



**United States
Department of
Agriculture**

**Agricultural
Marketing
Service**

**Fruit and
Vegetable
Division**

**Processed
Products
Branch**

United States Standards for Grades of Canned Raspberries

Effective date May 12, 1976

This is the second issue, as amended, of the United States Standards for Grades of Canned Raspberries published in the **FEDERAL REGISTER** of April 9, 1976 (41 FR 15016) to become effective May 12, 1976. This issue supersedes the second issue, which has been in effect since March 1, 1958.

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. grade 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 Canned Raspberries

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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.

§52.3311 Product description

Canned raspberries is the product represented as defined in the Standards of Identity (21 CFR 27.35) for canned berries issued pursuant to the Federal Food, Drug, and Cosmetic Act.

§52.3312 Color types.

- (a) Red (such as the New Washington, Latham, and Lloyd George varieties).
- (b) Reddish purple (such as the Columbian and Sodus varieties).
- (c) Black (such as the Logan and Cumberland varieties).

§52.3313 Grades.

- (a) **U.S. Grade A or U.S. Fancy** is the quality of canned raspberries that possess similar varietal characteristics; that possess a normal flavor; that possess a good color; that (except for canned black raspberries) are practically uniform in size; that are practically free from defects; that possess a good character; and that for those factors which are rated in accordance with the scoring system outlined in this subpart, the total score is not less than 90 points: **Provided**, that canned red and reddish purple raspberries may be only reasonably uniform in size, if the total score is not less than 90 points.
- (b) **U.S. Grade B or U.S. Choice** is the quality of canned raspberries that possess similar varietal characteristics; that possess a normal flavor; that possess a reasonably good color; that (except for canned black raspberries) are reasonably uniform in size; that are reasonably free from defects; that possess a reasonably good character; and that for those factors which are rated in accordance with the scoring system outlined in this subpart, the total score is not less than 80 points: **Provided**, that canned red and reddish purple raspberries may be only fairly uniform in size, if the total score is not less than 80 points.
- (c) **U.S. Grade C or U.S. Standard** is the quality of canned raspberries that possess similar varietal characteristics; That possess a normal flavor that possess a fairly good color; that (except for canned black raspberries) are fairly uniform in size; that are fairly free from defects; that possess a fairly good character; and that for those factors which are rated in accordance with the scoring system outlined in this subpart, the total score is not less than 70 points: **Provided**, that canned red and reddish purple raspberries may vary in uniformity of size, if the total score is not less than 70 points.

- (d) **Substandard** is the quality of canned raspberries that fails to meet the requirements of U.S. Grade C or U.S. Standard.

§52.3314 Liquid media and brix measurements.

- (a) Brix measurement requirements for the liquid media in canned raspberries are not incorporated in the grades of the finished product since sirup, or any other liquid medium, as such, is not factor of quality for the purpose of these grades. The designations of liquid packing media and Brix measurements, where applicable, are as follows:

Designations	Brix measurements
"Extra heavy sirup;" or "Extra heavily sweetened fruit juice (s) and water;" or "Extra heavily sweetened fruit juice (s)."	27° or more but not more than 35°
"Heavy sirup;" or "Heavily sweetened fruit juice(s) and water;" or "Heavily sweetened fruit juice(s)."	20° or more but less than 27°
"Light sirup;" or "Lightly sweetened fruit juice(s) and water;" or "Lightly sweetened fruit juice(s)."	15° or more but less than 20°
"Slightly sweetened water;" or "Extra light sirup;" or "Slightly sweetened fruit juice (s) and water;" or "Slightly sweetened fruit juice (s)."	11° or more but less than 15°
"In water"	Not applicable
"In fruit juice (s) and water"	Not applicable
"In fruit juice (s)"	Not applicable

§52.3315 Recommended fill of container.

The recommended fill of container is not incorporated in the grades of the finished product since fill of container, as such, is not a factor of quality for the purposes of these grades. It is recommended that each container of canned raspberries be filled with raspberries as full as practicable without impairment of quality and that the product and packing medium occupy not less than 90 percent of the volume of the container.

§52.3316 Recommended minimum drained weights.

- (a) **General.** The minimum drained weight recommendations for canned raspberries in Table I are not incorporated in the grades of the finished product since drained weight, as such, is not a factor of quality for the purposes of these grades.

