



ASEAN STANDARD FOR PINEAPPLE (ASEAN Stan 3:2006, REV, 1-2012)

1. DEFINITION OF PRODUCE

This standard applies to commercial varieties of pineapples grown from *Ananas comosus* L. Merr. of the Bromeliaceae family, to be supplied fresh to the consumer. Pineapples 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 pineapples must be:

- whole, with or without the crown, and with or without the stem;
- fresh in appearance, including the crown, when present, which should be free of dead or dried leaves;
- sound, produce affected by rotting or deterioration such as to make it unfit for is excluded;
- clean, practically free of any visible foreign matter;
- practically free of pests affecting the general appearance of the produce;
- practically free of damage caused by pests;
- practically free from mechanical damage such as pronounced blemishes
- practically free from physiological damage such as low and/or high temperature
- free of abnormal external moisture, excluding condensation following removal from cold storage;
- free of any foreign smell and/or taste;
- total soluble solids content in the fruit flesh should be at least 12°Brix

2.1.1 The pineapples must have been carefully picked and have reached an appropriate degree of development and ripeness in accordance with criteria proper to the variety and/or commercial type and to the area in which they are grown.

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

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

2.2 CLASSIFICATION

Pineapples are classified in three classes defined below:

2.2.1 “Extra” Class

Pineapples 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 that these do not affect the general appearance of the produce, the quality, the keeping quality and presentation in the package.

The crown, if present, shall be simple and straight with no sprouts.

2.1.2 Class I

Pineapples in this class must be of good quality. They must be characteristic of the variety

The following slight defects, however, may be allowed, provided that 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, including sun spots;
- slight skin defects (i.e. scratches, scars, scrapes and blemishes) not exceeding 4 percent of the total surface area of the fruit

The defects must not, in any case, affect the pulp of the fruit.

The crown, if present, shall be simple and straight or slightly curved with no sprouts.

2.1.3 Class II

This class includes pineapples 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 that the pineapple retains their essential characteristics as regards the quality, the keeping quality and presentation:

- defects in shape;
- defects in colouring, including sun spots;
- skin defects (i.e. scratches, scars, scrapes, bruises and blemishes), not exceeding 8% of the total surface area.

The defects must not, in any case, affect the pulp of the fruit.

The crown, if present, shall be simple or double and straight or slightly curved, with no sprouts.

3 PROVISIONS CONCERNING SIZING

Size is determined by the average weight of the fruit in accordance with the following table:

Size Code	Weight with crown (grams)
1	>2600
2	>2100-2600
3	>1600-2100
4	>1100-1600
5	>900-1100
6	>700-900
7	>500-700
8	250-500

4 PROVISIONS CONCERNING TOLERANCES

Tolerances in respect of quality and size shall be allowed in each lot for produce presented in bulk for produce not satisfying the requirements of the class indicated.

4.1 QUALITY TOLERANCES

4.1.1 "Extra" Class

Five percent by number or weight of pineapples 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 by number or weight of pineapples satisfying the requirements of the class, but meeting those of Class II or, exceptionally, coming within the tolerances of that class.

4.1.3 Class II

Ten percent by number or weight of pineapples satisfying neither the requirements of the class nor the minimum requirements, with the exception of produce affected by rotting or any other deterioration rendering it unfit for consumption.

4.2 SIZE TOLERANCES

For all classes, 10% by number or weight of pineapples corresponding to the size immediately above and/or below that indicated on the package.

5. PROVISIONS CONCERNING PRESENTATION

5.1 UNIFORMITY

The contents of each package must be uniform and contain only pineapples of the same origin, variety and/or commercial type, quality and size. For “Extra” Class, colour and ripeness should be uniform. The visible part of the contents of the package must be representative of the entire contents.

5.2 PACKAGING

Pineapples must be packed in such a way as to protect the produce properly.

The material used inside the packages 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.

Pineapples shall be packed in each container in compliance with the Recommended International Code of Practice for Packaging and Transport of Fresh Fruit and Vegetables (CAC/RCP 44-1995).

