



**United States  
Department of  
Agriculture**

**Agricultural  
Marketing  
Service**

**Fruit and  
Vegetable  
Division**

**Processed  
Products  
Branch**

# **United States Standards for Grades of Dehydrated (Low Moisture) Peaches**

**Effective date June 30, 1974**

This is the first issue, as amended, of the United States Standards for Grades of Dehydrated (Low Moisture) Peaches published in the FEDERAL REGISTER of May 23, 1974 (39 FR 18089), to become effective June 30, 1974. This amended issue supersedes the first issue, which has been in effect since November 30, 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 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  
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## United States Standards for Grades of Dehydrated, Low-Moisture, Peaches

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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).

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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.

**§52.3911 Product description.**

Dehydrated, low-moisture peaches, hereinafter referred to as **low-moisture peaches**, are prepared from clean and sound fresh or previously dried peaches which are cut, chopped, or otherwise prepared into various sizes and shapes; are prepared to assure a clean, sound, wholesome produce; are processed by dehydration whereby practically all of the moisture is removed to product a very dry texture; and are packaged (including kind of container and proper closure) to assure retention of the low-moisture characteristics of the product. The product shall have been subjected to sulfur treatment sufficiently to retain a characteristic color but no other additives may be present.

**§52.3912 Moisture of low-moisture peaches.**

The moisture content of all styles of the finished product shall not be more than 7.5 percent.

**§52.3913 Styles of low-moisture peaches.**

- (a) **Nugget-type.** **Nugget-type** is especially processed to produce popcorn-like or foam-textured units of irregular-shapes of such size that practically all of the units will pass through 0.625 inch (5/8-inch) square openings.
- (b) **Pieces.** **Pieces** consist of irregularly-shaped cut or chopped pieces of such size that practically all of the units will pass through 0.625 inch (5/8-inch) square openings.
- (c) **Diced.** **Diced** consists of predominantly partial cube-shaped units with a square dimension on one surface of such units.
- (d) **Slices.** **Slices** consist of predominantly parallel-cut strips of irregular shapes and thicknesses.

**§52.3914 Grades of low-moisture peaches.**

- (a) **U.S. Grade A or U.S. Fancy** low-moisture peaches is the quality of low-moisture peaches that possess a normal flavor and odor, that possess a good color, that are reasonably uniform in size, that are practically free from defects, that possess a good texture; and that for those factors which are scored in accordance with the scoring system outlined in this subpart the total score is not less than 85 points: **Provided**, That the low-moisture peaches may be fairly uniform in size and may possess a reasonably good texture if the total score is not less than 85 points.

- (b) **U.S. Grade B or U.S. Choice** low-moisture peaches is the quality of low-moisture peaches that possess a normal flavor and odor, that possess a reasonably good color, that are fairly uniform in size, that are reasonably free from defects, that possess a reasonably good texture; and that for those factors which are scored in accordance with the scoring system outlined in this subpart the total score is not less than 70 points: **Provided**, That the low-moisture peaches may vary in uniformity of size, if the total score is not less than 70 points.
- (c) **Substandard** low-moisture peaches is the quality of low-moisture peaches that fail to meet the requirements of U.S. Grade B.

**§52.3915 Ascertaining the grade.**

- (a) In addition to considering other requirements outlined in the standards, the following quality factors are evaluated:
  - (1) **Factors not rated by score points.**
    - (i) **Flavor and odor.**
  - (b) **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 .....	20
Uniformity of size .....	20
Absence of defects .....	40
Texture .....	<u>20</u>
Total Score .....	100

The factors of flavor and odor, color, certain defects as may be applicable, and texture are ascertained upon the low-moisture peaches and the cooked product as specified in this subpart.

- (c) **Flavor and odor. Normal flavor and odor** means that the low-moisture peaches and the cooked product possess a characteristic flavor and odor that is free from objectionable flavors or objectionable odors of any kind. A flavor and odor in the low-moisture peaches indicative of proper sulfur treatment is not considered objectionable unless after cooking the flavor is objectionable from such detectable cause.

**§52.3916    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).

**§52.3917    Color.**

- (a) **"A" classification.** Low-moisture peaches that possess a good color may be given a score of 17 to 20 points. **good color** means that the overall color is characteristic for the product and respective style, ranging from deep rich yellow or yellow-orange to deeper orange-amber among the units and within individual units and is reasonably uniform; and that such characteristic color, upon cooking, is a reasonably bright color typical of cooked low-moisture peaches that have been properly prepared and processed.
- (b) **"B" classification.** If the low-moisture peaches possess a reasonably good color, a score of 14 to 16 points may be given. Low-moisture peaches 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 the overall color may vary considerably ranging from slightly dull yellow or slightly dull yellow-orange to darker orange and dark amber; and that such characteristic color, upon cooking, may be slightly dull but is typical of cooked low-moisture peaches that have been properly prepared and processed.
- (c) **"SStd" classification.** Low-moisture peaches that fail to meet the requirements of **B** classification 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).