- (b) Method for ascertaining drained weights.** The drained weight is determined by emptying the contents of the container upon a United States Standard No. 8 circular sieve of proper diameter containing 8 meshes to the inch (0.0937 inch \pm 3%, square openings) so as to distribute the product evenly, inclining the sieve to a 17 to 20 degree angle to facilitate draining, and allowing to drain for two minutes. The drained weight is the weight of the sieve and raspberries less the weight of the dry sieve. A sieve 8 inches in diameter is used for containers less than 3 pounds, and a sieve 12 inches in diameter is used for containers 3 pounds or more.
- (c) Compliance with recommended drained weights.** Compliance with the recommended drained weights is determined by averaging the drained weight from all the containers which are representative of a specific lot and such lot is considered as meeting the recommendations if the following criteria are met:
- (1)** The average of the drained weights from all of the containers meets the recommended drained weight;
 - (2)** One-half or more of the containers meet the recommended drained weight; and
 - (3)** The drained weights from the containers which do not meet the recommended drained weight are within the range of variability for good commercial practice.

TABLE I - Recommended Minimum Drained Weights for Canned Raspberries

Container designations (metal unless otherwise stated)	Container size, over-all dimensions		In syrup; artificially sweetened packing media; water (grades A and B)		In water, grades C and SStd.	
	Width	Height	Red and Purple	Black	Red and Purple	Black
	(Inches)	(Inches)	(Ounces)	(Ounces)	(Ounces)	(Ounces)
8 oz. Tall	2-11/16	3-4/16	4	5	4-1/4	5-1/4
No. 300	3	4-7/16	7	7	7-1/4	7-1/4
No. 1 Tall	3-1/16	4-11/16	8	8	8-1/4	8-1/4
No. 303	3-3/16	4-6/16	8	8	8-1/4	8-1/4
No. 2	3-7/16	4-9/16	10	10	10-1/4	10-1/4
No. 2-1/2	4-1/16	4-11/16	14-1/4	14-1/4	14-1/2	14-1/2
No. 10	6-3/16	7	53	55	60	65

§52.3317 Ascertaining the grade.

(a) **General.** In addition to considering other requirements outlined in the standards the following quality factors are evaluated:

(1) **Factors not rated by score points.**

(i) Varietal characteristics.

(ii) Flavor.

(2) **Factors rated score points.** This 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 such factors are:

Factors	Points
Color	30
Uniformity of size	10
Defects	30
Character	30
Total Score	100

(b) **Definition of flavor.**

(1) **"Normal flavor"** means that the canned raspberries are free from objectionable flavors and objectionable odors of any kind.

§52.3318 Ascertaining the rating for the factors which are scored.

The essential variations within each factor which is scored are so described that the value may be ascertained for each factor and expressed numerically. The numerical range within each factor which is scored is inclusive (for example, **27 to 30 points** means 27, 28, 29, or, 30 points).

§52.3319 Color

(a) **General.** The factor of color refers to the color typical of the varietal group and to the intensity and brightness of such color.

- (b) **"A" classification.** Canned raspberries that possess a good color may be given a score of 27 to 30 points. "Good color" means that the canned raspberries possess a bright and typical color of well-ripened raspberries for the varietal type that have been properly processed and are practically uniform in that not more than 5 percent, by weight, of the drained raspberries may vary markedly from this typical color.
- (c) **"B" classification.** Canned raspberries that possess a reasonably good color may be given a score of 24 to 26 points. Canned raspberries that fall into this classification shall not be graded above U.S. Grade B or U.S. Choice, regardless of the total score of the product (this is a limiting rule). "Reasonably good color" means that the canned raspberries possess a reasonably bright and typical color of reasonably well-ripened raspberries for the varietal type that have been properly processed and are reasonably uniform in that not more than 15 percent, by weight, of the drained raspberries may vary markedly from this typical color.
- (d) **"C" classification.** Canned raspberries that possess a fairly good color may be given a score of 21 to 23 points. Canned raspberries that fall into this classification shall not be graded above U.S. Grade C or U.S. Standard regardless of the total score of the product (this is a limiting rule). "Fairly good color" means that the canned raspberries possess a color typical of fairly well-ripened raspberries for the varietal type that have been properly processed and which color may be variable but not off-color.
- (e) **"SStd" classification.** Canned raspberries that fail to meet the requirements of paragraph (d) of this section may be given a score of 0 to 20 points and shall not be graded above Substandard, regardless of the total score for the product (this is a limiting rule).

