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Crops
Program

Specialty
Crops
Inspection
Division

Mushrooms

Shipping Point and Market Inspection Instructions

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These instructions contain information and guidelines to help personnel of the U.S. Department of Agriculture's (USDA) Specialty Crops Inspection (SCI) Division uniformly apply and interpret U.S. grade standards, other similar specifications, and special procedures.

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Comments may be submitted to:

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These instructions replace the Mushrooms Shipping Point and Market Inspection Instructions dated March 2004, and include, but not limited to, all previous correspondence, memos, inspection instructions, or procedures.

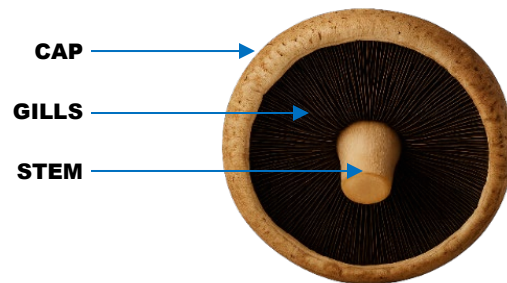
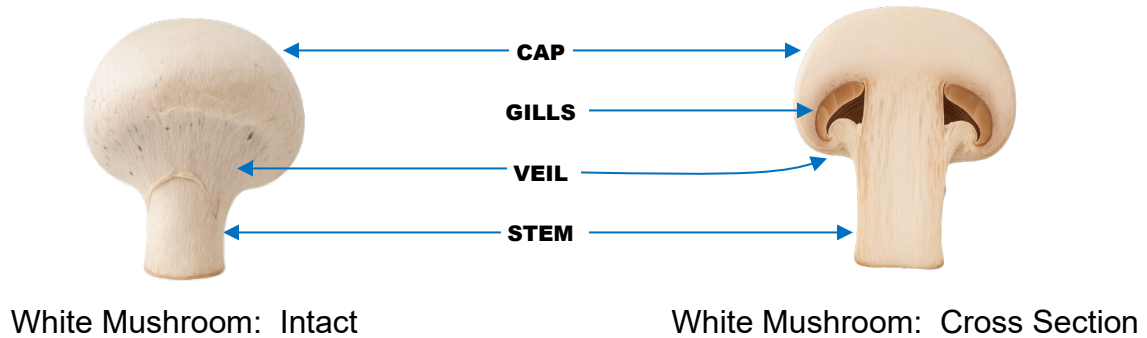
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SHIPPING POINT AND MARKET INSPECTION INSTRUCTIONS FOR MUSHROOMS

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MUSHROOM TYPES AND ANATOMY



Portabella Mushroom: Underside

Cap: The round, top part of the mushroom that protects the gills (underneath).

Gills: The thin, paper-like ribs found underneath the cap. The location where microscopic spores are produced (for reproduction).

Veil: Temporary membrane that protects the gills. In portabella mushrooms, the veil breaks, completely exposing the gills underneath the cap.

Stem: The vertical, stalk-like structure that supports the cap.

GENERAL

The U.S. Standards for Grades of Mushrooms (mushroom standards) apply to the following types of mushrooms (*Agaricus bisporus*):

- **U.S. No. 1 and U.S. No. 2 grades:** Cultivated white and brown button mushrooms which contain closed veils. These include the crimini (also spelled cremini) variety, otherwise known as baby bellas.
- **U.S. No. 1 Portabella grade:** Portabella mushrooms (also spelled portobello) are classified as open mushrooms with fully exposed gills and no residual veil, exhibiting a slight downturn or cup-shaped form along the cap edges. These are sometimes referred to as ports or giant criminis.

Besides portabella mushrooms, the mushroom standards cannot be applied to other varieties with open veils and exposed gills. When inspecting these other varieties, apply the procedures used for inspecting commodities with no established U.S. grades (NOG). Do not use the terms grade defects, injury, damage, or serious damage. Furthermore, do not use terms such as materially or seriously affecting the appearance as these terms are generally used to describe damage and serious damage. Describe the objectionable factors in terms of color, area affected, depth, etc.

In addition, the mushroom standards may not be applied to sliced mushrooms. When inspected, they too will be handled as a NOG. Refer to the [General Market Manual](#), as well as the [Fresh Cut Produce Inspection Instructions](#) for more detail.

Any portion of these instructions beginning with §51 and followed with **bold** print is material copied directly from the [U.S. Standards for Grades of Mushrooms](#).

REPRESENTATIVE SAMPLING

Obtaining representative samples is essential. Accurate certification is possible only if the samples examined are truly representative of the entire lot or accessible portion. Sample all portions of a lot or load even if it is difficult to reach all layers or parts. If you cannot access the entire lot for sampling, restrict the inspection and certificate to the accessible portion.

SIZE OF SAMPLE

The tolerances in the mushroom standards are determined on the basis of weight. When inspecting consumer packages, the individual package will be the sample size.

When inspecting packages in baskets over two pounds, or when loose in flats, or bulk, the sample will consist of at least one pound (16 ounces). Double the sample size (at

least 2 pounds or 32 ounces) in at least one sample that exceeds the application of tolerances.

To make certain that the sample selected is representative, always obtain some of the mushrooms from the bottom of each basket sampled.