**§52.3918    Uniformity of size.**

- (a) **"A" classification.** Low-moisture peaches that are reasonably uniform in size may be given a score of 17 to 20 points. **Reasonably uniform in size** has the following meanings for the respective styles:
  - (1) **Nugget-type; pieces.** Practically all of the units are of such size and shape as to pass through 0.625 inch (5/8-inch) square openings and not more than 10 percent, by weight, of the low-moisture peaches may pass through meshes of a U.S. Standard No. 8 sieve (0.0937 inch,  $\pm 3$  percent, square openings).

- (2) **Diced.** Practically all of the units, except for fine pieces, are definite partial cube-shapes and not less than 60 percent, by weight, of the low-moisture peaches approximate cube-shapes of 1/4-inch to 1/2-inch square on one surface dimension; and not more than 5 percent, by weight, of the low-moisture peaches may pass through meshes of a U.S. Standard No. 8 sieve (0.0937 inch,  $\pm 3$  percent, square openings).
  - (3) **Slices.** Practically all of the units, except for small pieces, are definite parallel-cut strips and not less than 70 percent, by weight, of the low-moisture peaches approximate 1/4-inch to 1/2-inch in width; and not more than 5 percent, by weight, of the low-moisture peaches may pass through meshes of a U.S. Standard No. 8 sieve (0.0937 inch,  $\pm 3$  percent, square openings).
- (b) **"B" classification.** If the low-moisture peaches are fairly uniform in size, a score of 14 to 16 points may be given. **Fairly uniform in size** has the following meanings for the respective styles:
- (1) **Nugget-type; pieces.** Practically all of the units are of such size and shape as to pass through 0.625 inch (5/8-inch) square openings and not more than 25 percent, by weight, of the low-moisture peaches may pass through meshes of a U.S. Standard No. 8 sieve (0.0937 inch,  $\pm 3$  percent, square openings).
  - (2) **Diced.** Practically all of the units, except for fine pieces, are definite partial cube-shapes and not less than 40 percent, by weight, of the low-moisture peaches approximate cube-shapes of 1/4-inch to 1/2-inch square on one surface dimension; and not more than 10 percent, by weight, of the low-moisture peaches may pass through meshes of a U.S. Standard No. 8 sieve (0.0937 inch,  $\pm 3$  percent, square openings).
  - (3) **Slices.** Practically all of the units, except for small pieces, are definite parallel-cut strips and not less than 50 percent, by weight, of the low-moisture peaches approximate 1/4-inch to 1/2-inch in width and approximate 3/4-inch or more in length; and not more than 10 percent, by weight, of the low-moisture peaches may pass through meshes of a U.S. Standard No. 8 sieve (0.0937 inch,  $\pm 3$  percent, square openings).

- (c) **"SStd" classification.** Low-moisture peaches that fail to meet the requirements of **B** classification of this section may be given a score of 0 to 13 points and shall not be graded above **U.S. Grade B**, regardless of the total score for the product (this is a partial limiting rule).

**§52.3919 Absence of defects.**

- (a) **General.** The factor of absence of defects refers to the degree of freedom from damaged and seriously damaged units and from other defects or injury that affect the appearance or eating quality of the units or product.

(b) **Definitions.**

- (1) **Damaged units** are units that possess defects which materially affect the appearance of the low-moisture peaches and are of such nature that they may or may not disappear upon cooking and include, but are not limited to:

(i) Units that are definitely mechanically damaged other than from preparation by cutting or chopping; and

(ii) Units that possess scars, blemishes, insect injury, or other abnormalities.

- (2) **Seriously damaged units** include units that are seriously darkened (very dark brown to black) or which in any other way seriously affect the appearance of the low-moisture peaches and that the damage is of such nature that it does not disappear upon cooking.

- (c) **"A" classification.** Low-moisture peaches that are practically free from defects may be given a score of 34 to 40 points. **Practically free from defects** means that the low-moisture peaches are practically free from any defects that affect more than slightly the appearance or eating quality either in low-moisture peaches or after cooking; and that not more than a total of 5 percent, by weight, of the low-moisture peaches may be damaged units: **Provided**, That not more than 2 percent, by weight, of the low-moisture peaches may be seriously damaged units.



- (d) **"B" classification.** If the low-moisture peaches are reasonably free from defects, a score of 28 to 33 points may be given. Low-moisture peaches 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 the low-moisture peaches are reasonably free from any defects that affect materially the appearance or eating quality either in the low-moisture peaches or after cooking; and that not more than a total of 10 percent, by weight, of the low-moisture peaches may be damaged units: **Provided**, That not more than 4 percent, by weight, of the low-moisture peaches may be seriously damaged units.
- (e) **"SStd" classification.** Low-moisture peaches that fail to meet the requirements of **B** classification 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).

