



ASEAN STANDARD FOR STRAWBERRY (ASEAN Stan 65:2020)

1. DEFINITION OF PRODUCE

This standard applies to commercial varieties of strawberry grown from *Fragaria x ananassa* (Duchesne ex Weston) Duchesne ex Rozier of the Rosaceae family, to be supplied fresh to the consumer. Strawberry for industrial processing is excluded.

2. PROVISIONS CONCERNING QUALITY

2.1 MINIMUM REQUIREMENTS

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

- intact, with calyx;
- firm;
- fresh in appearance;
- 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 of pests¹;
- practically free of damage caused by pests affecting the general appearance of the produce;
- free of mechanical and/or physiological damage such as low and /or high temperature;
- free of abnormal external moisture, excluding condensation following removal from cold storage; and
- free of any foreign odour and/or taste.

The development and condition of the strawberry should be such as to enable them:

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

2.1.1 Minimum Maturity Requirements

Strawberry must have reached an appropriate degree of development in accordance with criteria proper to the variety and to the area in which they are grown.

¹ The Provision for pest applies without prejudice to the applicable plant protection rules applied by governments in line with the International Plant Protection Convention (IPPC).

2.2 CLASSIFICATION

Strawberry is classified into three classes defined below:

2.2.1 Extra class

Strawberry in this class shall be of superior quality and with characteristics of the variety. They shall be well-formed and free from defects, with the exception of very slight superficial defects, provided these do not affect the general appearance of the produce, quality, keeping quality and presentation in the package.

2.2.2 Class I

Strawberry in this class shall be of good quality and with characteristics of the variety. The following slight defects, however, may be allowed, provided these do not affect the general appearance of the produce, quality, keeping quality and presentation in the package:

- slight defects in shape;
- presence of a small white patch, not exceeding 10% of the total surface area of the fruit; and
- slight pressure marks.

2.2.3 Class II

This class includes strawberries that do not qualify for inclusion in the higher classes but satisfy the minimum requirements specified in Section 2.1 above.

The following defects may be allowed, provided the strawberries retain their essential characteristics with regards to quality, keeping quality and presentation:

- defects in shape;
- white patch, not exceeding 20% of the total surface area of the fruit; and
- slight dry bruising not likely to spread.

3. PROVISIONS CONCERNING SIZING

Size is determined by individual fruit weight in accordance with Table 1:

Table 1 – Size classification of strawberries based on weight

Size Code	Weight per fruit (g)
1	> 30
2	>20-30
3	10-20
4	<10

4. PROVISIONS CONCERNING TOLERANCES

At all marketing stages, tolerances in respect to quality and size shall be allowed in each lot for produce not satisfying the requirements of the class indicated. Conformity assessment for the produce should be conducted in accordance with the relevant provisions in the *ASEAN Principles and Guidelines for National Food Control System (CAC/GL 82-2013- Principles and Guidelines for National Food Control Systems, MOD)*, *ASEAN Principles for Food Import and Export Inspection and Certification (CAC/GL 20-1995-Principles For Food Import And Export Inspection And Certification, MOD)* and/or the *Codex Guidelines for Food Import Control Systems (CXG 47-2003)*.

4.1 QUALITY TOLERANCES

4.1.1 Extra class

Five percent by number or weight of strawberries not satisfying the requirements of the class but meeting those of Class I is allowed.

4.1.2 Class I

Ten percent by number or weight of strawberries not satisfying the requirements of the class but meeting those of Class II is allowed. Within this tolerance not more than 2 % in total (by number or weight) may consist of produce not satisfying the minimum requirements, or of produce affected by decay.

4.1.3 Class II

Ten percent by number or weight of strawberries satisfying neither the requirements of the class nor the minimum requirements is allowed. Within this tolerance not more than 2 % total (by number or weight) in total may consist of produce affected by decay.

4.2 SIZE TOLERANCES

For all classes, 10% by number or weight of strawberries not satisfying the requirements as regards sizing but falling within the size immediately above or below those indicated in Section 3.

5. PROVISIONS CONCERNING PRESENTATION

5.1 UNIFORMITY

The contents of each package (or lot for produce presented in bulk) shall be uniform and contain only strawberry of the same origin, quality and size. The visible part of the contents of the package (or lot for produce presented in bulk) shall be representative of the entire content.

5.2 PACKAGING

Strawberry shall be properly packed in such a way as to protect the produce. The materials used inside the package shall be new, clean and of good 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.

Strawberry shall be packed in each container in compliance with the *Codex Code of Practice for Packaging and Transport of Fresh Fruits and Vegetables*. (CXC 44-1995).

5.2.1 Description of Containers

The containers shall meet the quality, hygiene, ventilation and resistance characteristics to ensure suitable handling, shipping and preserving of the strawberry. Packages (or lot for produce presented in bulk) shall be free of all foreign matter and odour.

