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**Agricultural
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**Fruit and
Vegetable
Division**

**Processed
Products
Branch**

United States Standards for Grades of Sulfured Cherries

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This is the second issue of the United States Standards for Grades of Sulfured Cherries published in the **FEDERAL REGISTER** of May 12, 1951 (16 FR 4423) to become effective June 12, 1951. This issue supersedes the first issue, which has been in effect since May 17, 1934.

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 processed fruits and vegetables, 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 standards also serve as a basis for the inspection and grading of commodities by the Federal inspection service, the only activity authorized to approve the designation of U.S. grades as referenced in the standards, as provided under the Agricultural Marketing Act of 1946. This service, available as on-line (in-plant) or lot inspection and grading of all processed fruit and vegetable products, is offered to interested parties, upon application, on a fee-for-service basis. The verification of some specific recommendations, requirements, or tolerances contained in the standards can be accomplished only by the use of on-line inspection procedures. In all instances, a grade can be assigned based on final product factors or characteristics.

In addition to the U.S. grade standards, grading manuals or instructions for inspection of several processed fruits and vegetables are available upon request for a nominal fee. These manuals or instructions contain detailed interpretations of the grade standards and provide step-by-step procedures for grading the product.

Grade standards are issued by the Department after careful consideration of all data and views submitted, and the Department welcomes suggestions which might aid in improving the standards in future revisions. Comments may be submitted to, and copies of standards and grading manuals obtained from:

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United States Standards for Grades of Sulfured Cherries

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Authority:	Agricultural Marketing Act of 1946, Secs. 203, 205, 60 Stat. 1087, as amended, 1090, as amended (7 U.S.C. 1622, 1624).

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.

§52.741 Product description.

Sulfured cherries are prepared from properly matured whole cherries (*Prunus avium* or *Prunus cerasus*) of similar varietal characteristics; are packed with or without the addition of a hardening agent, in a solution of sulfur dioxide of sufficient strength to preserve the product.

§52.742 Styles of sulfured cherries.

- (a) **Unstemmed and unpitted** is the style of sulfured cherries consisting of whole cherries (irrespective of size) with pits, and not less than 80 percent by weight, of all the cherries have the stems attached.
- (b) **Stemmed and unpitted** is the style of sulfured cherries consisting of whole cherries (irrespective of size) with pits and not more than 1/2 of 1 percent, by weight, of all the cherries are cherries with stems attached.
- (c) **Stemmed and pitted** is the style of sulfured cherries consisting of whole cherries of which not more than 1/2 of 1 percent, by weight, of all the cherries are cherries with stems attached and:
 - (1) For each 40 ounces of all the cherries there may be present not more than 2 cherries with pits when all cherries are of small size or extra small size;
 - (2) For each 40 ounces of all the cherries there may be present not more than 1 cherry with a pit when all cherries are of medium size, large size, or different sizes; and
 - (3) For each 60 ounces of all the cherries there may be present not more than 1 cherry with a pit when all cherries are of extra large size.
- (d) **Unstemmed and pitted or cocktail** is the style of sulfured cherries consisting of whole cherries of which not more than 7 percent, by weight, of all the cherries are cherries without the stems firmly attached and:
 - (1) For each 40 ounces of all the cherries there may be present not more than 2 cherries with pits when all cherries are of small size or extra small size;
 - (2) For each 40 ounces of all the cherries there may be present not more than 1 cherry with a pit when all cherries are of medium size, large size, or different sizes; and

(3) For each 60 ounces of all the cherries there may be present not more than 1 cherry with a pit when all cherries are of extra large size.

(e) **Unclassified** consists of sulfured cherries which do not conform to any of the foregoing styles.

(f) **Pit** means an entire pit or portion thereof attached to a sulfured cherry or within the pit cavity.

§52.743 Recommended sizes of sulfured cherries.