NUMBER OF SAMPLES

In general, all unrestricted lots will have a minimum of 3 samples examined (lots with less than 3 containers will have all containers examined to be considered unrestricted).

As a general guide, the goal is to sample:

- 1% of the containers for lots with up to 2,000 containers.
- Two-thirds of 1% (0.67%) for lots exceeding 2,000 containers.

The exact number of samples may vary depending on the number of defects found in the lot. Very high, very low, or inconsistent amounts of defects may change the number of samples to less or more than the goals above. It is entirely the inspector's responsibility to examine enough samples to ensure that the certificate issued will accurately describe the quality and condition of the lot. Refer to the [General Market Manual](#) for additional guidance on number of samples.

When sampling mushrooms packed in consumer units within master containers, apply the sampling rate described above to the number of master containers. However, depending on the packaging type/number of specimens, one or more consumer units may be selected for sampling from each master container. Be consistent and sample the same amount of consumer units from each master container selected.

Example: 300 master cartons white mushrooms 10 x 8 oz; take 2 samples from 3 master units = 6 total samples.

TOLERANCES AND APPLICATION OF TOLERANCES

TOLERANCES

§51.3389 Tolerances. In order to allow for variations incident to proper grading and handling the following tolerances, by weight, are provided as specified:

(a) Defects.

(1) U.S. No. 1.

- (i) At shipping point.¹ 5 percent for mushrooms in any lot which have open veils and 8 percent for mushrooms in any lot which fail to meet the remaining requirements of this grade, but not more than 1 percent shall be allowed for mushrooms affected by disease (exclusive of spots) or decay.**
- (ii) En route or at destination. 10 percent for mushrooms in any lot which have open veils and 12 percent for mushrooms in any lot which fail to meet the remaining requirements of this grade: *Provided*, That included in this amount not more than the following shall be allowed:**
 - (A) 8 percent for permanent defects; and**
 - (B) 2 percent for mushrooms affected by disease (exclusive of spots) or decay.**

(2) U.S. No. 2.

- (i) At shipping point. 10 percent for mushrooms in any lot which have open veils and 12 percent for mushrooms in any lot which fail to meet the remaining requirements of this grade, but not more than 1 percent shall be allowed for mushrooms affected by disease (exclusive of spots) or decay.**
- (ii) En route or at destination. 25 percent for mushrooms in any lot which have open veils and 15 percent for mushrooms in any lot which fail to meet the remaining requirements of this grade: *Provided*, That included in this amount not more than the following shall be allowed:**

¹ 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.

(A) 12 percent for permanent defects; and

(B) 2 percent for mushrooms affected by disease (exclusive of spots) or decay.

(3) U.S. No. 1 Portabella.

(i) At shipping point. 8 percent for mushrooms in any lot which fail to meet the requirements of the grade, but not more than 1 percent shall be allowed for mushrooms affected by disease (exclusive of spots) or decay.

(ii) En route or at destination. 12 percent for mushrooms in any lot which fail to meet the requirements of the grade: *Provided*, That included in this amount not more than the following shall be allowed:

(A) 8 percent for permanent defects; and

(B) 2 percent for mushrooms affected by disease (exclusive of spots) or decay.

(b) Off-size. 10 percent for mushrooms in any lot which fail to meet a specified diameter.

SUMMARY OF TOLERANCES

Shipping Point

	U.S. No. 1	U.S. No. 1 Portabella	U.S. No. 2
Size			
Off-size	10%	10%	10%
Defects			
Open veils	5%	N/A	10%
Total defects, including:	8%	8%	12%
Disease (exclusive of spots) or decay	1%	1%	1%

En Route or Destination

	U.S. No. 1	U.S. No. 1 Portabella	U.S. No. 2
Size			
Off-size	10%	10%	10%
Defects			
Open veils	10%	N/A	25%
Total defects, including:	12%	12%	15%
Permanent defects	8%	8%	12%
Disease (exclusive of spots) or decay	2%	2%	2%

APPLICATION OF TOLERANCES

§51.3390 Application of Tolerances. The contents of individual packages in the lot, based on sample inspection, are subject to the following limitations:
Provided, That the average for the entire lot is within the tolerance specified for the grade.

- (a) For packages containing more than 1 pound:
 - (1) For a tolerance of 10 percent or more, individual packages in any lot shall have not more than one and one-half (1.5) times the tolerance specified.
 - (2) 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 2 defective and 2 off-size specimens may be permitted in any package.
- (b) For packages containing 1 pound or less (except those containing 4 or fewer mushrooms), individual packages in any lot shall have not more than 4 times the tolerance specified, except that at least 2 defective and 2 off-size specimens may be permitted in any package.
- (c) For packages containing 4 or fewer mushrooms, individual packages in any lot are not restricted as to the percentage of defects and off-size mushrooms.

SUMMARY OF APPLICATION OF TOLERANCES – PACKAGES OVER 1 POUND

Shipping Point¹

	U.S. No. 1	U.S. No. 1 Portabella	U.S. No. 2
Size			
Off-size	10% x 1.5 = 15%	10% x 1.5 = 15%	10% x 1.5 = 15%
Defects			
Open veils	5% x 2 = 10%	N/A	10% x 1.5 = 15%
Total defects, including:	8% x 2 = 16%	8% x 2 = 16%	12% x 1.5 = 18%
Disease (exclusive of spots) or decay	1% x 2 = 2%	1% x 2 = 2%	1% x 2 = 2%

¹ At least 2 defective (for tolerances of less than 10%) and 2 off-size specimens may be permitted in any package.

