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मानक

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IS 14266 (1995): Canned Mushrooms [FAD 10: Processed Fruits and Vegetable Products]



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“Knowledge is such a treasure which cannot be stolen”



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भारतीय मानक

डिब्बा बंद मशरूम — विशिष्टि

*Indian Standard*

# CANNED MUSHROOMS — SPECIFICATION

UDC 664.84.036.5 [63.82]

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**BUREAU OF INDIAN STANDARDS**  
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG  
NEW DELHI 110002

## FOREWORD

This Indian Standard was adopted by the Bureau of Indian Standards after the draft finalized by the Processed Fruits and Vegetable Products Sectional Committee had been approved by the Food and Agriculture Division Council.

Mushrooms are edible fungi being cultivated in many parts of our country for edible consumption. Mushrooms are popular in the Indian diet, not only for their delicacy and flavour, but also for their nutritional value and are taken as a supplementary food item in the vegetarian diet. Besides being sold fresh in the Indian market, mushroom canning is gaining importance in the food industry.

To provide guidelines for ensuring the quality of canned mushrooms, being marketed internally and also being exported, this Indian standard has been formulated. It is based on CODEX STAN 55-1981 Canned mushrooms, published by the Codex Alimentarius Commission.

During the formulation of this standard due consideration has been given to the provisions of the *Prevention of Food Adulteration Act, 1954* and Rules framed thereunder and also to the *Fruit Products Order, 1955* and the *Standards of Weights and Measures (Packaged Commodities) Rules, 1977*. The standard is subject to the restrictions imposed under these, wherever applicable.

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS 2 : 1960 'Rules for rounding off numerical values (*revised*)'. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

## *Indian Standard*

# CANNED MUSHROOMS — SPECIFICATION

### 1 SCOPE

This standard prescribes the requirements for canned mushrooms.

### 2 REFERENCES

The Indian Standards listed in Annex A are necessary adjuncts to this standard.

### 3 TERMINOLOGY

For the purpose of this standard, the following definitions shall apply.

#### 3.1 Buttons

Whole mushrooms, with attached stems not exceeding 5 mm in length, measured from the bottom of the veil.

#### 3.2 Sliced Buttons

Buttons cut into slices 2 mm to 6 mm thick.

#### 3.3 Whole

Whole mushrooms, with attached stems cut to a length not exceeding the diameter of the cap, measured from the bottom of the veil.

#### 3.4 Sliced or Sliced Whole

Mushrooms cut into slices 2 mm to 8 mm thick.

#### 3.5 Random Sliced

Mushrooms cut into slices of varying thickness and in which the slices may deviate materially from cuts approximately parallel to the axis of the mushroom.

#### 3.6 Quarters

Whole mushrooms cut, parallel to the axis of the mushroom, into four approximately even parts.

#### 3.7 Stems and Pieces (Cut)

Pieces of caps and stems of irregular sizes and shapes.

#### 3.8 Grilling

Selected open-veiled mushrooms not exceeding 40 mm in diameter, with attached stems not exceeding the diameter of the cap, measured from the bottom of the veil scar.

#### 3.9 Other Optional Styles

Other forms, not specifically described in 3.1 through 3.8 such as diced or chopped, which are appropriately described on the label.

### 4 REQUIREMENTS

#### 4.1 General Requirements

4.1.1 Canned mushrooms shall be prepared from fresh mushrooms, which shall be in good condition and after cleaning and trimming shall be sound and free from extraneous matter; these shall be packed with water or other suitable liquid medium, seasonings, and other ingredients, appropriate to the product; processed by heat in an appropriate manner, before or after being sealed in a container, so as to prevent spoilage.

#### 4.1.2 Varietal Types

Any suitable variety (cultivar) of the genus *Agaricus* (*Psalliota*), including *A. bisporus*, may be used.

#### 4.1.3 Colour

- a) White or cream, and
- b) Brown.

#### 4.2 Styles

The product may be presented in any one of the following styles defined under 3.

- a) Buttons,
- b) Sliced buttons,
- c) Whole,
- d) Sliced or sliced whole,
- e) Random sliced,
- f) Quarters,
- g) Stems and pieces (cut),
- h) Grilling, and
- j) Other optional styles.

#### 4.3 Types of Packs

Canned mushrooms may be categorized into the following packs, depending on the covering media used:

- a) Regular or natural pack
  - in water, brine and/or juice excluding from the mushrooms;
- b) Vinegar pack
- c) Oil pack
- d) Sauce pack
  - in butter or butter sauce;
  - in cream sauce;
  - in sauce other than a butter or cream sauce;
  - in spiced curry.