(a) Although size is a factor in connection with some styles of sulfured cherries, it is not a factor of quality for the purpose of these grades. The size range of sulfured cherries varies on the basis of the diameter of the fruit. The diameter of the sulfured cherry is the minimum diameter of the fruit that will pass through a rigid ring of the same diameter without using pressure. The name designations of the various sizes are shown in the first column of Table No. I of this section. Sulfured cherries will be considered as meeting a particular designated size if not more than 10 percent, by weight, of all the cherries are 1 mm. smaller or 2 mm. smaller and not more than 10 percent, by weight, of all the cherries are 1 mm. larger or 2 mm. larger than the diameter range of the particular size designation: **Provided**, that not more than 1 percent, by weight, of all the cherries are no more than 2 mm. smaller than the minimum diameter for the designated size and not more than 1 percent, by weight, of all cherries are no more than 2 mm. larger than the maximum diameter for the designated size.

Table No. I-Sizes of Cherries in Sulfured Cherries

Name designation:	Minimum and maximum diameter
Extra Small	14 mm. to, and including 16 mm.
Small	16 mm. to, and including 18 mm.
Medium	18 mm. to, and including 20 mm.
Large	20 mm. to, and including 22 mm.
Extra large	22 mm. and over

§52.744 Grades of sulfured cherries.

(a) **U.S. Grade A** or **U.S. Fancy** is the quality of sulfured cherries that are clean; that possess a good color; that are practically free from defects; that possess a good character; and that score not less than 85 points when scored in accordance with the scoring system outlined in this subpart.

- (b) **U.S. Grade B or U.S. Choice** is the quality of sulfured cherries that are clean; that possess a reasonably good color; that are reasonably free from defects; that possess a reasonably good character; and that score not less than 70 points when scored in accordance with the scoring system outlined in this subpart.
- (c) **U.S. Grade D or Seconds** is the quality of sulfured cherries that are clean, but for other reasons fail to meet the requirements of U.S. Grade B or U.S. Choice.
- (d) **U.S. Combination grade** is the quality of sulfured cherries that are clean; and that with respect to color, absence of defects, and character meets the following requirements:
 - (1) Not less than 90 percent, by weight, of all the cherries, possess at least a reasonably good color and a reasonably good character and are free from misshapen cherries, cherries seriously damaged by mechanical injury, and seriously blemished cherries; and
 - (2) Unless otherwise specified, at least 50 percent, by weight, of all the cherries, possess a good color and a good character; and are free from blemished cherries or seriously blemished cherries, misshapen cherries, and cherries damaged by mechanical injury or cherries seriously damaged by mechanical injury.

§52.745 Definition.

Clean means that the product is practically free from loose pits, leaves, detached stems, bark, fruit spurs, dirt or other foreign material.

§52.746 Ascertaining the grade with respect to U.S. Grade A or U.S. Fancy and U.S. Grade B or U.S. Choice.

- (a) The grade of sulfured cherries is ascertained by considering, in addition to the requirements of the respective grade, the respective ratings for the factors of color, absence of defects, and character.
- (b) The relative importance of each factor which is scored is expressed numerically on the scale of 100. The maximum number of points that may be given each factor is:

Factors	Points
Color	20
Absence of defects	40
Character	<u>40</u>
Total Score	100

§52.747 Ascertaining the rating for each factor which is scored.

The essential variations within each factor which is scored are so described that the value may be ascertained and expressed numerically. The numerical range for the ratings of such factors is inclusive (for example, **17 to 20 points** means 17, 18, 19, or 20 points).

§52.748 Color.

- (a) **"A" classification.** Sulfured cherries that possess a good color may be given a score of 17 to 20 points. **Good color** means that the cherries possess a practically uniform color typical of well-bleached sulfured cherries for the variety.
- (b) **"B" classification.** If the sulfured cherries possess a reasonably good color, a score of 14 to 16 points may be given. **Reasonably good color** means that the cherries possess a reasonably uniform in color typical of reasonably well-bleached sulfured cherries for the variety. Sulfured cherries that fall into this classification shall not be graded above U.S. Grade B or U.S. Choice, regardless of the total score for the product (this is a limiting rule).
- (c) **"SStd" classification.** Sulfured cherries that fail to meet the requirements of paragraph (b) of this section may be given a score of 0 to 13 points. Sulfured cherries that fall into this classification shall not be graded above U.S. Grade D or Seconds, regardless of the total score for the product (this is a limiting rule).

§52.749 Absence of defects.

