

United States Department of Agriculture

Agricultural Marketing Service

Fruit and Vegetable Division

Processed Products Branch

# United States Standards for Grades of Frozen Apricots

Effective June 21, 1963

This is the second issue, as amended, of the United States Standards for Grades of Frozen Apricots, published in the **FEDERAL REGISTER** of June 21, 1963 (28 FR 6391) to become effective June 21, 1963. This issue supersedes the first issue, which has been in effect since June 30, 1945.

These standards are included in the Code of Federal Regulations, Title 7--Agriculture, Part 52.

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:

Chief, Processed Products Branch Fruit and Vegetable Division, AMS U.S. Department of Agriculture P.O. Box 96456, Rm. 0709, So. Bldg. Washington, D.C. 20090-6456

#### UNITED STATES STANDARDS FOR GRADES OF

#### **FROZEN APRICOTS**

#### EFFECTIVE JUNE 21, 1963

Section		Page No.
52.5521	Product description.	2
52.5522	Styles of frozen apricots.	2
52.5523	Grades of frozen apricots.	2
52.5524	Ascertaining the grade of a sample unit.	4
52.5525	Ascertaining the rating for the factors which are scored.	4
52.5526	Color.	5
52.5527	Size and symmetry.	7
52.5528	Defects.	8
52.5529	Character.	13
52.5530	Ascertaining the grade of a lot.	14
52.5531	Score sheet for frozen apricots.	15

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.

#### §52.5521 Product description.

Frozen apricots are prepared from sound, mature, fresh, peeled or unpeeled fruit of any commercial variety of apricot which are sorted, washed, and may be trimmed to assure a clean and wholesome product. The apricots are properly drained of excess water before filling into containers; may be packed with the addition of nutritive sweetening ingredient(s) (including syrup and/or syrup containing pureed apricots) and/or suitable antioxidant ingredient(s) and/or any other ingredients(s) permissible under the provisions of the Federal Food, Drug, and Cosmetic Act. The apricots are prepared and frozen in accordance with good commercial practice; and are maintained at temperatures necessary for the preservation of the product.

#### §52.5522 Styles of frozen apricots.

- (a) Halves are cut approximately in half along the suture from stem to apex and from which the pit has been removed.
- (b) **Quarters** are apricot halves cut into two approximately equal parts.
- (c) Slices are apricot halves cut into sectors smaller than quarters.
- (d) **Diced** are apricots cut into approximate cubes.
- (e) **Cuts** are apricots that are cut in such a manner as to change the original conformation and do not meet any of the foregoing styles.
- (f) **Machine-pitted** means mechanically pitted in such a manner as to substantially destroy the conformation of the fruit in removing the pit.

#### §52.5523 Grades of frozen apricots.

- (a) U.S. Grade A (or U.S. Fancy) is the quality of frozen apricots that:
  - (1) Have similar varietal characteristics,
  - (2) Have a normal flavor and odor,
  - (3) Have a good color,
  - (4) Are practically uniform in size and symmetry for the style of halves,
  - (5) Are practically free of defects,

(6) Have a good character, and

- (7) Score not less than 90 points when scored in accordance with the scoring system outlined in this subpart: **Provided**, that frozen apricots may have a reasonably good character, and in the style of halves may be reasonably uniform in size and symmetry, if the total score is not less than 90 points.
- (b) U.S. Grade B (or U.S. Choice) is the quality of frozen apricots that:
  - (1) Have similar varietal characteristics,
  - (2) Have a normal flavor and odor,
  - (3) Have a reasonably good color,
  - (4) Are reasonably uniform in size and symmetry for the style of halves,
  - (5) Are reasonably free of defects,
  - (6) Have a reasonably good character, and
  - (7) Score not less than 80 points when scored in accordance with the scoring system outlined in this subpart: **Provided**, that frozen apricots in the style of halves may be only fairly uniform in size and symmetry if the total score is not less than 80 points.
- (c) U.S. Grade C (or U.S. Standard) is the quality of frozen apricots that:
  - (1) Have similar varietal characteristics,
  - (2) Have a normal flavor and odor,
  - (3) Have a fairly good color,
  - (4) Are fairly uniform in size and symmetry for the style of halves,
  - (5) Are fairly free of defects,
  - (6) Have a fairly good character, and
  - (7) Score not less than 70 points when scored in accordance with the scoring system outlined in this subpart: **Provided**, that frozen apricots in the style of halves may vary in size if the total score is not less than 70 points.

