



**ASEAN STANDARD FOR BITTER GOURD**  
(ASEAN Stan 47:2016)

**1. DEFINITION OF PRODUCE**

This standard applies to commercial varieties of bitter gourd grown from *Momordica charantia* L. of the Cucurbitaceae family, to be supplied fresh to the consumer, after preparation and packaging. Bitter gourd 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 bitter gourd must be:

- whole;
- fresh;
- characteristic of the variety;
- firm;
- free of cracks;
- 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;
- practically free from mechanical and 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; and
- free of pronounced blemishes.

The peduncle or stem, if present, should not exceed 2.5 cm.

**2.1.1** The bitter gourd must have been harvested and have reached an appropriate degree of maturity in accordance with criteria proper to the variety and the area in which they are grown. The development and condition of the bitter gourd 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**

Bitter gourd is classified in three classes defined below:

### **2.2.1 "Extra" Class**

Bitter gourd in this class must be of superior quality. It must be free of 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**

Bitter gourd in this class must be of good quality. The following 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:

- slight defects in shape; and
- slight defects such as bruising, scratches or other mechanical damage. The total area affected shall not exceed 5% of the total surface area of the fruit.

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

### **2.2.3 Class II**

This class includes bitter gourd which do not qualify for inclusion in the higher classes, but satisfy the minimum requirements specified in Section 2.1 above. The following may be allowed, provided the bitter gourd retain their essential characteristics as regards the quality, the keeping quality and presentation:

- defects in shape; and
- defects such as bruising, scratches or other mechanical damage. The total area affected shall not exceed 10% of the total surface area of the fruit.

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

## **3. PROVISIONS CONCERNING SIZING**

Size is determined by length or weight with the following tables:

Table 1. Size classification based on fruit length

Size Code	Length (cm)
1	>30
2	>25-30
3	>20-25
4	>15-20
5	≤15

Table 2. Size classification based on fruit weight

Size Code	Weight (gram)
1	>600
2	>500-600
3	>400-500
4	>300-400
5	≤300

#### **4. PROVISIONS CONCERNING TOLERANCES**

Tolerances in respect of quality and size 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 "Extra" Class**

Five percent by number or weight of bitter gourd 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 bitter gourd 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.

###### **4.1.3 Class II**

Ten percent by number or weight of bitter gourd satisfying neither the requirements of the class nor the minimum requirements and without rotten fruit.

##### **4.2 SIZE TOLERANCES**

For all classes, 10% by length or weight of bitter gourd 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 uniform and contain only bitter melon of the same origin, variety, 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**

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

Bitter melon 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 bitter melon. 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**

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.

### **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**

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

### **7.2 OTHER CONTAMINANTS**

#### **7.2.1 Heavy Metals**

Bitter gourd 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:**

Bureau of Agriculture and Fisheries Product Standards. 2008. Philippines National Standard Fresh Vegetables – Ampalaya (*Momordica charantia* L.) - Grading and Classification (PNS/BAFPS 61:2008 ICS:67.080). Quezon City

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

Information for Brunei Darussalam on Bitter Gourd. 2015

Information of Thailand for Bitter Gourd. 2015.

Malaysian Standard MS 1146:1989 Specification for Fresh Bitter Gourd (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)

## ANNEX 1

## VERNACULAR NAMES OF BITTER GOURD IN THE ASEAN REGION

<b>Country</b>	<b>Vernacular name</b>
Brunei Darussalam	Peria Peria katak
Cambodia	Marash
Indonesia	Paria Pare
Lao PDR	Mak Ha
Malaysia	Peria Peria Katak
Myanmar	Kje Hin Gar Thee Kje Hin Gar (Taw Thee)
Philippines	Ampalaya Amorgoso
Singapore	
Thailand	Mara Mara keenok
Vietnam	Muop Dang Kho Qua