, “pink” or “red” where appropriate
- “seedless” (optional, seedless grapefruit and pummelos may occasionally contain seeds).

C. Origin of produce

- Country of origin⁸ and, optionally, district where grown, or national, regional or local place name
- In the case of a mixture of grapefruit and/or pummelos with 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.

⁴ These marking provisions do not apply to sales packages presented in packages. However, they do apply to sales packages (pre-packages) presented individually.

⁵ The national legislation of a number of countries requires the explicit declaration of the name and address. However, in the case where a code mark is used, the reference “packer and/or dispatcher (or equivalent abbreviations)” has to be indicated in close connection with the code mark, and the code mark should be preceded by the ISO 3166 (alpha) country/area code of the recognizing country, if not the country of origin.

⁶ An informative, non-exhaustive list of varieties and their respective synonyms, trademarks and/or variety groups is available at the Specialized Section’s meeting website.

⁷ A trade name can be a trademark for which protection has been sought or obtained or any other commercial denomination.

⁸ The full or a commonly used name should be indicated.

D. Commercial specifications

- Class
- Size expressed as:
 - Minimum and maximum diameter (in mm) or
 - Size code(s), optionally followed [proposal by South Africa] by a minimum and maximum size diameter
 - Count
- Post-harvest treatment (optional, based on the national legislation of the importing country).

[Note: The current CODEX Standard for pummelos does not include this labelling requirement]

E. Official control mark (optional)

Limes

I. Definition of produce⁹

This standard applies to of varieties (cultivars) grown from

- Persian limes grown from the species *Citrus latifolia* (Yu. Tanaka) Tanaka, a large fruited acid lime known also as Bearss or Tahiti,
- Mexican limes grown from the species *Citrus aurantiifolia* (Christm.) Swingle, also known as sour limes and key limes,
- Indian sweet limes, Palestine sweet limes grown from the species *Citrus limettioides*
- Tanaka

[Note: concerning hybrids, refer to wording in current standard.]

to be supplied fresh to the consumer, limes for industrial processing being excluded.

Remark by Germany: Codex STAN 213 does not include Mexican limes or Indian sweet limes.

Remark by South Africa: proposal to exclude Mexican lime and Indian sweet lime.

II. Provisions concerning quality

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

However, if applied at stages following export, products may show in relation to the requirements of the standard:

- a slight lack of freshness and turgidity
- for products graded in classes other than the “Extra” Class, a slight deterioration due to their development and their tendency to perish.

⁹ All information on botanical names is taken from the GRIN database. See www.ars-grin.gov

The holder/seller of products may not display such products or offer them for sale, or deliver or market them in any manner other than in conformity with this standard. The holder/seller shall be responsible for observing such conformity.

A. Minimum requirements

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

- intact
- 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 bruising and/or extensive healed overcuts
- [healed overcuts missing in Codex STAN 213]
- free of signs of shrivelling and dehydration [missing in Codex STAN 213]
- free of damage caused by low temperature or frost [frost missing in Codex STAN 213]
- free of abnormal external moisture
- free of any foreign smell and/or taste.

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

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

B. Maturity requirements

The limes must be sufficiently developed and display satisfactory maturity and/or ripeness, account being taken of criteria proper to the variety, the time of picking and the growing area.

Maturity of limes is defined by the following parameters specified as follows:

The minimum juice¹⁰ content is set at:

- 42 per cent for Persian limes and
- 40 per cent for Mexican and Indian sweet limes.

The degree of colouring shall be such that following normal development the limes reach the colour typical of the species at their destination point. The fruit should be green but may show yellow patches up to 30% of its surface for Persian limes and up to 20% for Mexican and Indian sweet limes.

Remark by Germany: Whether the sentence proposed for deletion is necessary while the minima of colouring are defined should be discussed.

Remark by South Africa: This sentence applies to orange-coloured citrus species, therefore can be deleted for lime fruit.

¹⁰ The determination of juice content is based on the OECD guidelines on objective tests. See <http://www.oecd.org/agriculture/fruit-vegetables/publications/oecd-guidelines-fruit-vegetables.htm>

C. Classification

Limes are classified in three classes, as defined below:

(i) "Extra" Class

Limes in this class must be of superior quality. They must be characteristic of the variety (species).

They 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.

(ii) Class I

Limes in this class must be of good quality. It must be characteristic of the variety (species). 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.