6. MARKING OR LABELLING

6.1 CONSUMER PACKAGES

In addition to the requirements of the *Codex General Standard for the Labelling of Prepackaged Foods* (CXS 1-1985), the following specific provisions apply:

6.1.1 Name of Produce

Each package shall be labelled as to the name of the produce and may be labelled as to the name of the variety and/or commercial type.

6.1.2 Origin of Produce

Country of origin and, optionally, district where grown, or national, regional or local place name.

6.2 NON-RETAIL CONTAINERS

Each package shall bear the following particulars, in letters grouped on the same side, legibly and indelibly marked, and visible from the outside, or in the documents accompanying the shipment. For produce transported in bulk these particulars shall appear on a document accompanying the goods.

6.2.1 Identification

Name and address of Exporter, Packer and/or Dispatcher. Identification code² (optional).

² 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

6.2.2 Name of Produce

Name of the produce “Strawberry” and the commercial type if the contents are not visible from the outside. Name of the variety (optional).

6.2.3 Origin of Produce

Country of origin and, optionally, district where grown or national, regional or local place name.

6.2.4 Commercial Specification

- Name of Produce;
- Origin of Produce;
- Variety name (optional);
- Class;
- Size;
- Number of units (optional); and
- Net weight (optional).

6.2.5 Official Inspection Mark (optional)

7. FOOD ADDITIVES

No food additives are permitted in this product.

8. CONTAMINANTS

8.1 Strawberry shall comply with maximum residue limits for pesticides established by the ASEAN Harmonized MRLs of Pesticides and/or Codex Alimentarius Commission. In cases where the MRLs of pesticide are not included in the databases of ASEAN and Codex Alimentarius Commission, the commodity shall conform with the established MRL of the national authority.

8.2 Strawberry potato shall comply with the maximum levels of the *Codex General Standard for Contaminants and Toxins in Food and Feed* (CXS 193-1995).

9. HYGIENE

9.1 It is recommended that the product covered by the provisions of this Standard be prepared and handled in accordance with the appropriate sections of the *ASEAN Good Agricultural Practices (GAP)*, *ASEAN General Principle for Food Hygiene, Recommended International Code of Practice – General Principles of Food Hygiene* (CXC 1-1969), *Code of Hygienic Practice for Fresh Fruits and Vegetables* (CXC 53-2003), and other relevant Codex texts such as Codes of Hygienic Practice and Codes of Practice.

dispatcher (or equivalent abbreviations)” has to be indicated in close connection with the code mark.

9.2 The product should comply with any microbiological criteria established in accordance with the *Principles and Guidelines for the Establishment and Application of Microbiological Criteria for Foods* (CXG 21-1997).

10. METHODS OF ANALYSIS AND SAMPLING

Analytical and sampling methods to be used for ascertaining conformance to the requirements of this specification shall be in accordance with relevant text in Codex Methods of Analysis and Sampling.

References:

ASEAN General Principle for Food Hygiene, Recommended International Code of Practice – General Principles of Food Hygiene (CXC 1-1969)

ASEAN Good Agricultural Practices (GAP).

ASEAN Harmonized MRLs of Pesticides.

ASEAN Principles and Guidelines for National Food Control System.

ASEAN Principles for Food Import and Export Inspection and Certification (CAC/GL 20-1995-PRINCIPLES FOR FOOD IMPORT AND EXPORT INSPECTION AND CERTIFICATION, MOD)

Bureau of Agriculture and Fisheries Standards. 2014. Philippine National Standard on Fresh fruits – Strawberry –Classification and Grading (PNS/BAFS 125:2014).

Codex General Standard for the Labelling of Prepackaged Foods (CODEX STAN 1-1985, Rev. 1-1991)

Indonesia Nasional Standard for Strawberry (SNI 8026:2014)

Codex Code of Hygienic Practice for Fresh Fruits and Vegetables (CXC 53-2003)

Codex Code of Practice for Packaging and Transport of Fresh Fruits and Vegetables. (CXC 44-1995).

Codex General Standard for Contaminants and Toxins in Food and Feed (CXS 193-1995).

Codex General Standard for the Labelling of Prepackaged Foods (CXS 1-1985)

Codex Guidelines for Food Import Control Systems (CXG 47-2003).

Codex Principles for the Establishment and Application of Microbiological Criteria for Foods (CXG 21-1997).

Codex Recommended International Code of Practice – General Principles of Food Hygiene (CXC 1-1969).

Information from Malaysia, 2019.

Information from Thailand, 2019

UNECE Standard FFV-35 concerning the marketing and commercial control of Strawberries. 2017

ANNEX 1

VERNACULAR NAMES OF STRAWBERRY IN THE ASEAN REGION

Country	Vernacular Name
Brunei Darussalam	Strawberi
Cambodia	Strawberry
Indonesia	Stroberi
Lao PDR	Stroberi
Malaysia	Strawberi
Myanmar	
Philippines	Strawberry
Singapore	
Thailand	Strawberry
Vietnam	