- (a) **General.** The factor of absence of defects refers to the degree of freedom from misshapen cherries, cherries damaged or seriously damaged by mechanical injury, and cherries blemished or seriously blemished by discoloration, rain or solution cracks, bird pecks, pathological injury, insect injury or blemished by other means.
 - (1) **Misshapen cherries** means any deformed cherries or double cherries.

- (2) **Cherries damaged by mechanical injury** means any pitter tear or pitter tears which materially affect the appearance of the cherry; any open pitter hole measuring more than 1/8 inch across, but not more than 3/16 inch across, or open pitter holes aggregating more than 1/8 inch across, but not more than 3/16 inch across; any pitter hole where there is a material loss of flesh; and other mechanical injury which materially affects the appearance of the cherry.
- (3) **Cherries seriously damaged by mechanical injury** means any pitter tear or pitter tears which seriously affect the appearance of the cherry; any open pitter hole measuring more than 3/16 inch across, or open pitter holes aggregating more than 3/16 inch across, any pitter hole where there is a serious loss of flesh; and other mechanical injury which seriously affects the appearance of the cherry.
- (4) **Blemished cherry** means any cherry which is affected by:
- (i) Dark surface discoloration exceeding in the aggregate the area of a circle 3/16 inch in diameter but not exceeding in the aggregate 1/8 of the surface of the cherry;
 - (ii) Any rough surface areas which slightly affect the appearance of the cherry;
 - (iii) Light surface discoloration exceeding in the aggregate 1/8 of the surface of the cherry, but not exceeding in the aggregate 1/2 of the surface of the cherry;
 - (iv) Rain checks or rain cracks (a) in the stem basin more than 1/4 inch in length, but not more than 1/2 inch in length, (b) any rain checks or rain cracks outside the stem basin more than 3/16 inch in length but not more than 3/8 inch in length;
 - (v) Any solution cracks or other blemish or combination of any blemishes which materially affect the appearance of the cherry. The term **blemished cherry** also means any cherry the flesh of which is materially discolored.
- (5) **Seriously blemished cherry** means any cherry which is affected by:
- (i) Dark surface discoloration exceeding in the aggregate 1/8 of the surface of the cherry;

- (ii) Any rough surface areas which materially affect the appearance of the cherry;
 - (iii) Light surface discoloration exceeding in the aggregate 1/2 of the surface of the cherry;
 - (iv) Rain checks or rain cracks (a) in the stem basin more than 1/2 inch in length, (b) any rain checks or rain cracks outside the stem basin more than 3/8 inch in length;
 - (v) Any solution cracks or other blemish or combination of any blemishes which seriously affect the appearance of the cherry. The term **seriously blemished cherry** also means any cherry the flesh of which is seriously discolored.
- (b) **"A" classification.** Sulfured cherries that are practically free from defects may be given a score of 34 to 40 points. **Practically free from defects** means that not more than a total of 10 percent, by weight, of cherries are misshapen cherries, cherries damaged by mechanical injury, seriously damaged by mechanical injury, blemished cherries or seriously blemished cherries of which not more than five percent, by weight, of all cherries are misshapen cherries, cherries seriously damaged by mechanical injury or seriously damaged by mechanical injury or seriously blemished cherries.
- (c) **"B" classification.** Sulfured cherries that are reasonably free from defects may be given a score of 28 to 33 points. **Reasonably free from defects** means that not more than a total of 10 percent, by weight, of cherries are misshapen cherries, cherries seriously damaged by mechanical injury, or seriously blemished cherries. Sulfured cherries that fall into this classification shall not be graded above U.S. Grade B or U.S. Choice, regardless of the total score for the product (this is a limiting rule).
- (d) **"SStd" classification.** Sulfured cherries that fail to meet the requirements of paragraph (c) of this section for any reason may be given a score of 0 to 27 points and shall not be graded above U.S. Grade D or Seconds, regardless of the total score for the product (this is a limiting rule).

§52.750 Character.

- (a) **General.** The factor of character refers to the firmness of the cherries and to the condition of the flesh.