Remark by Germany: In Codex STAN 213 for Persian limes, the last three indents are replaced by "slight skin defects not exceeding 1 cm²."

The defects must not, in any case, affect the flesh. [part of Codex STAN 213]

(iii) Class II

This class includes limes that do not qualify for inclusion in the higher classes but satisfy the minimum requirements specified above.

The following defects may be allowed, provided the limes 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.

Remark by Germany: In Codex STAN 213 for Persian limes, the last four indents are replaced by "slight skin defects not exceeding 2 cm²."

- Rough skin. *Remark by Germany:* not relevant for limes.

The defects must not, in any case, affect the flesh. [part of Codex STAN 213]

III. Provisions concerning sizing

Size is determined by the maximum diameter of the equatorial section of the fruit or by count. The minimum size is set at:

- 42 mm for Persian limes
- 25 mm for Mexican limes [proposal by South Africa] and Indian sweet limes.

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

- (a) When sized by diameter
- 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 \geq 60 mm but < 80 mm
 - 20 mm, if the diameter of the smallest fruit (as indicated on the package) is \geq 80 mm but < 110 mm [proposal by South Africa]
 - no limitation of difference in diameter for fruit \geq 110 mm. [proposal by South Africa]

Remark by South Africa: this section is redundant for lime fruit.

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

<i>Persian limes</i>	
<i>Size code</i>	<i>Diameter (mm)</i>
1	58 – 67
2	53 – 62
3	48 – 57
4	45 – 52
5	42 – 49

<i>Mexican and Indian sweet limes</i>	
<i>Size code</i>	<i>Diameter (mm)</i>
1	> 45
2	40.1 - 45
3	35.1 - 40
4	30.1 - 35
5	25 - 30

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.

Remark by Germany: Codex STAN 213 is more prescriptive – as previous UNECE standard.]

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

Uniformity in size is not required in mixtures of limes with distinctly different citrus fruit species.

Remark by South Africa: What is meant or intended by this point?

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

(ii) Class I

A total tolerance of 10 per cent, by number or weight, of limes not satisfying the requirements of the class but meeting those of Class II is allowed. Within this tolerance not more than 1 per cent 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 per cent, by number or weight, of limes satisfying neither the requirements of the class nor the minimum requirements is allowed. Within this tolerance not more than 2 per cent in total may consist of produce affected by decay.

B. Size tolerances

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

In any case, the tolerance of 10 per cent applies only to fruit not smaller than 40 mm for Persian limes.

V. Provisions concerning presentation

A. Uniformity

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

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

However, a mixture of limes with 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. Uniformity in size is not required.

Remark by Germany: The paragraph on mixtures of species is not part of Codex STAN 213.

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

B. Packaging

The limes 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 to the produce shall be such that, when removed, they neither leave visible traces of glue, nor lead to skin defects. Information lasered on single fruit should not lead to flesh or skin defects.

If the fruit is wrapped, thin, dry, new and odourless¹¹ paper must be used.

The use of any substance tending to modify the natural characteristics of the limes, especially in taste or smell, 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.

VI. Provisions concerning marking

Each package¹² must bear the following particulars, in letters grouped on the same side, legibly and indelibly marked, and visible from the outside:

A. Identification

Packer and/or dispatcher/exporter:

Name and physical address (e.g. street/city/region/postal code and, if different from the country of origin, the country) or a code mark officially recognized by the national authority¹³ if the country applying such a system is listed in the UNECE database.

B. Nature of produce¹⁴

- “Limes”, “Persian limes”, “Mexican limes”, “Indian sweet limes”/“Palestine sweet limes” if the produce is not visible from the outside
- “Mixture of citrus fruit” or equivalent denomination and common names of the different species, in case of a mixture of limes with citrus fruit of distinctly different species
- Name of the variety (optional)

The name of a variety may be replaced by a synonym. A trade name¹⁵ can only be given in addition to the variety name [proposal by South Africa] or the synonym.

- “seedless”: (optional, seedless citrus fruit may occasionally contain seeds).

¹¹ 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 regulations of the importing country.

¹² These marking provisions do not apply to sales packages presented in packages. However, they do apply to sales packages (pre-packages) presented individually.

¹³ The national legislation of a number of countries requires the explicit declaration of the name and address. However, in the case where a code mark is used, the reference “packer and/or dispatcher (or equivalent abbreviations)” has to be indicated in close connection with the code mark, and the code mark should be preceded by the ISO 3166 (alpha) country/area code of the recognizing country, if not the country of origin.