En Route or Destination¹

	U.S. No. 1	U.S. No. 1 Portabella	U.S. No. 2
Size			
Off-size	10% x 1.5 = 15%	10% x 1.5 = 15%	10% x 1.5 = 15%
Defects			
Open veils	10% x 1.5 = 15%	N/A	25% x 1.5 = 37.5%
Total defects, including:	12% x 1.5 = 18%	12% x 1.5 = 18%	15% x 1.5 = 22.5%
Permanent defects	8% x 2 = 16%	8% x 2 = 16%	12% x 1.5 = 18%
Disease (exclusive of spots) or decay	2% x 2 = 4%	2% x 2 = 4%	2% x 2 = 4%

¹ At least 2 defective (for tolerances of less than 10%) and 2 off-size specimens may be permitted in any package.

SUMMARY OF APPLICATION OF TOLERANCES – 1 POUND OR LESS

Note: For packages containing 4 or fewer mushrooms, individual packages are not restricted as to the percentage of defects and off-size mushrooms.

Shipping Point¹

Defects	U.S. No. 1	U.S. No. 1 Portabella	U.S. No. 2
Size			
Off-size	10% x 4 = 40%	10% x 4 = 40%	10% x 4 = 40%
Defects			
Open veils	5% x 4 = 20%	N/A	10% x 4 = 40%
Total defects, including:	8% x 4 = 32%	8% x 4 = 32%	12% x 4 = 48%
Disease (excluding spots) or decay	1% x 4 = 4%	1% x 4 = 4%	1% x 4 = 4%

¹ At least 2 defective and 2 off-size specimens may be permitted in any package.

En Route or Destination¹

	U.S. No. 1	U.S. No. 1 Portabella	U.S. No. 2
Size			
Off-size	10% x 4 = 40%	10% x 4 = 40%	10% x 4 = 40%
Defects			
Open veils	10% x 4 = 40%	N/A	25% x 4 = 100% = N/A
Total defects, including:	12% x 4 = 48%	12% x 4 = 48%	15% x 4 = 60%
Permanent defects	8% x 4 = 32%	8% x 4 = 32%	12% x 4 = 48%
Disease (excluding spots) or decay	2% x 4 = 8%	2% x 4 = 8%	2% x 4 = 8%

¹ At least 2 defective and 2 off-size specimens may be permitted in any package.

NOTESHEET AND CERTIFICATE

Entries on the notesheet and certificate must be legible and accurate. Support all information appearing on the certificate by information on the notesheet. All information and notations must be properly recorded so that anyone familiar with inspection procedures can understand them and write a certificate. Notesheets and certificates are prima facie evidence and must withstand legal scrutiny.

Detailed instructions about dates, inspection points, places of inspection, types of carriers, lading, and other items not covered by these instructions may be found in the [General Shipping Point Manual](#), [General Market Manual](#), [Federal-State Inspection Certificate \(FV-184\) Handbook](#), or [Fresh Fruit and Vegetable Inspection Certificate \(FV-300\) Manual](#). Contact your supervisor for anything not covered in these instructions.

PRODUCT

Use the common name, mushrooms, to describe this commodity in the product heading. Type may be reported in conjunction with mushrooms or may be reported in the “Product/Variety” section on the shipping point inspection certificates or in the “Lot ID” section on market notesheet and certificate.

NUMBER/TYPE OF CONTAINERS

Always report the number of containers. In the market and at shipping point locations for stationary lot certification, always verify the container count provided by the applicant for each lot and report it as the “inspector’s count.” When the number of containers available for inspection does not match the application, confirm that the amount presented for inspection constitutes the lot. If an accurate count cannot be determined, report the count at someone else’s authority, but also report the reason for doing so on the notesheet. Example: Numerous pallets with mixed product.

At shipping point locations for “days-run” certification, the manifest for count typically provided by the applicant is acceptable to use for reporting the number of containers.

Mushrooms are usually packed and shipped loose in fiberboard cartons, packed in foam or plastic trays or baskets with film covering.

BRANDS/MARKINGS

At shipping point, report the brand, variety, size, color, Positive Lot Identification (PLI), and other important information appearing on the container on the notesheet and certificate in the appropriate sections.

At market, report the brand, variety, size, color, count, grade, weight, point of origin, and other important information appearing on the container on the notesheet in the “Brands/Marks” section. On the certificate, report only the brand name and other pertinent information in the “Brand/Markings” section.

ORIGIN

Do not make a positive statement about origin on your own authority; rather, quote the container markings that list the state or country of origin in the appropriate space on the notesheet and the certificate. If origin is not marked, try to obtain this information from the applicant. This policy is necessary because some firms may use one mark on the same product packed in several states.

CONDITION OF PACK

The pack is seldom a problem. Mushrooms are packed in a variety of bulk and consumer packages. Use the following terms to describe the pack:

Pint type containers with film wrapping:

- **Well filled** – when the mushrooms are 1/2 to 1 inch above the rim of the cup.
- **Fairly well filled** – when the pack is not ideal, cups are at least level full.
- **Slightly slack** – when mushrooms are slightly below the tops of the cups.
- **Slack** – when mushrooms are decidedly below the top of cups. Report in fractions of an inch.

