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Division

United States Standards for Grades of Canned Squash (Summer Type)

Effective January 20, 2017

This issue of the United States Standards for Grades of Squash (Summer Type) (81 FR 93596) supersedes the previous issue which has been in effect since May 25, 1959.

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

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 Canned Squash (Summer Type)

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Product Description, Styles, and Grades
§52.3581 Product description.

Canned squash (summer type) is the canned product prepared from clean, sound, succulent, immature summer type squash, hereinafter called canned squash, which has been washed, properly trimmed and sorted. The product is packed in accordance with good commercial practice and is sufficiently processed by heat to assure preservation of the product in hermetically sealed containers.

§52.3582 Styles of canned squash.

- (a) **Whole** means canned squash consisting of whole squash with stems removed.
- (b) **Sliced crosswise** means canned squash consisting of units cut at right angle to the longitudinal axis into slices of approximately uniform thickness with parallel surfaces.
- (c) **Diced** means canned squash which has been cut into fairly uniform diced units.
- (d) **Cut** means canned squash cut into units which are not uniform in size or shape or which do not conform to any of the foregoing styles.

§52.3583 Grades of canned squash.

- (a) **U.S. Grade A** is the quality of canned squash that possesses similar varietal characteristics; that possesses a normal flavor; that possesses a good color; that is practically free from defects; that possesses 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 85 points.
- (b) **U.S. Grade C** is the quality of canned squash that possesses similar varietal characteristics; that possesses a normal flavor; that possesses a fairly good color; that is fairly free from defects; that possesses 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.
- (c) **Substandard** is the quality of canned squash that fails to meet the requirements of U.S. Grade C.

Fill of Container and Drained Weight

§52.3584 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 purpose of these grades. It is recommended that each container of canned squash be filled with squash 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.

§52.3585 Drained weights.

- (a) **General.** The minimum drained weight recommendations for canned squash in table I hereof are not incorporated in the grades of the finished product since drained weight, as such, is not a factor of quality for the purpose of these grades.
- (b) **Method for ascertaining drained weight.** The drained weight is determined by emptying the contents of the container upon a United States Standard No. 8 sieve of proper diameter so as to distribute the product evenly, inclining the sieve to facilitate drainage, and allow the product to drain for two minutes. The drained weight is the weight of the sieve and the product less the weight of the dry sieve. A sieve 8 inches in diameter is used for the No. 3 size can (404 x 414) and smaller sizes; and a sieve 12 inches in diameter is used for containers larger than the equivalent of the No. 3 size can.
- (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 weights.
 - (2) One-half or more of the containers meets 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 of canned squash in ounces

Container size or designation	Maximum headspace allowable (measured from top of double seam)	Styles of canned (summer type) squash	
		Whole	Sliced or cut
	16th of an inch		
8-ounce tall	7.6	4.5	5.5
No. 303	9.4	10.8	11.0
No. 2	9.7	13.0	13.1
No. 10	13.6	70.0	70.0

Factors of Quality

§52.3586 Ascertaining the grade.

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

(1) **Factors which are not scored.**

- (i) **Varietal characteristics;**
- (ii) **Flavor.**

(2) **Factors which are scored.** 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 such factors are:

Factors:	Points
Color	20
Defects	40
Character	40
Total Score	100

(b) **Normal flavor.** **Normal flavor** means that the product is free from objectionable flavors and objectionable odors of any kind.

§52.3587 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, 17 to 20 points means 17, 18, 19, or 20 points.)

§52.3588 Color.

- (a) **“A” classification.** Canned squash that possesses a good color may be given a score of 17 to 20 points.

Good color means that the color of the squash is bright and typical of young and tender squash of similar varietal characteristics which has been properly processed.

- (b) **“C” classification.** Canned squash that possesses a fairly good color may be given a score of 14 to 16 points. Canned squash that falls into this classification shall not be graded above U.S. Grade C, regardless of the total score for the product (this is a limiting rule).

Fairly good color means that the color of the squash is typical of fairly young and tender squash of similar varietal characteristics which has been properly processed.

- (c) **“SStd” classification.** Canned squash that fails to meet the requirements of paragraph (b) of this section may be given a score of 0 to 13 points and shall not be graded above Substandard, regardless of the total score for the product (this is a limiting rule).

§52.3589 Defects.

- (a) **General.** The factor of defects refers to the degree of freedom from harmless extraneous vegetable material, sand, grit, or silt, poorly cut units, units damaged by mechanical injury, and units damaged by discoloration, scars, insect injury, or damaged by other means.

(1) **Unit** means a whole squash or a portion of a squash.

(2) **Damaged unit** means any unit damaged by discoloration, scars, insect injury, or by other means except damaged by mechanical injury to the extent that the appearance or eating quality is materially affected.

