UNECE Standard on the marketing and commercial quality control of Sweet Peppers

Explanatory Brochure
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Sweet Peppers

Explanatory Brochure

New York and Geneva, 2018
Note

Commercial quality standards for agricultural produce are developed and approved by the United Nations Economic Commission for Europe through its Working Party on Agricultural Quality Standards. These international standards facilitate trade, encourage high-quality production, improve profitability and protect consumer interests. They are used by governments, producers, traders, importers and exporters, as well as international organizations. They cover a wide range of agricultural products, including fresh fruit and vegetables, dry and dried produce, seed potatoes, meat, cut flowers, eggs and egg products.

The Explanatory Brochure on the Standard for Sweet Peppers has been developed to harmonize the interpretation of the Standard, thereby facilitating international as well as national trade. It addresses producers and traders, as well as inspection authorities. It corresponds to the latest edition of the UNECE Standard for Sweet Peppers (FFV-28), which was officially adopted in November 2009. In November 2016, 2017 (alignment with the revised Standard Layout) and 2018, the Standard was revised. The 2018 version of the Brochure was reflects all these. Subsequent revisions to the Standard will be placed on the website at: www.unece.org/trade/agr/standard/fresh/FFV-Standards.htm

All members of the United Nations can participate on an equal footing in the activities of the Working Party on Agricultural Quality Standards.

For more information, please visit our website <www.unece.org/trade/agr>.
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The official text of the standard is indicated in blue bold type; the interpretative text of the standard is indicated in black. References to photos representing the visual interpretation are printed in black bold. The entire text of the standard without the interpretative text appears in the annex.
Definition of Produce
This standard applies to sweet peppers of varieties1 (cultivars) grown from Capsicum annuum L. to be supplied fresh to the consumer, sweet peppers for industrial processing being excluded.

Interpretation: Sweet peppers come in a range of colours, sizes and shapes such as the following types: elongated, square, flat.

Examples of this range are shown in Photos 1-7.

The following peppers are excluded from this standard:
- hot or chilli peppers; however, some of the sweet pepper varieties may have a hot taste
- those for industrial processing.

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1 Some of the sweet pepper varieties may have a slightly hot taste. Examples of commercial varieties of sweet peppers having a slightly hot taste are Sivri and Padron.

Interpretation: Examples of occasional hot tasting commercial types and varieties are Sivri and Padrón.
Photo 2
Definition of produce — elongated sweet pepper

Photo 3
Definition of produce — elongated sweet peppers
Definition of produce — square sweet peppers

Photo 4
Definition of produce — square sweet peppers

Photo 5
Definition of produce — square sweet peppers
Photo 6
Definition of produce — square sweet peppers

Photo 7
Definition of produce — flat sweet peppers (tomato peppers)
Provisions concerning Quality
II. Provisions concerning Quality

The purpose of the standard is to define the quality requirements for sweet peppers 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 shall be responsible for observing such conformity.

Advice: At the packing stage, special attention should be paid to ensuring that the minimum requirements have been met. Produce with any progressive defects will deteriorate during transportation and distribution.

A. Minimum requirements

In all classes, subject to the special provisions for each class and the tolerances allowed, the sweet peppers must be:
- intact

Interpretation: The sweet peppers must not have any damage or injury. The skin of the produce must be intact. Sweet peppers with unhealed injuries or that have holes that expose the interior of the produce are not allowed. The calyx must be intact. The calyx may be slightly damaged according to the provisions of Classes I and II. For products graded in classes other than “Extra” Class, produce with splits or fresh cuts, caused by bad packing or handling, is only allowed within the tolerances of classes I and II.

