



ASEAN STANDARD FOR BROCCOLI (ASEAN Stan 48:2016)

1. DEFINITION OF PRODUCE

This standard applies to commercial varieties of broccoli grown from *Brassica oleracea* L. var. *italica* of the Brassicaceae family, to be supplied fresh to the consumer, after preparation and packaging. Broccoli 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 broccoli must be:

- whole;
- fresh;
- compact;
- well-trimmed;
- maximum stem length of 10 cm;
- free of bloom or free of opening flower;
- characteristic of the variety;
- 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 pests and damage caused by them 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 smell and/or taste.

2.1.1 Broccoli should be harvested and have reached an appropriate degree of development in accordance with criteria proper to the variety and to the area in which they are grown.

The development and condition of the broccoli should 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

Broccoli is classified in two classes defined below:

2.2.1 Class I

Broccoli in this class must be of good quality. It must be characteristic of the variety and/or commercial type.

Broccoli must be:

- firm and compact
- tightly-grained
- free of enlarged flower bud

The buds must be fully closed.

Leaves extending above the head may be allowed to provide green, sound and fresh appearance.

2.2.2 Class II

This class includes broccoli that do not qualify for inclusion in Class I but satisfy the minimum requirements specified above.

Broccoli may be:

- slightly loose and less compact
- less tightly-grained.

The buds must be practically closed.

Leaves extending above the head may be allowed, provided these are green, sound, fresh and tender.

3. PROVISIONS CONCERNING SIZING

Size is determined by the weight or maximum diameter of the equatorial section of the inflorescence (floral head), in accordance with the following tables:

Table 1. Size classification of broccoli based on weight

Size Code	Weight (g)
1	>400
2	>300-400
3	>200-300
4	100-200

Table 2. Size classification of broccoli based on diameter

Size Code	Diameter (cm)
1	>14
2	>12-14
3	>10-12
4	>8-10
5	6-8

4. PROVISIONS CONCERNING TOLERANCES

Tolerances in respect of quality shall be allowed in each package (or 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 Class I

Five percent by number or weight of broccoli not satisfying the requirements of the class, but meeting those of Class II or, exceptionally, coming within the tolerances of that class.

4.1.2 Class II

Ten percent by number or weight of broccoli satisfying neither the requirements of the class nor the minimum requirements, with the exception of produce affected by rotting or any other deterioration.

[4.2 SIZE TOLERANCES]

For all classes, 10% by number or weight of broccoli 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) must be uniformed and contained only broccoli of the same variety, origin, quality and size. The visible part of the contents of the package (or lot for produce presented in bulk) must be representative of the entire contents.

5.2 PACKAGING

Broccoli must be properly packed in such a way as to protect the produce. The materials used inside the package must be 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.

Broccoli shall be packed in each container in compliance with the *Recommended International Code of Practice for Packaging and Transport of Tropical Fresh Fruits and Vegetables*. (CAC/RCP 44-1995, Amd. 1-2004).

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 broccoli. Packages (or lot for produce presented in bulk) must be free of all foreign matter and smell.

6. MARKING OR LABELLING

6.1 CONSUMER PACKAGES

In addition to the requirements of the *Codex General Standard for the Labelling of Prepackaged Foods* (CODEX STAN 1-1985, Rev. 1-1991), the following specific provisions apply:

6.1.1 Nature 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.

6.2 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.

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

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

6.2.5 Official Inspection Mark (optional)

7. CONTAMINANTS

7.1 PESTICIDE RESIDUES

Broccoli 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

7.2.1 Heavy Metals

Broccoli shall comply with those maximum levels for heavy metals established by the Codex Alimentarius Commission and/or by authority for this commodity.

8. HYGIENE

8.1 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 *Recommended International Code of Practice – General Principles of Food Hygiene* (CAC/RCP 1-1969, Rev 4-2003), and other relevant Codex texts such as Codes of Hygienic Practice and Codes of Practice.

8.2 The product 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. 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 Harmonized MRLs of Pesticides.

Bureau of Agriculture and Fisheries Standards. 2005. Philippine National Standard Vegetables – Broccoli (*Brassica oleracea* L. var. *italica* Plenck)– Grading and Classification (PNS/BAFS 16:2005 ICS 65.020.20). Quezon City

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

Information of Thailand for Broccoli 2015

Malaysian Standard MS 2618 : 2015 Fresh Broccoli (*Brassica oleracea* L. var. *italica*) – Specification) (ICS: 67.080.20)

Principles for the Establishment and Application of Microbiological Criteria for Foods (CAC/GL 21-1997).

Recommended International Code of Practice for Packaging and Transport of Tropical Fresh Fruits and Vegetables. (CAC/RCP 44-1995, Amd. 1-2004).

Recommended International Code of Practice – General Principles of Food Hygiene (CAC/RCP 1-1969, Rev 4-2003).

UNECE STANDARD FFV- 48 Concerning the marketing and commercial quality control of broccoli 2010 EDITION

ANNEX 1

VERNACULAR NAMES OF BROCCOLI IN THE ASEAN REGION

Country	Vernacular Name
Brunei Darussalam	Brokoli
Cambodia	(Khatna Phka Khiev)
Indonesia	Brokoli
Lao PDR	Ka Lam Dok Kiew
Malaysia	Brokoli
Myanmar	Bro Ko Li Pan Go Bi Sein Pan Moun la Sein
Philippines	Broccoli
Singapore	
Thailand	Broccoli
Viet Nam	Xup Lo Xanh