¹⁴ An informative, non-exhaustive list of varieties and their respective synonyms, trademarks and/or variety groups is available at the Specialized Section’s meeting website.

¹⁵ A trade name can be a trademark for which protection has been sought or obtained or any other commercial denomination.

C. Origin of produce

- Country of origin¹⁶ and, optionally, district where grown, or national, regional or local place name

In the case of a mixture of limes with 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 size (in mm) or
 - Size code(s), optionally followed by a minimum and maximum size or Count
- Post-harvest treatment (optional, based on the national legislation of the importing country).

[Note: This labelling requirement is not included in the CODEX Standard for limes]

E. Official control mark (optional)

Lemons

I. Definition of produce¹⁷

This standard applies to lemons of varieties (cultivars) grown from *Citrus limon* (L.) Burm. f. to be supplied fresh to the consumer, lemons for industrial processing being excluded. [Note: concerning hybrids, refer to wording in current standard.]

II. Provisions concerning quality

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

However, if applied at stages following export, products may show in relation to the requirements of the standard:

- a slight lack of freshness and turgidity
- for products graded in classes other than the “Extra” Class, a slight deterioration due to their development and their tendency to perish.

The holder/seller of products may not display such products or offer them for sale, or deliver or market them in any manner other than in conformity with this standard. The holder/seller shall be responsible for observing such conformity.

¹⁶ The full or a commonly used name should be indicated.

¹⁷ All information on botanical names is taken from the GRIN database. See www.ars-grin.gov

A. Minimum requirements

In all classes, subject to the special provisions for each class and the tolerances allowed, the lemons 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 lemons must be such as to enable it:

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

B. Maturity requirements

The lemons must be sufficiently developed and display satisfactory maturity and/or ripeness, account being taken of criteria proper to the variety, the time of picking and the growing area.

Maturity of lemons is defined as follows:

The minimum juice content¹⁸ is set as 20 per cent.

The colouring must be typical of the variety. However, the degree of colouring shall be such that following normal development the lemons reach the colour typical of the variety at their destination point. Fruit with a green (but not dark green) colour is allowed, provided it satisfies the minimum requirements as to juice content

Lemons meeting these maturity requirements may be “degreened”. This treatment is only permitted if the other natural organoleptic characteristics are not modified.

C. Classification

Lemons are classified in three classes, as defined below:

(i) "Extra" Class

Lemons in this class must be of superior quality. It must be characteristic of the variety. They 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.

(ii) Class I

Lemons in this class must be of good quality. It must be characteristic of the variety.

¹⁸ The determination of juice content is based on the OECD guidelines on objective tests. See <http://www.oecd.org/agriculture/fruit-vegetables/publications/oecd-guidelines-fruit-vegetables.htm>

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.

(iii) Class II

This class includes lemons that do not qualify for inclusion in the higher classes but satisfy the minimum requirements specified above.

The following defects may be allowed, provided the lemons 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.

III. Provisions concerning sizing

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

The minimum size is set at 45 mm.

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

- (a) When sized by diameter
- 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 \geq 60 mm but < 80 mm
 - 20 mm, if the diameter of the smallest fruit (as indicated on the package) is \geq 80 mm but < 110 mm
 - there is no limitation of difference in diameter for fruit \geq 110 mm.

Remark by South Africa: delete, as these provisions are redundant for lemons.

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

<i>Size code</i>	<i>Diameter (mm)</i>
0	79 - 90
1	72 - 83
2	68 - 78
3	63 - 72
4	58 - 67
5	53 - 62
6	48 - 57
7	45 - 52

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).

Uniformity in size is not required in mixtures of lemons with distinctly different citrus fruit species.

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

(ii) Class I

A total tolerance of 10 per cent, by number or weight, of lemons not satisfying the requirements of the class but meeting those of Class II is allowed. Within this tolerance not more than 1 per cent 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 per cent, by number or weight, of lemons satisfying neither the requirements of the class nor the minimum requirements is allowed. Within this tolerance not more than 2 per cent in total may consist of produce affected by decay.

B. Size tolerances

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

In any case, the tolerance of 10 per cent applies only to fruit not smaller than 43 mm.

V. Provisions concerning presentation

A. Uniformity

The contents of each package must be uniform and contain only lemons of the same origin, variety, quality and size, and appreciably of the same degree of ripeness and development.