For other containers, including volume filled flats and bulk lidded baskets:

- **Very tight** or **excessively filled** – when mushrooms are too tight for best results, usually resulting in bruising.
- **Tight** or **well filled** – when the container is sufficiently filled to prevent movement. Mushrooms may be slightly below the top edge of the container.
- **Fairly tight** or **fairly well filled** – when pack is not ideal, but mushrooms are sufficiently packed to prevent injury under normal handling conditions.
- **Slack** or **loose** – when mushrooms are decidedly below the top edge of the container and or there is sufficient space which would allow considerable movement of the mushrooms. When using the term slack, report in fractions of an inch.

TEMPERATURE OF PRODUCT

Temperatures are not normally determined or reported at shipping point. However, due to the importance of the pulp temperature of fresh fruits and vegetables when in transit or at destination, it is essential that you accurately determine and report the temperature or range in temperatures on each lot. Report pulp temperature regardless of the location of the product, e.g., in the carrier, in a warehouse, or stacked on a platform.

Precool the thermometer to obtain true readings and report all temperatures to the nearest whole degree. Take a minimum of three temperatures for each lot; record the results on the notesheet. Take additional temperatures if the lot is abnormally cold or hot, or if there is a specific request for temperature. Specify the location where you took the temperature in the lot and/or load in greater detail when additional temperatures are taken.

SIZE

§51.3391 Size. Size of mushrooms may be specified to a minimum and/or maximum diameter. Diameter means the greatest dimension of the cap measured at right angles to the stem.

Size is not a requirement of any of the grades within the mushroom standards, however, when size is specified as either a minimum or maximum diameter (or both) the lot must meet those specifications.

When size (diameter) is specified (or requested to be reported at applicant's request) report the size range in the "Description of Product" section on shipping point inspection certificates, and in the "Other" section on market certificates. Include a mostly statement for all size ranges that exceed one inch.

For both shipping point and market inspections, a separate off-size tolerance of 10% is provided for mushrooms not meeting a specified diameter, regardless of container size. See [Tolerances and Application of Tolerances](#). Off-size columns must be kept on the notesheet to substantiate any off-size found within the lot. Report compliance or non-compliance to specified size following the grade statement. Example: U.S. No. 1, Meets Size as Specified.

When size is specified by the applicant, report this fact in the "Remarks" section on the certificate. Example: Size based on 1-inch minimum diameter, and 1-5/8 inches maximum diameter, and reported at applicant's request.

LENGTH OF STEM

§51.3395 Length of stem....means the greatest distance as measured from the point of attachment of the “veils” on the stem to the butt.

There are no stem length requirements in any of the grades in the mushroom standards; however, it may be reported at applicant's request. Keep in mind if minimum or maximum stem length were ever specified during an inspection, the tolerance for size may only be applied to diameter of the cap and never to stem length.

DEFECTS (QUALITY AND CONDITION)

Statements pertaining to freshness, maturity, shape, color, the amount and type of defects, and the amount of decay are shown under the appropriate headings.

Factors noted with **(Q)** are considered as **QUALITY** only. Quality or “permanent” defects are those that do not change during storage or shipment (e.g., shape and scars).

Report factors noted with **(C)** as **CONDITION** on market certificates. Condition defects are factors subject to change during shipment or storage, such as bruising, discoloration, shriveling, and decay.

Factors noted with **(Q or C)** may be considered as **QUALITY** or **CONDITION**, depending on the circumstances.

The U.S. Standards for Grades of Mushrooms do not provide definitions for serious damage; therefore, all defects are considered damage only.

BRUISING (C)

Bruising in mushrooms is caused by rough handling during the harvesting or packing process. Affected product is typically discolored (brown or pink/red) and indented. It may also result in leaving the mushroom with a ragged or skinned appearance.

Scoring Guide

Damage: When materially indented and discolored, ragged, or skinned, affecting an aggregate area of more than 5% of the surface.

CUTS OR MECHANICAL DAMAGE (Q OR C)

Cuts or mechanical damage may develop during the harvesting or packing process. When they cause the mushroom to be crushed, misshapen, or materially affect the overall appearance, they are considered damage in all grades. Score cuts or mechanical damage as quality when the injury affecting the mushroom appears old or healed and report as a **healed cut**. When cuts appear fresh and flesh of the mushroom is exposed, score as a condition defect at destination or market and refer to the defect as a **fresh cut**.

Scoring Guide

Damage: When mushrooms with cuts or mechanical damage cause the mushroom to become crushed or cut to the extent that the appearance is materially affected.

DISCOLORATION/SPOTS (C)

Discoloration is referenced multiple times in the mushroom standards. The term **discoloration** refers to basic discoloration that contrasts with the surface color of the mushroom, whereas **spots** refers to a specific discoloration that is typically more concentrated or pitted in nature. The following describes each type of discoloration:

DISCOLORATION

There are numerous factors that can result in mushrooms becoming discolored. Some of these include environmental factors (carbon dioxide levels), age, [bruising](#), and [mechanical damage](#). When unsure of the cause of discoloration, inspectors should refer to the defect as **discoloration** and describe the color on the notesheet and certificate.