Examples relating to the minimum requirement “intact” are shown in Photos 8-12.
Photo 9
Minimum requirement: “intact”. Holes in the produce exposing the interior — not allowed

Photo 10
Minimum requirement: “intact”. Holes in the produce exposing the interior — not allowed
Provisions concerning Quality

Photo 11
Minimum requirement: “intact”. Open cracking — not allowed

Photo 12
Minimum requirement: “intact”. Serious sunburn — not allowed
- **sound; produce affected by rotting or deterioration such as to make it unfit for consumption is excluded.**

**Interpretation:** The sweet peppers must be free of any disease or serious deterioration which appreciably affects their appearance, edibility or keeping quality.

Sweet peppers showing the following defects are therefore excluded:
- rotting, even if the signs are very slight or the rot affects the calyx and/or peduncle
- mould
- serious pitting
- serious bruising
- serious blossom end deterioration.

In addition, the sweet peppers must be free of physiological defects such as defects due to pitting or to calcium deficiency (called blossom end deterioration). Blossom end deterioration, bruising and pitting are allowed within the limits of Class II.

**Advice:** It is recommended that at the packing stage grading be restrictive for progressive defects such as rotting, mould and pitting.

Examples relating to the minimum requirement “sound” are shown in **Photos 13-18.**
Provisions concerning Quality

Photo 14
Minimum requirement: “sound”. Slight rot — not allowed.

Photo 15
Minimum requirement: “sound”. Mould on the calyx and/or peduncle — not allowed.
Photo 16
Minimum requirement: “sound”. Serious pitting — not allowed

Photo 17
Minimum requirement: “sound”. Serious bruising — not allowed
- clean, practically free of any visible foreign matter

**Interpretation:** The sweet peppers must be practically free of visible soil, dust, chemical residue or other foreign matter. Extensive soiling or any traces of inorganic deposits are not allowed. Any deposits of a blue, green or other unusual colour indicating the presence of traces of pesticide residues are not allowed.

Examples relating to the minimum requirement “clean” are shown in Photos 19-23.
Minimum requirement: “clean”. Practically free of visible foreign matter — limit allowed for all classes.

Photo 20

Minimum requirement: “clean”. Traces of visible foreign matter — allowed for all classes.

Photo 21
Minimum requirement: “clean”. Foreign matter — not allowed.

Minimum requirement: “clean”. Sooty mould left from aphid infestation — not allowed.
- **fresh in appearance**
- **firm**

**Interpretation:** The sweet peppers must be of acceptable freshness. A freshly harvested pepper or one from storage may be slightly soft but not shrivelled. **Photo 24**

- **practically free from pests**

**Interpretation:** The presence of pests can detract from the commercial presentation and acceptance of the sweet peppers. Therefore, the acceptable limit would be the odd insect, mite or other pest in the package or sample; any colonies would lead to the rejection of the produce. **Photo 25**
- free from damage caused by pests affecting the flesh

**Interpretation:** The sweet peppers must be free of internal and external damage caused by pests affecting the flesh. Pest damage affecting the flesh makes the produce unfit for consumption. However, slight damage caused by pests affecting the skin only is allowed within the skin defects allowed within each class.

Examples related to the minimum requirement “free from damage caused by pests affecting the flesh” are shown in Photos 26-27.
- free of damage caused by low temperature or frost

**Interpretation:** Damage caused by freezing is not allowed. In addition, storage temperatures below the critical temperature of about 7° C may cause chilling injury such as sunken glassy spots coalescing and deteriorating once the produce is transferred to ambient temperatures. Chilling injury might be acceptable in the 10 % tolerance of Class II, provided the edibility is not affected. **Photos 28-31**
Provisions concerning Quality

Photo 29
Minimum requirement: “free of damage caused by low temperature or frost”. Chilling injury (serious sunken glassy spots) — not allowed

Photo 30
Minimum requirement: “free of damage caused by low temperature or frost”. Freezing damage — not allowed
- with peduncles attached; the peduncle must be neatly cut and the calyx be intact

**Interpretation:** The peduncle must be present but it may be cut off at the level of the calyx. The calyx may be slightly damaged, but the greater part of the calyx must be present. The flesh must not be damaged.