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

However, a mixture of lemons with 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. However, in case of those mixtures uniformity in size is not required.

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

B. Packaging

The lemons 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 to the produce shall be such that, when removed, they neither leave visible traces of glue, nor lead to skin defects. Information lasered on single fruit should not lead to flesh or skin defects.

If the fruit is wrapped, thin, dry, new and odourless¹⁹ paper must be used.

The use of any substance tending to modify the natural characteristics of the lemons, especially in taste or smell, 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.

VI. Provisions concerning marking

Each package²⁰ must bear the following particulars, in letters grouped on the same side, legibly and indelibly marked, and visible from the outside:

A. Identification

Packer and/or dispatcher/exporter:

Name and physical address (e.g. street/city/region/postal code and, if different from the country of origin, the country) or a code mark officially recognized by the national authority²¹ if the country applying such a system is listed in the UNECE database.

¹⁹ 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 regulations of the importing country.

²⁰ These marking provisions do not apply to sales packages presented in packages. However, they do apply to sales packages (pre-packages) presented individually.

²¹ The national legislation of a number of countries requires the explicit declaration of the name and address. However, in the case where a code mark is used, the reference "packer and/or dispatcher (or equivalent abbreviations)" has to be indicated in close connection with the code mark, and the code mark should be preceded by the ISO 3166 (alpha) country/area code of the recognizing country, if not the country of origin.

B. Nature of produce²²

- “Lemons” if the produce is not visible from the outside
- “Mixture of citrus fruit” or equivalent denomination and common names of the different species, in case of a mixture of lemons of distinctly different species
- Name of the variety (optional);

The name of a variety can be replaced by a synonym. A trade name²³ can only be given in addition to the variety or the synonym.

- “seedless” (optional, seedless lemons may occasionally contain seeds).

C. Origin of produce

- Country of origin²⁴ and, optionally, district where grown, or national, regional or local place name
- In the case of a mixture of lemons with citrus fruit [proposal by South Africa] 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 size (in mm) or
 - Size code(s) optionally followed by a minimum and maximum size or
 - Count
- Post-harvest treatment (optional, based on the national legislation of the importing country).

E. Official control mark (optional)**Mandarin group****I. Definition of produce²⁵**

This standard applies to the mandarin groups of varieties (cultivars) grown from:

- Mandarins (*Citrus reticulata* Blanco),
- satsumas (*Citrus unshiu* Marcow.),
- clementines (*Citrus clementina* hort. ex Tanaka),
- common mandarins (*Citrus deliciosa* Ten.) and

²² An informative, non-exhaustive list of varieties and their respective synonyms, trademarks and/or variety groups is available at the Specialized Section’s meeting website.

²³ A trade name can be a trademark for which protection has been sought or obtained or any other commercial denomination.

²⁴ The full or a commonly used name should be indicated.

²⁵ All information on botanical names is taken from the GRIN database. See www.ars-grin.gov

- tangerines (*Citrus tangerina* Tanaka) and

[Note: concerning hybrids, refer to wording in current standard.]

to be supplied fresh to the consumer, mandarins (easy peelers) for industrial processing being excluded.

II. Provisions concerning quality

The purpose of the standard is to define the quality requirements for mandarins (easy peelers) after preparation and packaging.

However, if applied at stages following export, products may show in relation to the requirements of the standard:

- a slight lack of freshness and turgidity
- for products graded in classes other than the “Extra” Class, a slight deterioration due to their development and their tendency to perish.

The holder/seller of products may not display such products or offer them for sale, or deliver or market them in any manner other than in conformity with this standard. The holder/seller shall be responsible for observing such conformity.

A. Minimum requirements

In all classes, subject to the special provisions for each class and the tolerances allowed, the mandarins (easy peelers) must be:

- intact
- 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 bruising and/or extensive healed overcuts
- 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 mandarins (easy peelers) must be such as to enable it:

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

B. Maturity requirements

The mandarins (easy peelers) must be sufficiently developed and display satisfactory maturity and/or ripeness, account being taken of criteria proper to the variety, the time of picking and the growing area.

Maturity of mandarins (easy peelers) is defined by the following parameters specified for each species below²⁶:

	<i>Minimum juice content (per cent)</i>	<i>Minimum sugar/acid ratio</i>	<i>Colouring</i>
Satsumas	33	6.5:1	
Clementines	40	7.0:1	
Other mandarin varieties and their hybrids	33	7.5:1	

The colouring must be typical of the variety on at least one third of the surface of the fruit.