Scoring Guide

Damage: When discoloration distinctly contrasts with the normal color of the mushroom, affecting an aggregate area more than 10% of the surface; or lesser amounts of dark brown to black discoloration when the appearance is affected to a greater extent than the amount permitted above. Disregard slight discoloration affecting the cap and stem.

SPOTS

Spots are a type of discoloration that is more concentrated in nature than discoloration (as described above). They may occur as pitted or discolored spots which may or may not penetrate below the surface of the cap. Spots can be caused by a number of factors including environmental conditions (humidity, water), insect damage, or disease (bacterial or fungal). They may manifest in many different colors including brown, tan,

black, gray, pink/red, and yellow. Like discoloration, spots are scored against the total defect tolerance.

Scoring Guide

Damage: When any one pitted or discolored spot or combination of spots exceeds an area of 1/8" in diameter.

EXTRANEOUS MATERIAL (Q)

Extraneous material includes bedding material, dirt, or any other foreign substance that can become embedded in the cap or stem or smeared across the cap or stem.

Scoring Guide

Damage: When bedding material or other objectionable matter is embedded in the cap or stem or when materially smeared across the cap or stem.

FEATHERING (C)

Feathering is a condition defect in mushrooms characterized by raised, scaly, or ragged skin. Disregard any feathering that is slightly to moderately raised.

Scoring Guide

Damage: When peeling or separation of the flesh of the surface of the mushroom cap is more than moderately raised and affects more than 25% of the surface.

FIRMNESS (C)

§51.3394 Firm....means that the mushroom does not yield to moderate pressure and that the cap is not shriveled, wilted, or spongy.

All grades require mushrooms to be firm. Mushrooms that have matured beyond the firm stage are generally shriveled, wilted, or spongy.

Scoring Guide

Damage: When the mushroom yields to moderate pressure or when the cap is shriveled, wilted, or spongy. Refer to mushrooms meeting those descriptions as **not firm**.

FREEZING AND FREEZING INJURY (C)

Because mushrooms are grown indoors in a controlled environment there is a low likelihood of freezing before packing. However, freezing may occur after packing or in transit.

Use the term frozen only if ice crystals are present. Mushrooms in a frozen state will be darker and glassy compared to unaffected stock. There is typically a distinct line of demarcation between the affected and the unaffected portions.

Use the term freezing injury when it is evident the mushrooms have been frozen but are not in a frozen condition at the time of inspection. Specimens may be limp or flabby, water-soaked/leaking, and darker in appearance.

As noted in the [General Market Manual](#), freezing is only reported as a defect percentage when it is scattered throughout the pack (no definitive pattern throughout the load or container). A narrative statement as to location of freezing must be stated in all cases where freezing is found. Notate the following statement on the certificate whenever a freezing pattern cannot be determined: "Freezing (Freezing injury) is scattered throughout pack."

Scoring Guide

When an obvious pattern of freezing or freezing injury is present: Provide the following information in a freezing narrative statement on the certificate:

- Record the pulp temperatures taken at various locations.
- Determine and record extent of the injury in the load.
- Determine and record extent of the injury in the containers.
- Determine and record the degree to which individual specimens are affected.
- Describe the pattern of freezing or freezing injury in clear, concise terms.

State where or when the freezing occurred if indicated by the location of injury.
Example: Freezing injury indicates it occurred after packing but not in present location.

When no pattern of freezing or freezing injury is present:

Damage: When any amount is seen in mushrooms. Report as **frozen** or **freezing injury**.

MATURITY (Q)

§51.3396 Mature.... means that the mushroom shows normal growth for the type.

Although rarely encountered during a mushroom inspection, all grades within the mushroom standards require mushrooms to be mature. The maturity level of mushrooms will vary with the types of mushrooms. Report all mushrooms that do not show normal growth for the type as **not mature**.

Scoring Guide

Damage: Score against all grades when a mushroom is not mature.

OPEN MUSHROOMS (Q OR C)

§51.3397 Open mushrooms....are mushrooms with an open cap and the gills are fully exposed with no veil remaining. A slight downturn or cup of the edges of the cap is required.

Open mushrooms is a basic requirement of the U.S. No. 1 Portabella (portabella mushrooms). This requirement refers to the absence of a veil which fully exposes the gill, as well as the curvature of the cap.

Score as a quality defect when any portion of the veil covers any amount of the gills. Score as a condition defect when there is not a slight downturn or cup at the edges of the cap. In this state the cap will be somewhat flat. Refer to mushrooms that do not meet either requirement of open mushrooms as **not open**.

Open mushrooms is not a requirement in the U.S. No. 1 and U.S. No. 2 grades.

Scoring Guide

Damage:

- When gills are not fully exposed due to the presence of a veil or partial veil, or
- Mushroom does not show a slight downturn or cup of the edges of the cap.