(d) "Substandard" is the quality of frozen apricots that fail to meet the requirements of U.S. Grade C.

#### §52.5524 Ascertaining the grade of a sample unit.

- (a) **General.** In addition to considering other requirements outlined in the standard, the following quality factors are evaluated:
  - (1) Factors not rated by score points.
    - (i) Varietal characteristics;
    - (ii) Flavor and odor.
  - (2) Factors rated by score points.

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	30
Size and symmetry	10
Defects	30
Character	30_
Total Score	100

- (b) Definition of normal flavor and odor. Normal flavor and odor means that the frozen apricots are free from objectionable flavors or objectionable odors of any kind.
- (c) Evaluation of quality. Quality factors are evaluated immediately after thawing to the extent that the product is substantially free from ice crystals and can be handled as individual units.

#### §52.5525 Ascertaining the rating for factors which are scored.

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

- §52.5526 Color.
  - (a) **General.** The score for the factor of color is evaluated by considering the overall color of the units. Abnormal discoloration near or within the pit cavity shall be considered in the evaluation of the overall color of the unit.
  - (b) "A" Classification. Frozen apricots that have a good color may be given a score of 27 to 30 points. Good color means: that internally and externally the frozen apricots have a color that is bright, practically uniform, and typical of well-ripened apricots for the variety; and that deviations from such typical color do not exceed the allowances shown in Table I of this subpart: **Provided**, that such permitted deviations do not materially detract from the overall appearance of the product.
  - (c) "B" Classification. Frozen apricots that have a reasonably good color may be given a score of 24 to 26 points. Frozen apricots that fall into this classification shall not be graded above U.S. Grade B, regardless of the total score for the product (this is a limiting rule). Reasonably good color means: that internally and externally, the frozen apricots have a color that is reasonably bright, fairly uniform, and typical of reasonably well-ripened apricots for the variety; and that deviations from such typical color do not exceed the allowances shown in Table I of this subpart: Provided that such permitted deviations do not seriously detract from the overall appearance of the product.
  - (d) "C" Classification. Frozen apricots that have a fairly good color may be given a score of 21 to 23 points. Frozen apricots that fall into this classification shall not be graded above U.S. Grade C, regardless of the total score of the product (this is a limiting rule). Fairly good color means that the apricots are not materially darkened; and that deviations from such typical color do not exceed the allowances shown in Table I of this subpart.
  - (e) "SStd" Classification. Frozen apricots 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).

Grade	Styles	Greenish-yellow		Green			
classification		On 1/4 or less surface area	On more than 1/4 surface area	On 1/4 or less surface area	On more than 1/4 surface area	Light brown; dark brown	
	Halves	Maximum 15 percent by count.	Maximum 5 percent by count.	Maximum 5 percent by count.	Maximum 2 percent by count.	Maximum None.	
But no more than a total of 15 percent by count.							
А	Quarters; slices;	12 percent by count.	4 percent by weight.	4 percent by count.	1.5 percent by weight.	None.	
,,	diced; cuts.		But no more than a tota	al of 12 percent by weight.			
	Machine pitted	15 percent by weight.	5 percent by weight.	5 percent by weight.	2 percent by weight.	None.	
			But no more than a tota	al of 15 percent by weight.			
	Halves	No limit.	20 percent by count.	10 percent by count.	5 percent by count.	5 percent by count.	
		But no more than a total of 20 percent by count.					
	Quarters; slices;	No limit.	15 percent by weight.	8 percent by weight.	4 percent by weight.	2.5 percent by weight.	
B diced; cuts. But no more than				But no more than a tot	otal of 15 percent by weight.		
	Machine pitted	No limit.	20 percent by weight.	10 percent by weight.	5 percent by weight.	5 percent by weight.	
But no more than a total of 20 percent by weight.							
	Halves	No limit.	No limit.	No limit.	15 percent by count.	15 percent by count.	
				But no more than a to	otal of 20 percent by count.		
С	Quarters; slices;	No limit.	No limit.	No limit.	10 percent by weight.	10 percent by weight.	
Ũ	diced; cuts.				But no more than a total of 15 percent by weight.		
	Machine pitted	No limit.	No limit.	No limit.	15 percent by weight.	15 percent by weight.	
					But no more than a tot	al of 20 percent by weight.	