[Proposal by South Africa to move sentence about colouring below table.]

Remark by Germany: Whether the sentence proposed for deletion is necessary while the minima of colouring are defined should be discussed.

Remark by South Africa: South Africa supports the inclusion of this paragraph since sometimes when Satsumas are harvested mature but not yet fully coloured, they can then be shipped slightly greener (instead of degreening) to still “reach the colour typical of the variety at their destination point.

Mandarins (easy peelers) meeting these maturity requirements may be “degreened”. This treatment is only permitted if the other natural organoleptic characteristics are not modified.

C. Classification

Mandarins (easy peelers) are classified in three classes, as defined below:

(i) "Extra" Class

Mandarins (easy peelers) in this class must be of superior quality. It must be characteristic of the variety and/or the species.

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.

(ii) Class I

Mandarins (easy peelers) in this class must be of good quality. It must be characteristic of the variety and/or the species.

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.

²⁶ The determination of juice content and sugar/acid ratio is based on the OECD guideline on objective tests. See <http://www.oecd.org/agriculture/fruit-vegetables/publications/oecd-guidelines-fruit-vegetables.htm>

(iii) Class II

This class includes mandarins (easy peelers) that do not qualify for inclusion in the higher classes but satisfy the minimum requirements specified above.

The following defects may be allowed, provided the mandarins (easy peelers) retain their 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 partial detachment of the peel (or rind).

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 minimum size is set at

- 35 mm for clementines
- 45 mm for satsumas, other mandarin varieties and hybrids

B. Uniformity

Mandarins (easy peelers) may be sized by one of the following options:

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

- (a) When sized by diameter
 - 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 [proposal by South Africa]
 - no limitation of difference in diameter for fruit ≥ 110 mm. [proposal by South Africa]
- (b) When size codes are applied, the codes and ranges in the following table must be respected:

<i>Size code</i>	<i>Diameter (mm)</i>
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 ^a	43 - 52
7	41 - 48
8	39 - 46

^a Sizes below 45 mm refer to clementines only.

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).

Uniformity in size is not required in mixtures of distinctly different varieties of easy peelers with distinctly different citrus fruit species.

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 per cent, by number or weight, of mandarins (easy peelers) not satisfying the requirements of the class but meeting those of Class I is allowed. Within this tolerance not more than 0.5 per cent in total may consist of produce satisfying the requirements of Class II quality.

(ii) Class I

A total tolerance of 10 per cent, by number or weight, of mandarins (easy peelers) not satisfying the requirements of the class but meeting those of Class II is allowed. Within this tolerance not more than 1 per cent 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 per cent, by number or weight, of mandarins (easy peelers) satisfying neither the requirements of the class nor the minimum requirements is allowed. Within this tolerance not more than 2 per cent in total may consist of produce affected by decay.

B. Size tolerances

For all classes: a total tolerance of 10 per cent, by number or weight, of mandarins (easy peelers) corresponding to the size immediately below and/or above that (or those, in the case of the combination of three sizes) mentioned on the package is allowed.

In any case, the tolerance of 10 per cent applies only to fruit not smaller than 34 mm for clementines or 43 mm for satsumas, other mandarin varieties and hybrids.

V. Provisions concerning presentation

A. Uniformity

The contents of each package must be uniform and contain only mandarins (easy peelers) of the same origin, variety or species, quality and size, and appreciably of the same degree of ripeness and development.

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

However, a mixture of distinctly different varieties of mandarins (easy peelers) with distinctly different species of citrus fruit may be packed together in a sales package, provided they are uniform in quality and, for each species concerned, in variety or species and origin. However, in case of those mixtures uniformity in size is not required.

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

B. Packaging

The mandarins (easy peelers) 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 to the produce shall be such that, when removed, they neither leave visible traces of glue, nor lead to skin defects. Information lasered on single fruit should not lead to flesh or skin defects.

If the fruit is wrapped, thin, dry, new and odourless²⁷ paper must be used.

The use of any substance tending to modify the natural characteristics of the mandarins (easy peelers), especially in taste or smell⁴, 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.

VI. Provisions concerning marking

Each package²⁸ must bear the following particulars, in letters grouped on the same side, legibly and indelibly marked, and visible from the outside:

²⁷ 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 regulations of the importing country.