OPEN VEILS (C)

The veil on a mushroom is a layer of tissue that extends from the stem to the edge of the cap. It serves as protection for the gills. As the mushroom matures, the veil will eventually stretch and break. The U.S. No. 1 and U.S. No. 2 grades require mushrooms to be free from open veils. Mushrooms are considered damaged by open veils when veils have broken sufficiently to expose the gills or underside of the cap and

materially detracts from the appearance. Score affected mushrooms against the separate tolerances for open veils in each grade as follows:

- U.S. No. 1
 - Shipping point: 5% tolerance
 - En Route or destination: 10% tolerance
- U.S. No. 2
 - Shipping point: 10% tolerance
 - En Route or destination: 25% tolerance

The U.S. No. 1 Portabella grade does not have a veil requirement. Do not score open veils in this grade.

Scoring Guide

Damage: When the cap has expanded to the extent that the veil joining the margin of the cap to the stem has broken sufficiently to expose the gills or underside of the cap and materially detracts from the appearance.

SHAPE (Q)

§51.3393 Fairly well shaped....means the mushroom cap is not inverted, scalloped, indented, or otherwise deformed for the type to an extent which materially detracts from the appearance or marketing quality.

All grades require mushrooms to be fairly well shaped. Because mushrooms grow in close proximity to each other, it is fairly common for the shape of an individual mushroom to be slightly disproportionate. When judging shape, inspectors must be familiar with the varietal characteristics for the variety being inspected.

Scoring Guide

Damage: When not meeting the requirements of fairly well shaped. Refer to the defect as **not fairly well shaped**.

SIMILAR VARIETAL CHARACTERISTICS (Q)

§51.3398 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 (except when designated as a mixed or specialty pack).

All grades require mushrooms to consist of similar varietal characteristics, which is considered a quality defect when different varieties (colors) of mushrooms exist together, except when designated as a mixed or specialty pack. There are white, cream, and brown types of button mushrooms. It is often difficult to tell the difference between white and cream mushrooms, particularly if the white mushrooms have aged and the color has darkened. However, white and brown shall not be mixed in the same container, unless designated as a mixed or specialty pack.

Scoring Guide

Damage: Unless designated as a mixed or specialty pack, score mushrooms of different varietal characteristics against all grades.

TRIMMING (Q)

§51.3399 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 one and one-half (1.5) times the depth of the cap, unless otherwise specified.

All grades require mushrooms to be well trimmed. When considering trimming, both the condition of the cut (at the butt) as well as the length of the stem needs to be considered.

Scoring Guide

Damage: When not meeting the requirements of well trimmed. Refer to the defect as **not well trimmed**.

DECAY (C)

All grades for mushrooms are required to be free from decay. Any amount of decay, regardless as to where it is found on the mushroom (caps or stems) is scored against the 1% restrictive tolerance for disease (exclusive of spots) and decay.

Do not report the type of decay on the certificate. However, when in excess of the tolerance report the stages of decay as; early, moderate, or advanced, in the "Description of Products" section on the shipping point certificates, and in the "Other" section on the market certificates. Provide a description as to where the decay was found. Example: Decay is in early stages affecting stems.

Scoring Guide

Damage: When seen in any amount.

APPENDIX I: NOTESHEET AND CERTIFICATE EXAMPLES

EXAMPLE 1: SC-300 NOTESHEET (FRONT)

APPLICANT NUMBER 21		INSPECTION NOTESHEET U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE SPECIALTY CROP INSPECTION DIVISION																					
CARRIER or LOT IDENTIFICATION: <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:10%;">L</td><td style="width:10%;">O</td><td style="width:10%;">T</td><td style="width:10%;">1</td><td style="width:10%;">0</td><td style="width:10%;">0</td><td style="width:10%;">1</td><td style="width:10%;"></td><td style="width:10%;"></td><td style="width:10%;"></td> </tr> <tr> <td colspan="3">PREFIX</td><td colspan="4">NUMBER</td><td colspan="3">STATE</td> </tr> </table>		L	O	T	1	0	0	1				PREFIX			NUMBER				STATE			LOADING: Loaded-LO Pkty Unlded-PU UNLOADED-UL Lot Inspn - LI	
L	O	T	1	0	0	1																	
PREFIX			NUMBER				STATE																
APPLICANT Carrier or LOT IDENTIFICATION: Additional Lot ID: Carrier Type/ Name: Refrigeration Unit: ☐ ON ☐ OFF ☐ OPEN ☐ CLOSED Condition of Carrier: INSPECTION SITE: APPLICANT'S DOCK		CERTIFICATE NUMBER: EXAMPLE # 1 Inspection STARTED: m m d d y y Hour Min. A/P 0 5 0 1 2 6 0 8 : 4 5 A M Inspection Completed: m m d d y y Hour Min. A/P 0 5 0 1 2 6 1 0 : 2 5 A M Applicant: A & B PRODUCE Address: SOMEWHERE, MD SHIPPER: FUN GUYS DISTRIBUTING Address: ANYWHERE, PA																					
A : PRODUCT: MUSHROOMS NUMBER OF CONTAINERS 123 MASTER CTNS INSP. COUNT: Y TEMPERATURES: 45 TO 46 °F		BRANDS/MARKS: "FRESH AND TASTY", 8 OZ FUN GUYS DISTRIBUTING, ANYWHERE, PA - PRODUCE OF USA, MASTER CARTONS: 12 X 8 OZ - MARKED: WHITE																					
B : PRODUCT: MUSHROOMS NUMBER OF CONTAINERS 155 MASTER CTNS INSP. COUNT: Y TEMPERATURES: 45 TO 46 °F		"FRESH AND TASTY" PORTABELLA, 16 OZ. FUN GUYS DISTRIBUTING, ANYWHERE, PA - PRODUCE OF USA, MASTER CARTONS: 10 X 16 OZ (10 lbs)																					
C : PRODUCT: MUSHROOMS NUMBER OF CONTAINERS 111 CARTONS INSP. COUNT: Y TEMPERATURES: 46 TO 47 °F		"FRESH AND TASTY" CREMINI, 10 LBS. NET WT. FUN GUYS DISTRIBUTING, ANYWHERE, PA - BULK																					
D : PRODUCT: NUMBER OF CONTAINERS INSP. COUNT: TEMPERATURES:		() INTACT THROUGH LOAD () PARTLY UNLOADED																					