### Table I - Allowances for Color Variation

§52.5527 Size and symmetry.

(a) General. The factor of size and symmetry refers to the uniformity of size and to the symmetry of the units in the style of halves only. The total score for styles other than halves is determined by multiplying the sum of the scores assigned for color, defects, and character by 10 and dividing by 9, dropping any fractions.

#### (b) Definitions.

- (1) Off-suture cut means a halved apricot unit that has been cut at a distance greater than 3/8 inch from the suture.
- (2) **Misshapen unit** means that a unit in the style of halves has been excessively trimmed so that its normal shape has been destroyed other than because of ripeness. Halves slightly split between the pit cavity and the outer edge are not considered misshapen units.
- (c) "A" Classification. Frozen apricots in the style of halves that are practically uniform in size and symmetry may be given a score of 9 or 10 points. Practically uniform in size and symmetry means that not more than 10 percent, by count, of the units may be off-suture cuts or misshapen units; that the remaining units may vary slightly in thickness; and, in 90 percent, by count, of the remaining units having the most uniform size the weight of the largest full-size unit does not exceed the weight of the smallest full-size unit by more than 50 percent.
- (d) "B" Classification. Frozen apricots in the style of halves that are reasonably uniform in size and symmetry may be given a score of 8 points. Reasonably uniform in size and symmetry means that not more than 20 percent, by count, of the units may be off-suture cuts or misshapen units; that the remaining units may vary moderately in thickness; and, in 90 percent, by count, of the remaining units having the most uniform size the weight of the largest full-size unit is not more than twice the weight of the smallest full-size unit.
- (e) "C" Classification. Frozen apricots in the style of halves that are fairly uniform in size and symmetry may be given a score of 7 points. Fairly uniform in size and symmetry means that not more than 20 percent, by count, of the units may be misshapen units and any number of units may be off-suture cuts. Frozen apricots that fall into this classification shall not be graded above U.S. Grade B regardless of the total score of the product (this is a limiting rule).

(f) "SStd" Classification. Frozen apricots in the style of halves that fail to meet the requirements of paragraph (e) of this section may be given a score of 0 to 6 points and shall not be graded above U.S. Grade C, regardless of the total score for the product (this is a limiting rule).

#### §52.5528 Defects.

#### (a) General.

- (1) The factor of defects as applicable for the respective styles refers to the degree of freedom from pit material, from harmless extraneous material, from peel (in peeled apricots), from short stems, from minor blemishes and blemishes, from crushed or broken units (except in cuts or machine-pitted styles), and from any other defects which affect the appearance or edibility of the product.
- (2) **Ounces** and **by weight** with respect to the requirements of this section means the avoirdupois weight of fruit exclusive of packing media.
- (3) Average (or the abbreviation "Avg") with respect to the requirements of this section means the average as ascertained from all sample units.

#### (b) Definitions and explanations of defects.

- (1) Harmless extraneous material means any vegetable substance (such as, but not limited to, a leaf or portion thereof or a large stem) that is harmless.
- (2) Short stem means the short, thick, woody stem which attaches the apricot to the twig of the tree or other stem material of equivalent woodiness and shortness.
- (3) **Pit material** means any whole pit or any piece of pit material regardless of size.
- (4) **Minor blemish** means significant surface discolorations that are:
  - (i) light brown to brown surface areas which, singly or in combination on a unit, exceed in the aggregate the area of a circle 3/16, inch in diameter but do not exceed in the aggregate the area of a circle 1/4 inch in diameter; or

- (ii) Single dark brown surface areas that do not exceed the area of a circle 3/16 inch in diameter but which, singly or in combination with other "minor blemishes" on a unit, affect materially but not seriously the appearance of the unit.
- (5) **Blemished** means scab, hail injury, discoloration, or other abnormalities in the following degree:
  - Light brown to brown surface areas which, singly or in combination on a unit, exceed in the aggregate the area of a circle 1/4 inch in diameter;
  - (ii) Blemishes that extend into the fruit tissue regardless of area or depth;
  - (iii) Single dark brown surface areas that exceed the area of a circle 3/16 inch in diameter, whether or not the unit is affected by minor blemished; or
  - (iv) Any blemish whether or not specifically defined or mentioned in this subparagraph which seriously affects the appearance of the unit.
- (6) Crushed or broken unit in all styles other than cuts and machine-pitted means:
  - (i) A unit that has definetly lost its normal shape and bears marks of crushing not due to ripeness;and
  - (ii) A unit of frozen apricots is **broken** if severed into definite parts; but halves of frozen apricots that are slightly or partially split or mashed from the edge to the pit cavity are not considered broken. Portions equivalent to a full-size unit that has been broken are considered as one unit in determining the percentage by count.
- (c) "A" Classification. Frozen apricots that are practically free of defects may be given a score of 27 to 30 points. **Practically free of defects** means that:
  - (1) Any defects present may no more than slightly affect the appearance or edibility of the product; and

