

ASEAN STANDARD FOR AVOCADOS (ASEAN Stan 68:20xx)

1. DEFINITION OF PRODUCE

This Standard applies to commercial varieties of avocados grown from *Persea americana* Mill., of the Lauraceae family, to be supplied fresh to the consumer, after preparation and packaging. Parthenocarpic fruit and avocados for industrial processing are 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 avocados shall be:

- whole;
- 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 abnormal external moisture, excluding condensation following removal from cold storage;
- free of any foreign smell/odour and/or taste;
- having a turgid peduncle not more than 10 mm in length which shall be smoothly and cleanly cut. However, its absence is not considered a defect provided the place of the peduncle attachment is dry and whole;
- practically free of damage caused by low and/or high temperatures; and
- practically free of mechanical damage.

The development and condition of the avocados shall be such as to enable them:

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

2.1.1 Minimum Maturity Requirements

The avocados shall reach an appropriate degree of development, in accordance with criteria proper to the variety and to the area in which they are grown. The mature fruit should be free of bitterness.

¹ Provisions for pests and damage caused by pests apply without prejudice to the applicable plant protection rules applied by governments in line with the International Plant Protection Convention (IPPC).

2.2 CLASSIFICATION

Avocados are classified into three classes defined below:

2.2.1 “Extra” Class

Avocados in this class shall be of superior quality. If present, the peduncle shall be intact. They shall be characteristic of the variety. They shall 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.

2.2.2 Class I

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

- slight defects in shape;
- slight defects in colouring; and
- slight skin defects (corkiness, healed lenticels) and sunburn; the maximum total area should not exceed 5%.

The defects shall not, in any case, affect the flesh of the fruit.

2.2.3 Class II

This class includes avocados which 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 avocados retain their essential characteristics as regards the quality, the keeping quality and presentation:

- defects in shape;
- defects in colouring; and
- skin defects (corkiness, healed lenticels) and sunburn; the maximum total area should not exceed 10%.

The defects shall not, in any case, affect the flesh of the fruit.

3. PROVISIONS CONCERNING SIZING

Avocados can be sized through one of the following options:

- (a) When sized by weight of the fruit, size is determined based on the individual weight of each fruit. The following table is a guide and may be used on an optional basis.

Size Code	Weight (g)
1	> 800
2	>600 - 800
3	>400 - 600
4	>200 - 400
5	>125 - 200
6	70 – 125

(b) When sized by count: To ensure uniformity in size, the range in size between produce in the same package, the weight of the smallest fruit shall be not less than 75% of the weight of the largest fruit in the same package.

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 Systems* (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 (5%) by number or weight of avocados not satisfying the requirements of the class, but meeting those of Class I or, exceptionally, coming within the tolerances of that class.

4.1.2 Class I

Ten percent (10%) by number or weight of avocados not satisfying the requirements of the class, but meeting those of Class II or, exceptionally, coming within the tolerances of that class. Included therein shall be allowed not more than 1% for avocados affected by decay.

4.1.3 Class II

Ten percent (10%) by number or weight of avocados satisfying neither the requirements of the class nor the minimum requirements, with the exception of avocados affected by decay that should be not more than 2%.

4.2 SIZE TOLERANCES

For all classes, 10% by number or weight of avocados 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 avocados of the same origin, variety, 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

Avocados shall be packed in such a way as to protect the produce properly. The materials used inside the package shall be food-grade quality, 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.

Avocados shall be packed in each container in compliance with the *Code of Practice for the 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 avocados. Packages (or lot for produce presented in bulk) shall be free of all foreign matter and smell/odour.

6. PROVISIONS CONCERNING MARKING OR LABELLING

6.1 CONSUMER PACKAGES

In addition to the requirements of *the 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 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

The labelling of non-retail containers should be in accordance with the General Standard for the Labelling of Non-Retail Containers of Foods (CXS 346-2021). In addition, the following specific requirements shall apply:

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

6.2.1 Origin of Produce

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

6.2.2 Commercial Specifications

- Class;
- Size (if sized)

6.2.3 Official control mark (optional)

7. FOOD ADDITIVES

No food additives are permitted in this product.

8. CONTAMINANTS

8.1 Avocados 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 competent authority.

8.2 Avocados 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 produce 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.

9.2 The produce 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 (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).

Bureau of Agriculture and Fisheries Product Standards. 2013. Philippine National Standard on Fresh fruit – Avocado – Classification and Grading (PNS/BAFPS 113:2013).

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 Non-Retail Containers of Foods (CXS 346-2021).

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 Principles and Guidelines for National Food Control Systems (CAC/GL 82-2013).

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

Codex Recommended Methods of Analysis and Sampling (CXS 234-1999).

Codex Standard for Avocado (CXS 197-1995).

Viet Nam National Standard for Fresh Avocado (TCVN 10744:2015).

Adopted by 44th AMAF on 26 October 2022

ANNEX 1

VERNACULAR NAMES OF AVOCADO IN THE ASEAN REGION

Country	Vernacular Name
Brunei Darussalam	Avokado
Cambodia	Bor
Indonesia	Alpukat
Lao PDR	Avocado / mak bor
Malaysia	Avokado
Myanmar	Htaw-Pat
Philippines	Abukado / Abokado
Singapore	Avocado
Thailand	Avocado
Vietnam	Bơ