²⁸ These marking provisions do not apply to sales packages presented in packages. However, they do apply to sales packages (pre-packages) presented individually.

A. Identification

Packer and/or dispatcher/exporter:

Name and physical address (e.g. street/city/region/postal code and, if different from the country of origin, the country) or a code mark officially recognized by the national authority²⁹ if the country applying such a system is listed in the UNECE database.

B. Nature of produce³⁰

- “Mandarins (easy peelers)” if the produce is not visible from the outside
- “Mixture of citrus fruit” or equivalent denomination and common names of the different species, in case of a mixture of mandarins (easy peelers) with distinctly different species of citrus fruit
- “Satsumas” or “Clementines” where appropriate and the name of the variety is optional;
- Name of the variety for other mandarins and mandarin hybrids

The name of a variety can be replaced by a synonym. A trade name³¹ can only be given in addition to the variety or the synonym.

- “seeded” or “with seeds” [proposal by South Africa] in case of clementines with more than 10 seeds
- “seedless”: (optional, seedless mandarins (easy peelers) may occasionally contain seeds).

C. Origin of produce

- Country of origin³² and, optionally, district where grown, or national, regional or local place name
- In the case of a mixture of mandarins (easy peelers) 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 size (in mm) or
 - Size code(s) optionally followed by a minimum and maximum size or
 - Count
- Post-harvest treatment (optional, based on the national legislation of the importing country).

²⁹ The national legislation of a number of countries requires the explicit declaration of the name and address. However, in the case where a code mark is used, the reference “packer and/or dispatcher (or equivalent abbreviations)” has to be indicated in close connection with the code mark, and the code mark should be preceded by the ISO 3166 (alpha) country/area code of the recognizing country, if not the country of origin.

³⁰ An informative, non-exhaustive list of varieties and their respective synonyms, trademarks and/or variety groups is available at the Specialized Section’s meeting website.

³¹ A trade name can be a trademark for which protection has been sought or obtained or any other commercial denomination.

³² The full or a commonly used name should be indicated.

E. Official control mark (optional)

Oranges

I. Definition of produce³³

This standard applies to oranges of varieties (cultivars) grown from *Citrus sinensis* (L.) Osbeck to be supplied fresh to the consumer, oranges for industrial processing being excluded. [Note: concerning hybrids, refer to wording in current standard.]

II. Provisions concerning quality

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

However, if applied at stages following export, products may show in relation to the requirements of the standard:

- a slight lack of freshness and turgidity
- for products graded in classes other than the “Extra” Class, a slight deterioration due to their development and their tendency to perish.

The holder/seller of products may not display such products or offer them for sale, or deliver or market them in any manner other than in conformity with this standard. The holder/seller shall be responsible for observing such conformity.

A. Minimum requirements

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

- intact
- 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 bruising and/or extensive healed overcuts
- 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 oranges must be such as to enable it:

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

³³ All information on botanical names is taken from the GRIN database. See www.ars-grin.gov

B. Maturity requirements

The oranges must be sufficiently developed and display satisfactory maturity and/or ripeness, account being taken of criteria proper to the variety, the time of picking and the growing area.

Maturity of oranges is defined by the following parameters³⁴:

	<i>Minimum juice content (per cent)</i>	<i>Minimum sugar/acid ratio</i>
Blood oranges	30	6.5:1
Navels group	33	6.5:1
Other varieties	35	6.5:1
Mosambi, Sathgudi and Pacitan with more than one fifth green colour	33	
Other varieties with more than one fifth green colour	45	

The colouring must be typical of the variety. However, the degree of colouring shall be such that following normal development the oranges reach the colour typical of the variety at their destination point.

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.

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.

Oranges meeting these maturity requirements may be “degreened”. This treatment is only permitted if the other natural organoleptic characteristics are not modified.

C. Classification

Oranges are classified in three classes, as defined below:

(i) "Extra" Class

Oranges in this class must be of superior quality. It must be characteristic of the variety.

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.

(ii) Class I

Oranges in this class must be of good quality. It must be characteristic of the variety.

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 [missing in Codex STAN 245]

³⁴ The determination of juice content and sugar/acid ratio is based on the OECD guidelines on objective tests. See <http://www.oecd.org/agriculture/fruit-vegetables/publications/oecd-guidelines-fruit-vegetables.htm>

- 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.