#### 4.7 Microbiological Requirements

When tested by the methods prescribed in 18 of IS 2860 : 1964, the product shall:

- a) be free from microorganisms capable of development under normal conditions of storage, and
- b) not contain any substance originating from microorganisms in amounts which may represent a hazard to health.

4.7.1 The product shall have received a processing treatment sufficient to destroy all spores of *Clostridium botulinum*, when tested by the method prescribed in IS 5887 (Part 4) : 1976.

#### 4.8 Minimum Fill

The container shall be well filled with mushrooms and the product (including packing medium) shall occupy not less than 90 percent of the water capacity of the container when tested by the method prescribed in Annex C of IS 3248 : 1993. The water capacity of the container is the volume of distilled water at 27°C which the sealed container will hold when completely filled.

#### 4.9 Hygienic Requirements

The product shall be prepared in accordance with the hygienic practices prescribed in IS 6542 : 1972.

### 5 PACKING

The product shall be packed in either hermetically sealed open top sanitary cans made from tin plates and inside lacquered or in food grade plastic containers or aseptic packages.

### 6 MARKING

The following information must be clearly and indelibly marked on the pack:

- a) Name, type and style of the material with the brand name, if any;
- b) Name and address of manufacturer;
- c) Month and year of manufacture;
- d) Batch or code number;
- e) Net mass;
- f) List of ingredients in descending order;
- g) List of additives, if used; and
- h) The words 'Best before .....' (month and year to be indicated);
- k) Any other details required under the *Standards of Weights and Measures (Packaged Commodities) Rules, 1977, Prevention of Food Adulteration Rules, 1955 and Fruits Products Order, 1955.*

#### 6.1 BIS Certification Marking

The product may also be marked with Standard Mark.

6.1.1 The use of the Standard Mark is governed by the provisions of Bureau of Indian Standards Act, 1986 and the Rules and Regulations made thereunder. The details of conditions under which the licence for the use of Standard Mark may be granted to manufacturers or producers may be obtained from the Bureau of Indian Standards.

### 7 SAMPLING

7.1 Representative samples of the material shall be drawn and tested for conformity to this standard by the method prescribed in 3 of IS 2860 : 1964.

## ANNEX A

(Clause 2)

### LIST OF REFERRED INDIAN STANDARDS

| IS No.               | Title  | IS No.      | Title  |
|----------------------|--|-------------|--|
| 2860 : 1964          | Methods of sampling and test for processed fruits and vegetables   |             | <i>Clostridium botulinum</i> and <i>Bacillus cereus</i> and enumeration of <i>Clostridium welchii</i> and <i>Bacillus cereus</i> |
| 3248 : 1993          | Canned tomatoes ( <i>first revision</i> )  |             |  |
| 5887 (Part 4) : 1976 | Methods for detection of bacteria responsible for food poisoning : Part 4 Isolation and identification of <i>Clostridium welchii</i> , | 6542 : 1972 | Code for hygienic conditions for fruit and vegetable canning units   |
|                      |  | 7732 : 1975 | Apple juice  |

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This Indian Standard has been developed from Doc : No. FAD 10 ( 2886 ).

### Amendments Issued Since Publication

| Amend No. | Date of Issue | Text Affected |
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## BUREAU OF INDIAN STANDARDS

### Headquarters:

Manak Bhavan, 9 Bahadur Shah Zafar Marg, New Delhi 110002  
Telephones : 331 01 31, 331 13 75

Telegrams : Manaksanstha  
(Common to all offices)

### Regional Offices :

Central : Manak Bhavan, 9 Bahadur Shah Zafar Marg  
NEW DELHI 110002

Telephone  
{ 331 01 31  
331 13 75

Eastern : 1/14 C. I.T. Scheme VII M, V. I. P. Road, Maniktola  
CALCUTTA 700054

{ 37 84 99, 37 85 61  
37 86 26, 37 86 62

Northern : SCO 335-336, Sector 34-A, CHANDIGARH 160022

{ 60 38 43  
60 20 25

Southern : C. I. T. Campus, IV Cross Road, MADRAS 600113

{ 235 02 16, 235 04 42  
235 15 19, 235 23 15

Western : Manakalaya, E9 MIDC, Marol, Andheri (East)  
BOMBAY 400093

{ 632 92 95, 632 78 58  
632 78 91, 632 78 92

Branches : AHMADABAD. BANGALORE. BHOPAL. BHUBANESHWAR.  
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