Examples of this requirement are shown in **Photos 32-34**.

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**Photo 31**
Minimum requirement: “free of damage caused by low temperature or frost”. Freezing damage (internal view of the damaged sweet pepper on photo 30) — not allowed.

**Photo 32**
Minimum requirement: “with peduncles attached; the peduncle must be neatly cut and the calyx intact”. Intact peduncle.
Provisions concerning Quality

Photo 33
Minimum requirement: “with peduncles attached; the peduncle must be neatly cut and the calyx intact”. Peduncle cut off — allowed

Photo 34
Minimum requirement: “with peduncles attached; the peduncle must be neatly cut and the calyx be intact”. Damaged calyx — not allowed
- free of abnormal external moisture

**Interpretation:** This provision applies to excessive moisture, for example, free water lying inside the package, but does not include condensation on produce following release from cool storage or a refrigerated vehicle.

- free of any foreign smell and/or taste.

**Interpretation:** This provision applies to sweet peppers stored or transported under poor conditions, which have consequently resulted in their absorbing abnormal smells and/or tastes, in particular through the proximity of other products which give off volatile odours.

The development and condition of the sweet peppers must be such as to enable them:
- to withstand transportation and handling
- to arrive in satisfactory condition at the place of destination.
B. Classification
Sweet peppers are classified in three classes, as defined below:

(i) **“Extra” Class**
Sweet peppers in this class must be of superior quality. They must be characteristic of the variety and/or commercial type. 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.

Examples of “Extra” Class peppers are shown in Photos 35-36.
(ii) **Class I**

Sweet peppers in this class must be of good quality. They 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

Examples of Class I shape defects are shown in Photos 37-38.

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**Photo 36**
Classification: “Extra” Class. A very slight superficial defect — limit allowed

**Photo 37**
Classification: “Class I, a slight defect in shape”. Square sweet pepper — limit allowed
- slight silvering or damage caused by thrips covering not more than 1/3 of the total surface area

Interpretation: Slight silvering on up to 1/3 of the total surface area is allowed. This may be caused by:

- lack of calcium during growth of the sweet pepper: Photos 39-40
- thrips or mites: Photo 41.

However, changes in coloration as the produce ripens are not considered a colour defect but are important for the uniformity requirements in Classes “Extra” and I. Photo 42
Photo 40
Classification: “Class I, slight silvering”. Caused by calcium deficiency, 1/3 of the total surface area — limit allowed

Photo 41
Classification: “Class I, slight damage caused by thrips”. 1/3 of the total surface area — limit allowed
- slight skin defects, such as
  • pitting, scratching, sunburn, pressure marks covering in total not more than 2 cm for
    defects of elongated shape, and 1 cm² for other defects; or
  • dry superficial cracks covering in total not more than 1/8 of the total surface area

Interpretation: Slight pitting (surface spotting), up to two slight spots is allowed in Class I. Spots must be sound and showing no form of deterioration on the inside. Photo 43

Advice: It is recommended that at the packing stage grading be restrictive for progressive defects such as pitting.

Slight scratching or scarring on the body of the sweet pepper is allowed, provided the area affected does not exceed the area specified for Class I. Photos 44-45

Slight sunburn is allowed, provided the area affected does not exceed the area specified for Class I. Photo 46

Slight pressure marks are allowed, provided the area affected does not exceed the area specified for Class I and the pressure marks do not affect the flesh. Photos 47-48

Dry superficial cracks are allowed, provided the area affected does not exceed the area specified for Class I. Any cracks should be shallow and not discoloured. Photo 49
Photo 43
Classification: “Class I, slight skin defects”. Pitting — limit allowed

Photo 44
Classification: “Class I, slight skin defects”. Slight surface scratching — limit allowed
Photo 45
Classification: “Class I, slight skin defects”. Slight surface scratching — limit allowed

Photo 46
Classification: “Class I, slight skin defects”. Slight sunburn — limit allowed
Photo 47
Classification: “Class I, slight skin defects”. Slight pressure marks — limit allowed

Photo 48
Classification: “Class I, slight skin defects”. Slight pressure marks — limit allowed
- slightly damaged peduncle.