The defects must not, in any case, affect the flesh. [part of Codex STAN 245]

(iii) Class II

This class includes oranges that do not qualify for inclusion in the higher classes but satisfies the minimum requirements specified above.

The following defects may be allowed, provided the oranges 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 [missing in Codex STAN 245]
- 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).

The defects must not, in any case, affect the flesh. [part of Codex STAN 245]

III. Provisions concerning sizing

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

The minimum size is set as 53 mm by diameter.

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

- (a) When sized by diameter
- 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 \geq 60 mm but < 80 mm
 - 20 mm, if the diameter of the smallest fruit (as indicated on the package) is \geq 80 mm but < 110 mm
 - no limitation of difference in diameter for fruit \geq 110 mm.

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

<i>Size code</i>	<i>Diameter (mm)</i>
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

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.

Remark by Germany: Codex STAN 245 is more prescriptive – as previous UNECE standard.

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

Uniformity in size is not required in mixtures of oranges with distinctly different citrus fruit species.

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

(ii) Class I

A total tolerance of 10 per cent, by number or weight, of oranges not satisfying the requirements of the class but meeting those of Class II is allowed. Within this tolerance not more than 1 per cent 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 per cent, by number or weight, of oranges satisfying neither the requirements of the class nor the minimum requirements is allowed. Within this tolerance not more than 2 per cent in total may consist of produce affected by decay.

B. Size tolerances

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

In any case, the tolerance of 10 per cent applies only to fruit not smaller than 50 mm.

V. Provisions concerning presentation**A. Uniformity**

The contents of each package must be uniform and contain only oranges of the same origin, variety or commercial types [proposal by South Africa to delete "or commercial types"], quality and size, and appreciably of the same degree of ripeness and development.

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

However, a mixture of oranges with 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. However, in case of those mixtures uniformity in size is not required.

Remark by Germany: The paragraph on mixtures of species is not part of Codex STAN 245. However, the Codex standard is very prescriptive for types of presentation.

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

B. Packaging

The oranges 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 to the produce shall be such that, when removed, they neither leave visible traces of glue, nor lead to skin defects. Information lasered on single fruit should not lead to flesh or skin defects.

If the fruit is wrapped, thin, dry, new and odourless³⁵ paper must be used.

The use of any substance tending to modify the natural characteristics of the oranges, especially in taste or smell, 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.

³⁵ 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 regulations of the importing country.

VI. Provisions concerning marking

Each package³⁶ must bear the following particulars, in letters grouped on the same side, legibly and indelibly marked, and visible from the outside:

A. Identification

Packer and/or dispatcher/exporter:

Name and physical address (e.g. street/city/region/postal code and, if different from the country of origin, the country) or a code mark officially recognized by the national authority³⁷ if the country applying such a system is listed in the UNECE database.

B. Nature of produce³⁸

- “Oranges” or “Blood oranges” if the produce is not visible from the outside
- “Mixture of citrus fruit” or equivalent denomination and common names of the different species, in case of a mixture of oranges with citrus fruit of distinctly different species
- Name of the variety which may be replaced by the respective variety group in the case of “Navels” and “Valencias”

The name of a variety may be replaced by a synonym. A trade name³⁹ may only be given in addition to the variety name [proposal by South Africa] or the synonym.

C. Origin of produce

- Country of origin⁴⁰ and, optionally, district where grown, or national, regional or local place name
- In the case of a mixture of oranges with 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 size (in mm) or
 - Size code(s), optionally followed by a minimum and maximum size or
 - Count

³⁶ These marking provisions do not apply to sales packages presented in packages. However, they do apply to sales packages (pre-packages) presented individually.

³⁷ The national legislation of a number of countries requires the explicit declaration of the name and address. However, in the case where a code mark is used, the reference “packer and/or dispatcher (or equivalent abbreviations)” has to be indicated in close connection with the code mark, and the code mark should be preceded by the ISO 3166 (alpha) country/area code of the recognizing country, if not the country of origin.

³⁸ An informative, non-exhaustive list of varieties and their respective synonyms, trademarks and/or variety groups is available at the Specialized Section’s meeting website.

³⁹ A trade name can be a trademark for which protection has been sought or obtained or any other commercial denomination.

⁴⁰ The full or a commonly used name should be indicated.

- Post-harvest treatment (optional, based on the national legislation of the importing country). [Note: This labelling requirement is not included in the CODEX Standard for oranges.]

E. Official control mark (optional)