§52.3320 Uniformity of size.

- (a) **General.** The factor of uniformity of size refers to the uniformity of the diameters and to the minimum size of the canned red and reddish purple raspberries. The factor of uniformity of size of canned black raspberries is not scored but the other three factors (color, defects, and character, as applicable) are scored and the total is multiplied by 100 and divided by 80, dropping any fractions to determine the total score.
 - (1) **Diameter** of a raspberry is determined by measuring at the widest point across the face of the **cup** of the whole raspberry.

- (b) **"A" classification.** Canned raspberries that are practically uniform in size may be given a score of 9 or 10 points. **Practically uniform in size** means that the variation in size of the raspberries does not materially affect the appearance of the product and that not more than 10 percent, by weight, of the drained raspberries may be less than 9/16 inch in diameter.
- (c) **"B" classification.** Canned raspberries that are reasonably uniform in size may be given a score of 8 points. **Reasonably uniform in size** means that the variation in size does not materially affect the appearance of the product and that not more than 15 percent, by weight, of the drained raspberries may be less than 1/2 inch in diameter.
- (d) **"C" classification.** Canned raspberries that are fairly uniform in size may be given a score of 7 points. Canned raspberries 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 partial limiting rule). **Fairly uniform in size** means that the canned raspberries may be variable in size and that not more than 25 percent, by weight, of the drained raspberries may be less than 7/16 inch in diameter.
- (e) **"SStd" classification.** Canned raspberries that fail to meet the requirements of paragraph (d) of this section may be given a score of 0 to 6 points and shall not be graded above U.S. Grade C or U.S. Standard, regardless of the total score of the product (this is a partial limiting rule).

§52.3321 Defects

- (a) **General.** The factor of defects refers to the degree of freedom from harmless extraneous material, undeveloped berries, damaged berries, and any other defects not specifically mentioned that affect the appearance or edibility of the product.
 - (1) **Harmless extraneous material** means substances such as leaves, caps, and stems that are harmless.
 - (i) **Cap** means a loose or attached full cap or portion of a cap to which at least one sepal-like bract or a portion thereof is attached.
 - (ii) **Stem** means a loose or attached stem that is longer than 1/4 inch.

- (2) **Undeveloped berry** means a raspberry or a portion thereof that is shriveled or in which more than one-fourth of the raspberry possesses hard or undeveloped drupelets or that possesses deformed areas which materially affect either the appearance or the eating quality of the raspberry.
 - (3) **Damaged berry** means a raspberry or a portion thereof that is damaged by pathological, insect, or other injury which materially affects either the appearance or the eating quality of the raspberry.
- (b) **"A" classification.** Canned raspberries that are practically free from defects may be given a score of 27 to 30 points. **Practically free from defects** means that:

 - (1) The presence of harmless extraneous material does not more than slightly affect the appearance or edibility of the product;
 - (2) Not more than 5 percent, by weight, of the drained raspberries may be undeveloped berries and damaged berries; and
 - (3) The presence of harmless extraneous material, undeveloped berries and any other defects not specifically mentioned, individually and collectively, does not more than slightly affect the appearance or eating quality of the product.
- (c) **"B" classification.** Canned raspberries that are reasonably free from defects may be given a score of 24 to 26 points. Canned raspberries 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 free from defects" means that:

 - (1) The presence of harmless extraneous material does not materially affect the appearance or edibility of the product;
 - (2) Not more than 10 percent, by weight, of the drained raspberries may be undeveloped berries and damaged berries, and
 - (3) The presence of harmless extraneous material, undeveloped berries, damaged berries, and any other defects not specifically mentioned, individually and collectively, does not materially affect the appearance or eating quality of the product.