**Interpretation:** The peduncle may be cut off at the level of the calyx but the calyx must remain largely undamaged. The peduncle, if present, may be damaged or torn. **Photo 50**

*Advice:* It is recommended that at the packing stage grading be restrictive for this defect, as a damaged peduncle or calyx is likely to be the entry for rotting and mould.

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**Photo 49**

Classification: “Class I, slight skin defects”. Fine surface cracking on 1/8 of the total surface area — limit allowed

**Photo 50**

Classification: “Class I, slightly damaged peduncle” — limit allowed
(iii) **Class II**

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

The following defects may be allowed provided the sweet peppers retain their essential characteristics as regards the quality, the keeping quality and presentation:

- **defects in shape**

**Interpretation:** Defects of shape and development are allowed. Peppers with shape defects affecting edibility are excluded.

Examples of Class II shape defects are shown in Photos 51-57.
Provisions concerning Quality

Photo 52
Classification: “Class II, defects in shape”. Square type, shape defects — allowed

Photo 53
Classification: “Class II, defects in shape”. Square type, shape and development defect — limit allowed
Photo 54
Classification: “Class II, defects in shape”. Elongated type, shape and development defect — allowed

Photo 55
Classification: “Class II, defects in shape”. Elongated type, shape and development defect — allowed
Provisions concerning Quality

**Photo 56**
Classification: “Class II, defects in shape”. Elongated type, shape and development defect — allowed

**Photo 57**
Classification: “Class II, defects in shape”. Square type, shape and development defect with slight corky area — not allowed
- **silvering or damage caused by thrips covering not more than 2/3 of the total surface area.**

**Interpretation:** Silvering and discolouration on up to 2/3 of the total surface area is allowed. This may be caused by:
- lack of calcium during growth of the sweet pepper
- thrips or mites. **Photo 58**
- skin defects, such as:
  • pitting, scratching, sunburn, bruising, and healed injuries covering in total not more than 4 cm in length for defects of elongated shape and 2.5 cm² of the total area for other defects; or
  • dry superficial cracks covering in total not more than 1/4 of the total surface area

Examples of Class II skin defects are shown in Photos 59-67.

Interpretation: Pitting (surface spotting), up to five slight spots is allowed in Class II. Spots must be sound and showing no form of deterioration on the inside. Photo 59

Advice: It is recommended that at the packing stage grading be restrictive for progressive defects such as pitting.

Scratching or scarring on the body of the sweet pepper is allowed, provided the area affected does not exceed the area specified for Class II. Photos 60-61

Sunburn is allowed, provided the area affected does not exceed the area specified for Class II. Photo 62

Bruising is allowed, provided the area affected does not exceed the area specified for Class II and the pressure marks do not affect the flesh. Photo 63

Healed injuries: Small punctures caused, for example, by the stalk from an adjacent pepper or cuts caused during picking, or small areas of superficial pest damage, are allowed as long as they are healed and dry and will not cause further deterioration. Photos 64-65

Dry superficial cracks are allowed, provided the area affected does not exceed the area specified for Class II. Any cracks should be shallow and not discoloured. Photos 66-67
Photo 60
Classification: “Class II, skin defects”. Scarring or scratching up to 2.5 cm² — limit allowed

Photo 61
Classification: “Class II, skin defects”. Scarring or scratching — limit allowed
Provisions concerning Quality

Photo 62
Classification: “Class II, skin defects”. Sunburn — limit allowed

Photo 63
Classification: “Class II, skin defects”. Bruising — limit allowed
Photo 64
Classification: “Class II, skin defects”. Dry injuries — limit allowed

Photo 65
Classification: “Class II, skin defects”. Superficial pest damage — limit allowed
Provisions concerning Quality

**Photo 66**
Classification: “Class II, skin defects”. Dry superficial cracks on 1/4 of the total surface — limit allowed.