5.2.1 Description of the Containers

The containers should meet the quality, hygiene, ventilation and resistance characteristics to ensure suitable handling, shipping and preserving of the pineapples. Package must be free of all foreign matters and smell.

6. MARKING OR LABELLING

6.1 CONSUMER PACKAGES

In addition to the requirements of the Codex General Standard for the Labelling of Pre-packaged Foods (CODEX STAN 1-1985, Rev. 2-1999), the following specific provisions apply:

6.1.1 Nature of Produce

If the produce is not visible from the outside, 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. The absence of the crown should be indicated.

6.2 NON-RETAIL CONTAINERS

Each package must 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 must appear on a document accompanying the goods.

6.2.1 Identification

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

6.2.2 Nature of Produce

Name of produce if the contents are not visible from the outside. Name of variety and/or commercial type (optional). The absence of the crown should be indicated.

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 Identification

- Class;
- Size (size code or average weight in grams);
- Number of units (optional);
- Net weight (optional).

6.2.5 Official Inspection Mark (optional)

7. CONTAMINANTS

7.1 PESTICIDE RESIDUES

Pineapple shall comply with those maximum residue limits established by the Codex Alimentarius Commission, ASEAN Harmonized MRLs of Pesticides, and/or by authority for this commodity..

7.2 OTHER CONTAMINANTS

Pineapple shall comply with those maximum levels established by the Codex Alimentarius Commission and/or by authority for this commodity

8. HYGIENE

8.1 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 Recommended International Code of Practice – General Principle of Food Hygiene (CAC/RCP 1 – 1969, Rev. 3 – 1997), and other relevant Codex texts such as Codes of Hygienic Practice and Codex of Practice.

8.2 The produce should comply with any microbiological criteria established in accordance with the Principles for the Establishment and Application of Microbiological Criteria for Foods (CAC/GL 21-1997)

9. METHOD 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 Harmonized MRLs for Pesticides

Angeles, Domingo E. and Nieves, Allan C. 1977. Mga Gabay sa Matagumpay na Produksiyon ng Pinya. Philippines. University of the Philippines Los Baños, College, Laguna.

Codex Alimentarius Commission. Revised Codex Standard for Pineapple (Codex Stan 183 -1993, Rev. 1-1999)

Department of Agriculture - Bureau of Agriculture and Fisheries Product Standards. Philippine National Standard, Fresh Fruit – Pineapple Specification.PNS/BAFPS 09:2004. ICS 65.020.20.

Department of Standards Malaysia. MS 1041: 2001 Specification for Fresh Pineapple (First Revision). ICS:67.080.

Department of Agriculture and Agrifood – Ministry of Industry and Primary Resources Brunei Darussalam. Proposed Draft Brunei Standard for Pineapple. 2005

Galang, F.G. 1955. Fruit and Nut growing in the Philippines. Araneta Institute of Agriculture, Malabon, Manila, Philippines. 416 p.

Indonesian National Standard for Pineapple SNI 7422:2009, ICS 07.080.10

National Bureau of Agricultural Commodity and Food Standards, 2003. Thai Agricultural Standard: Pineapple. TAS 3-2003. Ministry of Agriculture and Cooperatives, Bangkok, Thailand.

Pantastico, E.B. (ed.). 1975. Postharvest Physiology, Handling and Utilization of tropical and Subtropical Fruits and vegetables. Connecticut: Westport

PNS/ISO 874:1980 (E) – Fresh Fruits and Vegetables – Sampling

PNS/BAFPS 09:2004. Fresh Fruit – Pineapple. Specification

Serrano, E.P. 1996. Draft Standard for ‘Queen’ Pineapple; PHTRC-UPLB.

Standardization of Philippine Fresh Pineapples and for other Purposes. Bureau of Standards. Department of Trade and Industry; No. 27 Series of 1968.

Vernacular Names for Pineapple

Country	Vernacular Name(s)
Brunei Darussalam	Nanas paun Nanas pisang
Cambodia	Manash
Indonesia	Nenas
Lao PDR	Mak Nat
Malaysia	Nanas
Philippines	Pinya
Thailand	Subparod
Vietnam	Dua / Thom