- (d) **"C" classification.** Canned raspberries that are fairly free from defects may be given a score of 21 to 23 points. Canned raspberries that fall into this classification shall not be graded above U.S. Grade C or U.S. Standard, regardless of the total score for the product (this is a limiting rule). **Fairly free from defects means that:**
- (1) The presence of harmless extraneous material does not seriously affect the appearance or edibility of the product;
 - (2) Not more than 20 percent, by weight, of the drained raspberries are undeveloped berries and damaged berries, and
 - (3) The presence of harmless extraneous material, undeveloped berries, damaged berries, and any other defects not specifically mentioned, individually and collectively, does not seriously effect the appearance or eating quality of the product.
- (e) **"SStd" classification.** Canned raspberries that fail to meet the requirements of paragraph (d) of this section may be given a score of 0 to 20 points and shall not be graded above Substandard, regardless of the total score for the product (this is a limiting rule.)

§52.3322 Character.

- (a) **General.** The factor of character refers to the degree of ripeness and fleshiness of the canned raspberries and the degree of freedom from detached drupelets and broken or mashed berries.
- (1) **Broken or mashed berry** means that the raspberry has more than 50 percent of the drupelets crushed, broken, or detached, or is damaged by other means to the extent that the original conformation of the berry is destroyed.
- (b) **"A" classification.** Canned raspberries that possess a good character may be given a score of 27 to 30 points. **Good character** means that:
- (1) The raspberries are thick fleshed and well ripened;
 - (2) The presence of detached drupelets does not more than slightly affect the appearance of the product; and
 - (3) Not more than 10 percent, by weight, of the drained raspberries may be broken or mashed.

- (c) **"B" classification.** Canned raspberries that possess a reasonably good character may be given a score of 24 to 26 points. Canned raspberries 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:
- (1) The raspberries are reasonably thick fleshed and reasonably well ripened;
 - (2) The presence of detached drupelets does not materially affect the appearance of the product; and
 - (3) Not more than 15 percent, by weight of the drained raspberries may be broken or mashed.
- (d) **"C" classification.** Canned raspberries that possess a fairly good character may be given a score of 21 to 23 points. Canned raspberries that fall into this classification shall not be graded above U.S. Grade C or U.S. Standard, regardless of the total score for the product (this is a limiting rule). "Fairly good character" means that:
- (1) The raspberries are fairly thick fleshed and fairly well ripened;
 - (2) The presence of detached drupelets does not seriously affect the appearance of the product; and
 - (3) Not more than 20 percent, by weight, of the drained raspberries may be broken or mashed berries.
- (e) **"SStd" classification.** Canned raspberries that fail to meet the requirements of paragraph (d) of this section may be given a score of 0 to 20 points and shall not be graded above Substandard, regardless of the total score for the product (this is a limiting rule).

§52.3323 Ascertaining the grade of a lot.

The grade of a lot of canned raspberries covered by this subpart is determined by the procedures set forth in the Regulations Governing Inspection and Certification of Processed Fruits, Vegetables, Processed Products Thereof, and Certain Other Processed Food Products (7 CFR 52.1 through 52.83).

§52.3324 Score sheet for canned raspberries.

Number, size and kind of container			
Label			
Container mark or identification			
Net weight (ounces)			
Vacuum			
Drained weight (ounces)			
Brix measurement			
Syrup designation			
Color type			
FACTORS		SCORE POINTS	
Color	30	"A"	27-30
		"B"	24-26 <u>1/</u>
		"C"	21-23 <u>1/</u>
		"SStd"	0-20 <u>1/</u>
Uniformity of size	10	"A"	9-10
		"B"	8
		"C"	7
Defects	30	/	<u>2</u>
		"SStd"	0-06 <u>2/</u>
Character	30	"A"	27-30
		"B"	24-26 <u>1/</u>
		"C"	21-23 <u>1/</u>
		"SStd"	0-20 <u>1/</u>
Total score	100	"A"	27-30
		"B"	24-26 <u>1/</u>
		"C"	21-23 <u>1/</u>
		"SStd"	0-20 <u>1/</u>
Flavor () normal () off-flavor			
Grade			

- 1/ Indicates limiting rule.
- 2/ Indicates partial limiting rule.

The U.S. Standards for Grades of Canned Raspberries shall become effective May 12, 1976, and thereupon will supersede the U.S. Standards for Grades of Canned Red Raspberries which have been in effect since March 1, 1958.

Dated April 6, 1976

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