**Photo 67**
Classification: “Class II, skin defects”. Cracking, scarring or scratching around neck of sweet pepper — limit allowed.
- **blossom end deterioration not more than 1 cm²**

**Interpretation:** Blossom end deterioration is allowed, provided the pale discoloured, leathery area at the distal end is dry and not exceeding 1 cm². **Photo 68**

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- **shrivelling not exceeding 1/3 of the surface**

**Interpretation:** Slight shrivelling or lack of turgidity covering up to 1/3 of the sweet pepper is allowed, as long as the sweet pepper remains reasonably firm. **Photo 69**

**Advice:** It is recommended that at the packing stage grading be restrictive for progressive defects such as shrivelling.
damaged peduncle and calyx, provided the surrounding flesh remains intact.

**Interpretation:** The peduncle may be damaged, cut or torn, but the base must remain. Parts of the calyx may be missing, due to pest or handling damage, but the flesh and skin of the produce must not be damaged. Decay on the non-edible calyx is only allowed in the tolerances of Class II.

Examples of Class II damage to the peduncle and/or calyx are shown in Photos 70-73.

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**Photo 70**
Classification: “Class II, damaged peduncle and calyx”. Damage to the calyx — allowed
Photo 71
Classification: “Class II, damaged peduncle and calyx”. Damage to the calyx — limit allowed

Photo 72
Classification: “Class II, damaged peduncle and calyx”. Damage to peduncle and calyx — limit allowed
Photo 73
Classification: “Class II, damaged peduncle and calyx”. Damage to peduncle and calyx — limit allowed
Provisions concerning Sizing
Size is determined by the maximum equatorial diameter or by weight.

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

(a) For sweet peppers sized by diameter:
   - 20 mm

(b) For sweet peppers sized by weight:
   - 30 g where the heaviest piece weighs 180 g or less
   - 80 g where the lightest piece weighs more than 180 g but less than 260 g
   - no limit where the lightest piece weighs 260 g or more

Elongated sweet peppers should be sufficiently uniform in length.

Uniformity in size is not compulsory for Class II.

Interpretation: Although sizing is optional for Class II, it is possible to use the grading by weight or diameter to improve the uniformity within the package.
Provisions concerning Tolerances
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.

Interpretation: Tolerances are provided to allow for deviation in handling and for natural deterioration of fresh produce over time.

To determine conformity with the tolerances, samples are taken according to Annex II of the OECD Council Decision [C(2006)95]*. Decision on conformity of the lot is taken depending on the percentage of non-conforming produce in the total sample.

A. Quality tolerances
   (i) “Extra” Class
   A total tolerance of 5 per cent, by number or weight, of sweet peppers 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 sweet peppers 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.
   (ii) Class II
   A total tolerance of 10 per cent, by number or weight, of sweet peppers 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 (if sized): a total tolerance of 10 per cent, by number or weight, of sweet peppers not satisfying the requirements as regards sizing is allowed.

* Downloadable from: www.oecd.org/dataoecd/33/0/19517729.pdf
Provisions concerning Presentation
A. Uniformity

The contents of each package must be uniform and contain only sweet peppers of the same origin, variety or commercial type, quality and size (if sized) and, in the case of Classes “Extra” and I, of appreciably the same degree of ripeness and colouring.

Interpretation: For sweet peppers turning colour, uniformity may change during transportation. In Class II, mixing produce of different colouring and size is allowed.

Examples of uniform presentations are shown in Photos 74-75.