FORM SC- 300-N

A				B				C				D			
Pack: WELL FILLED				Pack: WELL FILLED				Pack: WELL FILLED				Pack: EXAMPLE #1			
Size: NOT DETERMINED				Size: 3 TO 3 3/4 INCHES DIAMETER				Size: NOT DETERMINED				Size: EXAMPLE #1			
SCORESHEET												OPEN VEILS			
PLI Number		Other I.D.	TEMP.	Sample OZ	Q	DK	DISC	BRU					D		
					D		D	D					D		
NONE		111	45	8	0	0	1.0	0					1.1		
NONE		111		8	0	0.4	0	0					1.5		
NONE		111	46	8	0	0	1.7	0.6					2.0		
NONE		111		8	0	0.5	0.8	0.4					1.0		
NONE		111	45	8	0	0	1.0	0					1.7		
NONE		111		8	0	0	0.5	0					2.2		
				48	0	0.9	5	1					9.5		
Fails to grade U.S. No. 1 account condition.					X	(2)	(10)	(2)					(20)		
													(13-25)		
					E, Caps				DISCOLORATION: Light brown to dark brown.						
				Sample OZ	Q	DK	SPOTS					DIA	SIZE RANGE		
					D		D					3"			
NONE		121	45	16	0	0	4.0					0	3 - 3.5		
NONE		121	45	16	0	4.2	0					0	3.25 - 3.75		
NONE		121	46	16	0	0.0	0.0					0	3 - 3.75		
NONE		121		16	0	0	0.0					0	3 - 3.75		
NONE		121		16	0	0	0.0					0	3.25 - 3.75		
NONE		121		16	0	0	0					0	3 - 3.75		
				96	0	4.2	4.0					0			
					X	(4)	(4)					X			
Fails to grade U.S. No. 1 Portabella account condition. Meets size as specified.					E, Stem				SPOTS: Grey to black						
				Sample OZ	Q	DK	FEATHER								
					D		D								
NONE		131	46	16	2.2	0	0								
NONE		131	46	16	0	0	1.6								
NONE		131	47	16	0	0	1.4								
				48	2.2	0	3								
U.S. No. 1					(5)	X	(6)								
					(Not Fairly Well Shaped)				(0-10%)						
REMARKS / RESTRICTIONS / SPI															
LOT B: SIZE BASED ON 3" MINIMUM DIAMETER AT APPLICANT'S REQUEST.															
CARLOT Basis: \$\$\$\$				REPORTED TO: Sherman				INSPECTED BY:							
HOURLY Basis: _____				DATE: 5/1/2026				TIME: 11:00 AM		<i>J.N. Spector</i>					
TRAVEL Expenses: _____				REQUESTED BY: Applicant				ASSISTED BY: _____							
EXPENSES: _____				DATE: 5/1/2026				TIME: 7:00 AM							
EST. TOTAL: \$\$\$\$															