**§52.3920 Texture.**

- (a) **"A" classification.** Low-moisture peaches that possess a good texture may be given a score of 17 to 20 points. **Good texture** means with respect to the low-moisture peaches that the units may vary in texture from partially pliable to brittle but are otherwise reasonably uniform in texture; and, after cooking in accordance with the method outlined in this subpart, meet the following requirements for the applicable style:
- (1) **Nugget-type.** The cooked mass has a reasonably uniform texture and finish that is coarse or grainy without practically any hard particles.
  - (2) **Pieces.** The cooked product is practically free from hard, firm, or tough units and there is no more than moderate disintegration except for fine pieces that may have been present.
  - (3) **Diced.** The cooked product is practically free from hard or tough units and substantially retain the semblance of diced peaches except for small pieces or odd-shaped pieces that may have been present.
  - (4) **Slices.** The cooked product is practically free from hard or tough units and substantially retains the semblance of strips of peaches except for small pieces or odd-shaped pieces that may have been present.
- (b) **"B" classification.** If the low-moisture peaches possess a reasonably good texture, a score of 14 to 16 points may be given. **Reasonably good texture** means with respect to the low-moisture peaches that the units may vary in texture from partially pliable to brittle and may lack uniformity of texture; and, after cooking in accordance with the method outlined in this subpart, meet the following requirements for the applicable style:

- (1) **Nugget-type.** The cooked mass has a fairly uniform texture and finish that may range from fine and grainy to coarse and grainy; and hard particles may be noticeable but not objectionable.
  - (2) **Pieces.** The cooked product is fairly free from hard, firm, or tough units and may disintegrate generally into a coarse, saucelike consistency.
  - (3) **Diced.** The cooked product is fairly free from hard or tough units and consists of substantial amounts of diced peach pieces intermingled with a slight amount of mushiness from small pieces which may have been present.
  - (4) **Slices.** The cooked product is fairly free from hard or tough units and consists of substantial amounts of strips of peaches intermingled with a slight amount of mushiness from small pieces which may have been present.
- (c) **"SStd" classification.** Low-moisture peaches that fail to meet the requirements of **B** classification 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).

**§52.3921 Explanations of methods and analyses.**

- (a) **Moisture method.** **Moisture** is low-moisture peaches is determined in accordance with the official method applicable to dried fruits as outlined in the **Official Methods of Analysis of the Association of Official Analytical Chemists** or in accordance with methods which produce equivalent results.
- (b) **Cooking procedure.**
- (1) **General.** The cooking procedures that follow are not intended to be a recipe for purposes of food preparation but are for the purposes of ascertaining compliance with requirements for applicable quality factors as outlined in this subpart.
  - (2) **Method.** Add 50 grams of low-moisture peaches to 400 ml of water, bring to a boil, and simmer with only gentle and occasional stirring for the time specified for the respective styles:
    - (i) **Nugget-type; pieces.** Simmer for 15 minutes.
    - (ii) **Diced; sliced.** Simmer for 25 minutes.
- (c) **Screening method.** The technique for ascertaining compliance with the requirements in all styles for particles that pass through a U.S. Standard No. 8 sieve is as follows.

**(1) Nugget-type; pieces; diced; slices.**

- (i)** Place a 100 gram representative sample of the low-moisture peaches on a U.S. Standard No. 8, 8-inch diameter, full-height sieve to which a bottom pan has been attached:
- (ii)** Place the assembly on a smooth level surface and with a steady, fairly rapid sieving motion, move the assembly approximately 20 inches in a straight line and return to its original position, repeating the movement 20 times;
- (iii)** Weigh the fine material sifted through to the bottom pan and, on the basis of the original sample, calculate the percentage which passed through the No. 8 sieve.

**§52.3922 Ascertaining the grade of a lot.**

The grade of a lot of low-moisture peaches covered by these standards is determined by 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).

§52.3923 Score sheet for low-moisture peaches.

Size and kind of container .....			
Container marks or identification .....			
Label (including statement of sulfur content) .....			
Net weight .....			
Moisture content (percent) .....			
Style .....			
Factors		Score Points	
Color .....	20	"A"	17-20
		"B"	1/ 14-16
		"SStd"	1/ 0-13
Uniformity of size .....	20	"A"	17-20
		"B"	14-16
		"SStd"	2/ 0-13
Absence of defects .....	40	"A"	34-40
		"B"	1/ 28-33
		"SStd"	1/ 0-27
Texture .....	<u>20</u>	"A"	17-20
		"B"	14-16
		"SStd"	1/ 0-13
Total Score .....	100		
Flavor and odor ( ) Normal ( ) Off .....			
Grade .....			

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

Dated: May 20, 1974

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