V. Provisions concerning Presentation
However, a mixture of sweet peppers of distinctly different colours and/or commercial types may be packed together in a package, provided they are uniform in quality and, for each commercial type and/or colour concerned, in origin. However, in case of those mixtures, uniformity in size is not required.

**Interpretation:** Uniformity of size in mixtures of distinctly different colours and/or commercial types is not required.

Examples of mixtures are shown in Photos 76-78.
Provisions concerning Presentation

Photo 77
Presentation: “Uniformity” — mixture of sweet peppers of distinctly different colours of the same type in a sales unit

Photo 78
Presentation: “Uniformity” — mixture of sweet peppers of distinctly different colours and types in a sales unit
The visible part of the contents of the package must be representative of the entire contents.

**Interpretation:** Any attempt to deceive by placing superior product on the top layer is not allowed.

Examples of visibly representative contents are shown in Photos 79-80.
B. Packaging

The sweet peppers must be packed in such a way as to protect the produce properly.

**Interpretation:** Packaging must be of such quality and strength as to protect the sweet peppers during transportation and handling. *Photos 81-82*
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 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.

Packages must be free of all foreign matter.
Provisions concerning Marking
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:

Interpretation: On each package, all particulars must be grouped on the same side of the package, either on a label attached to or printed on the package with water insoluble ink. In case of re-used packages, all labels must be carefully removed and/or previous indications deleted.

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 authority. If the country applying such a system is listed in the UNECE database.

Interpretation: For inspection purposes, the “packer” is the person or firm responsible for the packaging of the produce (this does not mean the staff that actually carry out the work, who are responsible only to their employer). The code mark is not a trademark but an official control system enabling the person or firm responsible for packaging to be readily identified. The dispatcher (shipper or exporter) may, however, assume sole responsibility, in which case identification of the “packer” as defined above is optional.

Examples of identification are shown in Photos 83-85.

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

3 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.

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Photo 83
Marking: “Identification” — packer/dispatcher address
Marking: “Identification” — local size code (“Calibre GG”) is optional

Marking: “Identification” — officially recognized code mark
B. **Nature of produce**
- “Sweet peppers”, if the contents are not visible from the outside
- “Mixture of sweet peppers”, or equivalent denomination, in the case of a mixture of distinctly different commercial types and/or colours of sweet peppers. If the produce is not visible from the outside, the commercial types and/or colours and the quantity of each in the package must be indicated.

C. **Origin of produce**
- Country of origin and, optionally, district where grown or national, regional or local place name
- In the case of a mixture of distinctly different commercial types and/or colours of sweet peppers of different origins, the indication of each country of origin shall appear next to the name of the commercial type and/or colour concerned. Photo 86
- “(Name of type or variety) may have a slightly hot taste” or equivalent information, where appropriate.

D. **Commercial specifications**
- Class
- Size (if sized) expressed as minimum and maximum diameters or minimum and maximum weight
- Number of units (optional)
- “Hot” or equivalent denomination, where appropriate.

E. **Official control mark (optional)**
* The full or a commonly used name should be indicated.

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**Photo 86**
Marking: “Origin of produce” — sales package of mixed origins
I. Definition of Produce

This standard applies to sweet peppers of varieties (cultivars) grown from *Capsicum annuum* L. to be supplied fresh to the consumer, sweet peppers for industrial processing being excluded.

II. Provisions concerning Quality

The purpose of the standard is to define the quality requirements for sweet peppers 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 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 sweet peppers 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
- fresh in appearance
- firm
- practically free from pests
- free from damage caused by pests affecting the flesh
- free of damage caused by low temperature or frost
- with peduncles attached; the peduncle must be neatly cut and the calyx be intact
- free of abnormal external moisture
- free of any foreign smell and/or taste.

The development and condition of the sweet peppers must be such as to enable them:
- to withstand transportation and handling
- to arrive in satisfactory condition at the place of destination.

