



**ASEAN STANDARD FOR  
FRESH SHIITAKE MUSHROOM**  
(ASEAN Stan 44:2015)

## **1. DEFINITION OF PRODUCE**

This standard applies to commercial varieties of shiitake mushroom grown from *Lentinula edodes* (Berk) {syn. *Lentinus edodes* (Berk)} of the Marasmiaceae {syn. Tricholomataceae} family, to be supplied fresh to the consumer. Shiitake mushroom 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 shiitake mushroom must be:

- whole;
- fresh;
- 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;
- 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
- Well-trimmed, the trimming at the stalk base shall be clean and a slight discoloration of the cut surface due to storage is acceptable.

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

Shiitake mushroom is classified in three classes defined below:

### 2.2.1 "Extra" Class

Shiitake mushroom 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

Shiitake mushroom 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 of color and shape; and
- slight defects on the cap due to rubbing and other superficial defect such as breakage and blemish not exceed 5% of the total surface area.

### 2.2.3 Class II

This class includes shiitake mushroom 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 Shiitake mushroom retains their essential characteristics as regards the quality, the keeping quality and presentation:

- slight defects of color and shape; and
- slight defects on the cap due to rubbing and other superficial defect such as breakage and blemish not exceed 10% of the total surface area.

## 3. PROVISIONS CONCERNING SIZING

Size is determined by diameter of the cap with the following table:

Size Code	Diameter of the cap (in cm)
1	> 4
2	>3-4
3	>2-3
4	≤2

## **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 shiitake mushroom 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 shiitake mushroom not satisfying the requirements of the class, but meeting those of class II or, exceptionally, coming within the tolerances of the class.

#### **4.1.3 Class II**

Ten percent by number or weight of shiitake mushroom 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 shiitake mushroom 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 must be uniform and contain only shiitake mushroom of the same origin, variety, quality and size. The visible part of the contents of the package must be representative of the entire contents.

### **5.2 PACKAGING**

Shiitake mushroom 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.

Shiitake mushroom 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 shiitake mushroom. Packages 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<sup>1</sup> 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**

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<sup>1</sup> Impossible to remove

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**

Shiitake mushroom 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**

Shiitake mushroom 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:***

Proposed Draft Malaysian Standard for Shiitake Mushroom

Thai Agricultural Standard for Fresh Shiitake mushroom (TAS 1506:2008)

**ANNEX 1**

## VERNACULAR NAMES OF SHIITAKE MUSHROOM IN THE ASEAN REGION

<b>Country</b>	<b>Common name</b>
Brunei Darussalam	Cendawan Shiitake, Kulat Shiitake
Cambodia	Pset Khmao Pset Shiitake
Indonesia	Jamur Shiitake
Lao PDR	Hed Shiitake, Hed Hom
Malaysia	Cendawan Shiitake
Myanmar	Shitake Hmou
Philippines	Kabute
Singapore	
Thailand	Hed Hom
Vietnam	