- (2) The defects present do not exceed the applicable allowances specified in Table II of this subpart.
- (d) "B" Classification. Frozen apricots that are reasonably free of defects may be given a score of 24 to 26 points. Frozen apricots that fall into this classification shall not be graded above U.S. Grade B, regardless of the total score for the product (this is a limiting rule). Reasonably free from defects means that:
  - (1) Any defects present do not materially detract from the appearance or edibility of the product; and
  - (2) The defects present do not exceed the applicable allowances specified in Table III of this subpart.
- (e) "C" Classification. Frozen apricots that are fairly free from defects may be given a score of 21 to 23 points. Frozen apricots that fall 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 of defects means that:
  - (1) Any defects present do not seriously detract from the appearance or edibility of the product ; and
  - (2) The defects present do not exceed the applicable allowances specified in Table IV of this subpart.
- (f) "SStd" Classification. Frozen apricots that fail to meet the requirements of paragraph (e) 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).

	Styles				
Defects	Halves Quarters; slices; diced; cuts		Machine pitted		
Harmless extraneous material.	1 piece per 128 ozs. (average)	1 piece per 128 ozs. (average)	1 piece per 128 ozs. (average).		
Peel (in peeled)	1 square inch per 16 ozs. (average).	1 square inch per 16 ozs. (average).	1 square inch per 16 ozs. (average).		
Small stems	1 per 24 ozs. (average).	1 per 24 ozs. (average).	1 per 24 ozs. (average).		
Pit material	1 per 200 ozs. (average)	1 per 200 ozs. (average)	1 per 200 ozs. (average).		
Crushed or broken units	10 percent by count	5 percent by weight (cuts excluded).	Not applicable.		
Units affected by minor blemishes; and blemishes.	Total: 10 percent by count but no more than 5 percent by count blemished.	Total: 8 percent by weight but no more than 4 percent by weight blemished.	Total: 10 percent by weight but no more than 5 percent by weight blemished.		

# Table II - U.S. Grade AMaximum Allowances for Certain Defects in Frozen Apricots

# Table III - U.S. Grade BMaximum Allowances for Certain Defects in Frozen Apricots

	Styles				
Defects	Halves Quarters; slices; diced; cuts		Machine pitted		
Harmless extraneous material.	1 piece per 64 ozs. (average)	1 piece per 64 ozs. (average).	1 piece per 64 ozs. (average).		
Peel (in peeled)	2 square inches per 16 ozs. (average).	2 square inches per 16 ozs. (average).	2 square inches per 16 ozs. (average).		
Small stems	2 per 24 ozs. (average)	2 per 24 ozs. (average).	2 per 24 ozs. (average).		
Pit material	1 per 100 ozs. (average)	1 per 100 ozs. (average)	1 per 100 ozs. (average).		
Units affected by minor blemishes; and blemishes.	Total: 20 percent by count but no more than 10 percent by count blemished.	Total: 15 percent by weight but no more than 8 percent by weight blemished.	Total: 20 percent by weight but no more than 10 percent by weight blemished.		

Table IV - U.S. Grade C

	Styles				
Defects	Halves Quarters; slices; diced; cuts		Machine pitted		
Harmless extraneous material.	1 piece per 32 ozs. (average)	1 piece per 32 ozs. (average).	1 piece per 32 ozs. (average).		
Peel (in peeled)	3 square inches per 16 ozs. (average).	3 square inches per 16 ozs. (average).	3 square inches per 16 ozs. (average).		
Small stems	3 per 24 ozs. (average)	3 per 24 ozs. (average)	3 per 24 ozs. (average).		
Pit material	1 per 100 ozs. (average)	1 per 100 ozs. (average).	1 per 100 ozs. (average).		
Units affected by minor blemishes; and blemishes.	Total: 40 percent by count but no more than 15 percent by count blemished.	Total: 30 percent by weight but no more than 10 percent by weight blemished.	Total: 40 percent by weight but no more than 15 percent by weight blemished.		