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¹ Some of the sweet pepper varieties may have a slightly hot taste. Examples of commercial varieties of sweet peppers having a slightly hot taste are Sivri and Padron.
B. Classification

Sweet peppers are classified in three classes, as defined below:

(i) **“Extra” Class**

Sweet peppers in this class must be of superior quality. They must be characteristic of the variety and/or commercial type.

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**

Sweet peppers in this class must be of good quality. They 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 silvering or damage caused by thrips covering not more than 1/3 of the total surface area
- slight skin defects, such as:
  - pitting, scratching, sunburn, pressure marks covering in total not more than 2 cm for defects of elongated shape, and 1 cm² for other defects; or
  - dry superficial cracks covering in total not more than 1/8 of the total surface area
- slightly damaged peduncle.

(iii) **Class II**

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

The following defects may be allowed provided the sweet peppers retain their essential characteristics as regards the quality, the keeping quality and presentation:

- defects in shape
- silvering or damage caused by thrips covering not more than 2/3 of the total surface area
- skin defects, such as:
  - pitting, scratching, sunburn, bruising, and healed injuries covering in total not more than 4 cm in length for defects of elongated shape and 2.5 cm² of the total area for other defects; or
  - dry superficial cracks covering in total not more than 1/4 of the total surface area
- blossom end deterioration not more than 1 cm²
- shrivelling not exceeding 1/3 of the surface
- damaged peduncle and calyx, provided the surrounding flesh remains intact.

III. Provisions concerning Sizing

Size is determined by the maximum equatorial diameter or by weight.

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

- 20 mm

(a) For sweet peppers sized by diameter:

(b) For sweet peppers sized by weight:

- 30 g where the heaviest piece weighs 180 g or less
- 80 g where the lightest piece weighs more than 180 g but less than 260 g
- no limit where the lightest piece weighs 260 g or more

Elongated sweet peppers should be sufficiently uniform in length.

Uniformity in size is not compulsory for Class II.
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 sweet peppers 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 sweet peppers 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.

(ii) Class II
A total tolerance of 10 per cent, by number or weight, of sweet peppers 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 (if sized): a total tolerance of 10 per cent, by number or weight, of sweet peppers not satisfying the requirements as regards sizing is allowed.

V. Provisions concerning Presentation

A. Uniformity

The contents of each package must be uniform and contain only sweet peppers of the same origin, variety or commercial type, quality and size (if sized) and, in the case of Classes “Extra” and I, of appreciably the same degree of ripeness and colouring.

However, a mixture of sweet peppers of distinctly different colours and/or commercial types may be packed together in a package, provided they are uniform in quality and, for each commercial type and/or colour concerned, in 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 sweet peppers 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 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.

Packages must be free of all foreign matter.
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

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 authority, if a country applying such a system is listed in the UNECE database.

B. Nature of produce

- “Sweet peppers”, if the contents are not visible from the outside
- “Mixture of sweet peppers”, or equivalent denomination, in the case of a mixture of distinctly different commercial types and/or colours of sweet peppers. If the produce is not visible from the outside, the commercial types and/or colours and the quantity of each in the package must be indicated.

C. Origin of produce

- Country of origin and, optionally, district where grown or national, regional or local place name
- In the case of a mixture of distinctly different commercial types and/or colours of sweet peppers of different origins, the indication of each country of origin shall appear next to the name of the commercial type and/or colour concerned.

D. Commercial specifications

- Class
- Size (if sized) expressed as minimum and maximum diameters or minimum and maximum weight
- Number of units (optional)
- “(Name of type or variety) may have a slightly hot taste” or equivalent information, where appropriate.

E. Official control mark (optional)

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The UNECE has published an explanatory illustrated brochure on the application of this standard. The publication may be obtained from the UNECE at:
www.unece.org/trade/agr/welcome.htm

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2 These marking provisions do not apply to sales packages presented in packages. However, they do apply to sales packages (pre-packages) presented individually
3 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.
4 The full or a commonly used name should be indicated.