- (b) **"A" classification.** Sulfured cherries that possess a good character may be given a score of 34 to 40 points. **Good character** means that the cherries possess a firm fleshy texture, retain their approximate original shape, are not shriveled or watery, and do not show more than slight collapsed areas of flesh. To score in this classification, sulfured cherries may contain not more than five percent, by weight, of cherries which fail to meet requirements for **good character**.
- (c) **"B" classification.** If the sulfured cherries possess a reasonably good character, a score of 28 to 33 points may be given. Sulfured cherries that fall into this classification shall not be graded above U.S. Grade B or U.S. Choice, regardless of the total score for the product (this is a limiting rule). **Reasonably good character** means that the cherries possess a reasonably firm texture, may have slightly lost their original shape, may be slightly shriveled, or may show moderate collapsed areas of flesh. To score in this classification, sulfured cherries may contain not more than 10 percent, by weight, of cherries which fail to meet the requirements for **reasonably good character**.
- (d) **"SStd" classification.** Sulfured cherries that are soft, flabby, wrinkled, leathery, or have materially lost their original shape, or show seriously collapsed areas of flesh, or fail to meet the requirements of paragraph (c) of this section for any reason may be given a score of 0 to 27 points and shall not be graded above U.S. Grade D or Seconds, regardless of the total score for the product (this is a limiting rule).

§52.751 Ascertaining the grade with respect to U.S. Combination grade.

- (a) The combination grade of sulfured cherries is ascertained by considering color, absence of defects, character, and the cleanliness of the product.
- (b) The definition for cleanliness and the terms defined with respect to ascertaining **U.S. Grade A or U.S. Fancy and U.S. Grade B or U.S. Choice** outlined under the factors of color, absence of defects and character for these grades are also applicable for ascertaining the U.S. Combination grade.

§52.752 Tolerances for certification of officially drawn samples for U.S. Combination grade of sulfured cherries.

- (a) When certifying samples that have been officially drawn and which represent a specific lot of sulfured cherries, the percent, by weight, of cherries which possess at least a reasonably good color and a reasonably good character, and are free from misshapen cherries, cherries seriously damaged by mechanical injury, and seriously blemished cherries is computed by averaging the percent, by weight, of such cherries in all samples of the lot if:

(1) None of the samples in the lot contain less than 80 percent, by weight, of such cherries.

(b) The percent, by weight, of cherries for the lot which possess a good color and a good character, and are free from blemished cherries or seriously blemished cherries, misshapen cherries and cherries damaged by mechanical injury or cherries seriously damaged by mechanical injury, is computed by averaging the percent, by weight, of such cherries in all samples of the lot if:

(1) None of the samples in the lot contains less than 35 percent, by weight, of such cherries.

§52.753 Ascertaining the grade of a lot. (except for Combination grade)

The grade of a lot of **sulfured cherries** covered by these standards is determined by the procedures set forth in the regulations governing inspection and certification of processed fruits and vegetables, processed products thereof, and certain other processed food products (§52.1 through §52.83; 22 F.R. 3535).

§52.754 Score sheet for sulfured cherries.

Size and kind of container			
Container mark or identification			
Size of sample			
Size of cherries			
Style of pack			
Similar varieties			
Are clean			
Factors		Score Points	
Color	20	"A"	17-20
		"B"	14-16 <u>1/</u>
		"D"	0-13 <u>1/</u>
Absence of defects	40	"A"	34-40
		"B"	28-33 <u>1/</u>
		"D"	0-27 <u>1/</u>
Character	40	"A"	34-40
		"B"	28-33 <u>1/</u>
		"D"	0-27 <u>1/</u>
Total Score	100		
Grade			
Size of lot covered			

1/ Indicates limiting rule.

§52.755 Work sheet for sulfured cherries for grading on the basis of the U.S. Combination grade.

Size and kind of container		
Container identification marks		
Size of sample		
Style of pack		
Similar varieties		
Are clean		
Color	Good color-reasonably good color	Percent by weight
Absence of defects and character	Possess a good character and are free from blemished or seriously blemished cherries misshapen cherries and cherries damaged or seriously damaged by mechanical injury. Fail to meet requirements for reasonably good character, or are misshapen cherries, cherries seriously damaged by mechanical injury or seriously blemished cherries.	
Grade of sample		
Grade of lot		
Size of lot		

Codified in the Federal Register of December 9, 1953 (18 F.R. 7954)