EXAMPLE 1: SC-300 CERTIFICATE

CARRIER OR LOT IDENTIFICATION										Loading Loaded - LO Ply Unit - PU Unloaded - UL Lot Insp - LI										Applicant: A & B PRODUCE Address: SOMEWHERE, MD Shipper: FUN GUYS DISTRIBUTING Address: ANYWHERE, PA Insp. Site: APPLICANT'S DOCK										U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE INSPECTION CERTIFICATE EXAMPLE # 1																			
PREFIX Carrier / Lot ID Stated by: APPLICANT										NUMBER Carrier Type / Name:										STATE Additional Lot ID:										m m m d d y y hour min A/P																			
Carrier Type / Name:										Refrigeration Unit: On Off										Doors: Open Closed										Lot ID: 0 5 0 1 2 6 0 8 4 5 A M																			
TEMPERATURES of 45 to 46 of 45 to 46 of 46 to 47 of to										Product: MUSHROOMS MUSHROOMS MUSHROOMS										Brand / Markings: "FRESH & TASTY" 8 OZ. WHITE "FRESH & TASTY" 16 OZ. PORTABELLA "FRESH AND TASTY" CREMINI, 10 LBS.										Origin P A P A P A										Insp count Y Y Y									
AVERAGE DEFECTS										including -PER-DAWG -PER-DAWG -PER-DAWG										OFFSIZE / DEFECTS										OTHER																			
A. 00 %										QUALITY DEFECTS																																							
20 %										OPEN VEILS (13 TO 25%)																																							
10 %										DISCOLORATION (0 TO 21%) LIGHT BROWN TO DARK BROWN COLOR																																							
02 %										BRUISING																																							
02 %										DECAY (0 TO 6%) EARLY STAGES																																							
34 %										CHECKSUM																																							
B. 00 %										QUALITY DEFECTS										LOT B: SIZE: 3 TO 3 3/4 INCHES																													
04 %										SPOTS - GREY TO BLACK COLOR										DIAMETER																													
04 %										DECAY (0 TO 26%) EARLY STAGES AFFECTING STEM.																																							
08 %										CHECKSUM																																							
05 %										QUALITY DEFECTS (NOT FAIRLY WELL SHAPED)																																							
06 %										FEATHERING (0 TO 10%)																																							
00 %										DECAY										REMARKS: LOT B SIZE BASED ON 3 INCH MINIMUM DIAMETER AT APPLICANT'S REQUEST.																													
11 %										CHECKSUM																																							
GRADE: LOT A: FAILS TO GRADE U.S. NO. 1 ACCOUNT OF CONDITION. LOT B: FAILS TO GRADE U.S. NO. 1 PORTABELLA ACCOUNT OF CONDITION																																																	
MEETS SIZE AS SPECIFIED. LOT C: U.S. NO. 1																																																	
REMARKS: AN APPLICATION FOR APPEAL INSPECTION MAY BE MADE BY ANY FINANCIALLY INTERESTED PERSON REGARDING THE RESULTS OR ACCURACY OF THIS INSPECTION OR CERTIFICATE. CONTACT THE MARKET OFFICE LISTED ON THE CERTIFICATE OR EMAIL: SCIOPERATIONS@USDA.GOV FOR DETAILS.																																																	
WARNING: Any person who knowingly shall falsely make, issue, alter, forge, or counterfeit this certificate, or participate in any such actions, is subject to a fine of not more than \$1,000 or imprisonment for not more than one year, or both.										Inspector's Signature J. N. Spector										Market Office: Market Office, STATE										ESTIMATED TOTAL \$\$\$\$																			

EXAMPLE 2: FEIRS FV-E300 CERTIFICATE

Inspectors cannot use FEIRS when grading against the mushroom standards as the program has not been updated to the new standard. FEIRS can only be used when grading mushrooms as a NOG.

		U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE http://FPBIinspections.ams.usda.gov		INSPECTION CERTIFICATE EXAMPLE # 2 PAGE 1 of 1	
CARRIER or LOTID: PO 4545		APPLICANT: WRIGHT STUFF PRODUCE		REQUESTED: 4/6/2026 8:00 AM	
LOADING STATUS: UNLOADED		ANYWHERE, TX		STARTED: 4/6/2026 9:08 AM	
STATED BY: APPLICANT		SHIPPER: MUSHROOM'S ARE US		COMPLETED: 4/6/2026 10:02 AM	
ADDITIONAL ID: NA		SOMEWHERE, CN		PASSWORD FOR ONLINE ACCESS	
CARRIER TYPE: NA		MARKET OFFICE: MARKET OFFICE, STATE		YT8HUK2429A2SFVW	
REFRIG UNIT: NA	DOORS: NA	INSP SITE: APPLICANT'S WAREHOUSE		ESTIMATED FEE: \$\$\$\$	
REMARKS:					
LOT A (QAC) - SLICED PORTABELLA MUSHROOMS (OTHER SPECIAL PRODUCT)					
TEMP: 44° to 48°F	INSP CT: YES	NUMBER OF CONTAINERS: 300 MASTER CARTON(S)			ORIGIN: CN
MARKINGS: BRAND: READY FRESH VARIETY: PORTABELLA MARKINGS: READY FRESH, NET WT 8 OZ., PRODUCE OF CANADA, SLICED PORTABELLA MUSHROOMS, DISTRIBUTED BY MUSHROOM'S ARE US, SOMEWHERE, CANADA MASTER CARTONS: NO BRAND, 12 X 8 OZ SLICED PORTABELLA MUSHROOMS					
PLI: NONE		OTHER ID:			
INJURY	DAM	SER DAM	V.S. DAM	OFFSIZE/DEFECTS	
NA	0	NA	NA	QUALITY DEFECTS	
NA	18	NA	NA	DISCOLORATION (0 to 38%)	
NA	0	NA	NA	DECAY	
NA	18	NA	NA	CHECKSUM	
GRADE:		NO ESTABLISHED U.S. GRADE.			
LOT DESC:		DISCOLORATION: AREA AFFECTED: 10 TO 25% SLICE SURFACE DISCOLORATION: COLOR(S): BROWN TO DARK BROWN			
I, the undersigned, a duly authorized inspector of the United States Department of Agriculture, do hereby certify that at the request of the applicant and on the date indicated, samples of the herein described product were inspected and the quality and/or condition as shown by said samples were as herein stated. Warning: Any person who knowingly shall falsely make, issue, alter, forge, or counterfeit this certificate or participate in any such actions, is subject to a fine of not more than \$1,000 or imprisonment for not more than one year, or both. FORM FV-E300 (1.0.15.1)					
Signature: 0000 SPECTOR, I.N. <i>J. N. Spector</i>				Date: 4/6/2026	