#### Maximum Allowances for Certain Defects in Frozen Apricots

#### §52.5529 Character.

- (a) **General.** The factor of character refers to the degree of ripeness, the texture and condition of the flesh, the firmness and tenderness of the frozen apricots and, except for specified styles, their tendency to retain their apparent original conformation and size without material disintegration.
- (b) "A" Classification. Frozen apricots that have a good character may be given a score of 27 to 30 points. **Good Character** has the following meanings with respect to the applicable styles:
  - (1) Halves. The units have a practically uniform tender, fleshy texture typical of well-ripened, properly prepared and properly processed frozen apricots; the units are uniformly intact and may be soft but hold their original conformation and size without material disintegration; and not more than a total of 5 percent, by count, of all the units may be firm or very soft.
  - (2) Quarters; slices; diced; cuts. The product generally has a texture typical of well-ripened, properly prepared, and properly processed frozen apricots; the units are reasonably intact and may be soft but not mushy; and not more than a total of 5 percent, by weight, of all the units may be firm or very soft.
  - (3) Machine-pitted. The product generally has a texture typical of well-ripened, properly prepared, and properly processed frozen apricots; and the units may vary from slightly firm to very soft.
- (c) "B" Classification. Frozen apricots that have a reasonably good character may be given a score of 24 to 26 points. Reasonably good character has the following meanings with respect to the applicable styles:
  - (1) Halves. The units have a reasonably uniform, reasonably tender, and reasonably fleshy texture typical of reasonably well-ripened, properly prepared, and properly processed frozen apricots; the units are reasonably intact and may be variable in texture; and not more than a total of 10 percent, by count, of all the units may be very soft or very firm.
  - (2) Quarters; slices; diced; cuts. The product generally has a texture typical of reasonably well-ripened, properly prepared, and properly processed frozen apricots; the units are fairly intact and may be

variable in texture; and not more than a total of 10 percent, by weight, of all the units may be very soft or very firm.

- (3) Machine-pitted. The product generally has a texture typical of reasonably well-ripened, properly prepared, and properly processed frozen apricots; and the units may be variable in texture from firm to very soft fruit.
- (d) "C" Classification. Frozen apricots that have a fairly good character may be given a score of 21 to 23 points. Frozen apricots that fall 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, regardless of style, the product generally, or the units of frozen apricots, may be firm or mushy; and that not more than a total of 10 percent, by weight, of the frozen apricots may be very firm units.
- (e) "SStd" Classification. Frozen apricots 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).

#### §52.5530 Ascertaining the grade of a lot.

The grade of a lot of frozen apricots 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 through 52.83).

### §52.5531 Score sheet for frozen apricots.

Size and kind of container					
Containers					
Container marks or identification					
Cases					
Label (style, varietal type, added ingredier					
Net weight (ounces)					
Style					
Packing medium					
Factors		Score Points			
		"A"	27-30		
Color	30	"B"	24-26 <u>1</u> /		
		"C"	21-23 <u>1</u> /		
		"SStd"	0-20 <u>1</u> /		
		"A"	9-10		
Size and symmetry	10	"B"	8		
		"C"	7 <u>2</u> /		
		"SStd"	0-6 <u>3</u> /		
		"A"	27-30		
Defects	30	"B"	24-26 1/		
	00	"C"	21-23 1/		
		"SStd"	0-20 1/		
		0014	0 <u>10</u>		
		"A"	27-30		
Character	30	"B"	24-26		
		"C"	21-23 <u>1</u> /		
		"SStd"	0-20 <u>1</u> /		
Total Score	100				
Normal flavor and odor					
Grade					

 $\underline{1}$ / Indicates limiting rule.  $\underline{2}$ / Limited to Grade B or lower.

 $\frac{1}{3}$ / Limited to Grade C or lower.

The United States Standards for Grades of Frozen Apricots (which is the second issue) contained in this subpart shall become effective June 20, 1963, and thereupon will supercede the United States Standards for Grades of Frozen Apricots which have been in effect since June 30, 1945 and as amended July 1, 1946.

Dated: June 14, 1963.

G.R. Grange, Deputy Administrator, Marketing Services.