(3) **Seriously damaged** means damaged to the extent that the appearance or eating quality of the unit is seriously affected.

- (4) **Harmless extraneous vegetable material** means leaves, detached stems or portions thereof, or similar vegetable material.
 - (5) **Poorly cut** means units with attached stems or stem material, very ragged cut units, and pieces of less than one-half slice in sliced style squash, pieces measuring one-half inch or less in the longest dimension for cut style, and pieces measuring less than one-quarter inch in the longest dimension for diced style.
 - (6) **Damaged by mechanical injury** means broken or mashed to such an extent that the appearance or eating quality of the unit is seriously affected.
 - (7) **Sand, grit, or silt** means any particle of earthy material.
- (b) **“A” classification.** Canned squash that is practically free from defects may be given a score of 34 to 40 points.

Practically free from defects means that the product contains no grit, sand, or silt that affects the eating quality or appearance of the canned squash; that for each 12 ounces of drained weight, there may be present not more than one piece of harmless extraneous vegetable material. The combined weight of all other defects and defective units shall not exceed 12 percent of the drained weight of the units: *Provided, That:*

- (1) Not more than 4 percent, by weight, is of damaged units and of such 4 percent, not more than one-fourth thereof or 1 percent, by weight, of all the units consist of units that are seriously damaged; or
 - (2) Not more than 10 percent, by weight, is of poorly cut units, or of units damaged by mechanical injury, or any combination thereof of not more than 10 percent, by weight: *Provided, That* poorly cut units with attached stems or stem material does not exceed 2 percent, by weight.
- (c) **“C” classification.** If the canned squash is fairly free from defects, a score of 28 to 33 points may be given. Canned squash that falls into this classification shall not be graded above U.S. Grade C, regardless of the total score for the product (this is a limiting rule).

Fairly free from defects means that the product may contain a trace of sand, grit, silt that does not materially affect the eating quality or appearance of the canned squash; that for each 12 ounces of drained weight, there may be present not more than two pieces of harmless extraneous vegetable material. The combined weight of all other defects and defective units shall not exceed 20 percent of the drained weight of the units: *Provided, That*

- (1) Not more than 8 percent, by weight, is of damaged units and of such 8 percent, not more than one-fourth thereof or 2 percent, by weight, of all the units consist of units that are seriously damaged.
- (2) Not more than 15 percent, by weight, is of poorly cut units, or of units damaged by mechanical injury, or any combination thereof of not more than 15 percent, by weight: *Provided*, That poorly cut units with attached stems or stem material does not exceed 5 percent, by weight.
- (d) **“SStd” classification.** Canned squash that fails to meet the requirements of paragraph (c) of this section may be given a score of 0 to 27 points and shall not be graded above Substandard, regardless of the total score for the product (this is a limiting rule).

§52.3590 Character.

- (a) **General.** The factor of character refers to the fleshy texture, the tenderness, and the degree of development of the seeds.
- (b) **“A” classification.** Canned squash that possesses a good character may be given a score of 34 to 40 points.

Good character means that the units are practically intact, are fleshy and tender, that the seeds are in the immature stage, and that not more than 5 percent, by weight, of the units may be of fairly good character.

- (c) **“C” classification.** If the canned squash possesses a fairly good character, a score of 28 to 33 points may be given. Canned squash that falls into this classification shall not be graded above U.S. Grade C, regardless of the total score for the product (this is a limiting rule).

Fairly good character means that the units may show slight disintegration, may have lost to a considerable extent their fleshy texture, may be fairly tender, and that the seeds may have passed the immature stage of maturity, but are not hard and that not more than 10 percent, by weight, of the units fail to meet the requirements of fairly good character.

- (d) **“SStd” classification.** Canned squash that fails to meet the requirements of paragraph (c) of this section may be given a score of 0 to 27 points and shall not be graded above Substandard, regardless of the total score for the product (this is a limiting rule).

Lot Inspection and Certification

§52.3591 Ascertaining the grade of a lot.

The grade of a lot of Canned Squash (Summer Type) 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 (7 CFR 52.1 to 52.83).

Score Sheet
§52.3592 Score sheet for canned squash.

Number, size, and kind of container			
Container marks or identification			
Label			
Net weight (ounces)			
Vacuum (inches)			
Drained weight (ounces)			
Style (whole, sliced, cut)			
	Factors	Grade	Score Points
Color	20	“A”	17-20
		“C”	14-16 ¹
		“SStd”	0-13 ¹
Defects	40	“A”	34-40
		“C”	28-33 ¹
		“SStd”	0-27 ¹
Character	40	“A”	34-40
		“C”	28-33 ¹
		“SStd”	0-27 ¹
Total Score		100	
Flavor and odor			
U.S. Grade			

¹Indicates limiting rule.