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# **United States Standards for Grades of Mushrooms**

**Effective September 6, 2016**

This issue of the United States Standards for Grades of Mushrooms (81 FR 51297) supersedes the previous issue which has been in effect since July 15, 1966.

Voluntary U.S. grade standards are issued under the authority of the Agricultural Marketing Act of 1946, which provides for the development of official U.S. grades to designate different levels of quality. These grade standards are available for use by producers, suppliers, buyers, and consumers. As in the case of other standards for grades of fresh and processed fruits, vegetables, and specialty crops these standards are designed to facilitate orderly marketing by providing a convenient basis for buying and selling, for establishing quality control programs, and for determining loan values.

The U.S. grade standards and inspection instructions for all fresh and processed fruits, vegetables, and specialty crops are available on the internet and upon request at the address below. These documents provide detailed interpretations of the grade standards and provide step-by-step procedures for grading the product.

Grade standards are issued by the U.S. Department of Agriculture (USDA) after careful consideration of all data and views submitted during rulemaking. The Department welcomes suggestions for improving the standards in future revisions. Comments may be submitted to, and copies of standards and inspection instructions obtained from:

Director, Specialty Crops Inspection Division  
Specialty Crops Program,  
USDA, Agricultural Marketing Service  
1400 Independence Avenue, SW, STOP 0240  
Washington, D.C. 20250

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**Authority:** 7 U.S.C. 1621-1627.

**Note:** Compliance with the provisions of these standards shall not excuse failure to comply with the provisions of the Federal Food, Drug, and Cosmetic Act, or with applicable State laws and regulations.

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## United States Standards for Grades of Mushrooms

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## Grades

### §51.3385 U.S. No. 1.

“U.S. No. 1” consists of fresh mushrooms of similar varietal characteristics which are mature, at least fairly well shaped, well trimmed, free from open veils, disease, spots, insect injury, and decay, and from damage by any cause.

- (a) **Size.** Size is specified in terms of diameter and unless otherwise specified meets the requirements of one of the following size classifications:
- (1) **Small to medium** -- up to 1-5/8 inches in diameter;
  - (2) **Large** -- over 1-5/8 inches in diameter.
- (b) **Tolerances.** In order to allow for variations incident to proper grading and handling the following tolerances, by weight, are provided as specified:
- (1) **At shipping point**<sup>1</sup>. 5 percent for mushrooms in any lot which fail to meet the requirements of this grade, but not more than one-fifth of this amount or 1 percent shall be allowed for mushrooms affected by disease, spots, or decay.
  - (2) **En route or at destination.** 10 percent for mushrooms in any lot which have open veils. 5 percent for mushrooms in any lot which fail to meet the remaining requirements of this grade, but not more than one-fifth of this latter amount or 1 percent shall be allowed for mushrooms affected by disease, spots, or decay.
  - (3) **For off-size.** Ten percent for mushrooms in any lot which fail to meet the specified size requirements.

### §51.3386 U.S. No. 2.

“U.S. No. 2”. The requirements for this grade are the same as for U.S. No. 1 except for a greater tolerance for open veils and a larger tolerance for defects.

- (a) **Size.** Size is specified in terms of diameter and unless otherwise specified meets the requirements of one of the following size classifications:
- (1) **Small to medium** -- up to 1-5/8 inches in diameter;
  - (2) **Large** -- over 1-5/8 inches in diameter.

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<sup>1</sup> Shipping point, as used in these standards, means the point of origin of the shipment in the producing area or at port of loading for ship stores or overseas shipment or, in the case of shipments from outside the continental United States, the port of entry into the United States.

- (b) **Tolerances.** In order to allow for variations incident to proper grading and handling the following tolerances, by weight, are provided as specified:
- (1) **At shipping point.** Ten percent for mushrooms in any lot which have open veils. Ten percent for mushrooms in any lot which fail to meet the remaining requirements of this grade, but not more than one-tenth of this latter amount or 1 percent shall be allowed for mushrooms affected by disease, spots, or decay.
  - (2) **En route or at destination.** 25 percent for mushrooms in any lot which have open veils. 10 percent for mushrooms in any lot which fail to meet the remaining requirements of this grade, but not more than one-tenth of this latter amount or 1 percent shall be allowed for mushrooms affected by disease, spots, or decay.
  - (3) **For off-size.** 10 percent for mushrooms in any lot which fail to meet the specified size requirements.

**Reserved**  
**§51.3387      Reserved.**

**Application of Tolerances**  
**§51.3388      Application of tolerances.**

The contents of individual packages in the lot, based on sample inspection, are subject to the following limitations:

- (a) For a tolerance of 10 percent or more, individual packages in any lot shall have not more than one and one-half times the tolerance specified: *Provided*, That the average for the entire lot is within the tolerance specified for the grade.
- (b) For a tolerance of less than 10 percent, individual packages in any lot shall have not more than double the tolerance specified, except that at least one defective and one off-size specimen may be permitted in any package: *Provided*, That the average for the entire lot is within the tolerance specified for the grade.

**Definitions**  
**§51.3389      Similar varietal characteristics.**

“**Similar varietal characteristics**” means that the mushrooms are of the same general color. For example, white and brown mushrooms shall not be mixed in the same container.

**§51.3390      Mature.**

“**Mature**” means that the mushroom is firm and well developed; the veil area may be

stretched but not broken.

**§51.3391 Fairly well shaped.**

“**Fairly well shaped**” means that the mushroom cap is not flattened, scalloped, indented or otherwise deformed to an extent which materially detracts from the appearance or marketing quality.

**§51.3392 Well trimmed.**

“**Well trimmed**” means that the stems are smoothly cut, free from rough fleshy butts, the flared portion of the butt is removed and the remaining portion of the stem does not exceed the depth of the cap.

**§51.3393 Open veils.**

“**Open veils**” means that the cap has expanded to the extent that the protective covering or “veils” joining the margin of the cap to the stem have broken and exposed the gills or underside of the cap.

**§51.3394 Spots.**

“**Spots**” means pitted or discolored areas.

**§51.3395 Damage.**

“**Damage**” means any specific defect described in this section; or an equally objectionable variation of any one of these defects, any other defect, or any combination of defects which materially detracts from the appearance, or the edible or marketing quality of the individual mushroom or of the mushrooms in the lot. The following specific defects shall be considered as damage:

- (a) Discoloration when the color of the cap or stem materially affects the appearance or marketing quality of the mushrooms.
- (b) Dirt when any amount is embedded in the cap or stem.

**§51.3396 Length of stem.**

“**Length of stem**” means the greatest distance as measured from the point of attachment of the “veils” on the stem to the butt.

**§51.3397 Diameter.**

“**Diameter**” means the greatest dimension of the cap measured at right angles to the stem.

**Metric Conversion Table**  
**§51.3398 Metric conversion table**

Inches	Millimeters (mm)
1/8 equals	3.2
1/4 equals	6.4
3/8 equals	9.5
1/2 equals	12.7
5/8 equals	15.9
3/4 equals	19.1
7/8 equals	22.2
1 equals	25.4
1-1/4 equals	31.8
1-1/2 equals	38.1
1-3/4 equals	44.5
2 equals	50.8
3 equals	76.2
4 equals	101.6