



**United States
Department of
Agriculture**

**Agricultural
Marketing
Service**

**Fruit and
Vegetable
Division**

**Processed
Products
Branch**

United States Standards for Grades of Frozen Plums

Effective date March 6, 1956

This is the first issue of the United States Standards for Grades of Frozen Plums published in the **FEDERAL REGISTER** of February 4, 1956 (21 FR 781) to become effective March 6, 1956.

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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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.

§52.2911 Product description.

Frozen plums means the frozen product prepared from clean, sound, fresh fruit of any commercial variety of plums, exclusive of Damson variety, which are sorted, washed, drained, and pitted; which may be packed with or without the addition of a nutritive sweetening ingredient; and which are frozen in accordance with good commercial practice and maintained at temperatures necessary for the preservation of the product.

§52.2912 Color types of frozen plums.

- (a) Purple or Blue (such as Italian Prune plum variety).
- (b) Red (such as Satsuma variety or Santa Rosa variety).
- (c) Yellow-Green (such as Yellow Egg variety, Jefferson variety and Reine Claude variety).

§52.2913 Styles of frozen plums.

- (a) **Halved** means frozen plums that have been prepared by cutting whole plums longitudinally into approximate halves.
- (b) **Whole pitted** means frozen plums that have been prepared from whole plums in a manner that the plums are not excessively crushed or excessively broken in removing the pits.
- (c) **Crushed and broken** means frozen plums that have been prepared from whole plums in a manner that most of the plums are crushed or broken in removing the pits.

§52.2914 Grades of frozen plums.

- (a) **U.S. Grade A or U.S. Fancy** is the quality of frozen plums that possess similar varietal characteristics; that possess a normal flavor; that possess a good color; that are practically uniform in size for the applicable styles; that are practically free from defects; that possess a good character; 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 frozen plums may be only reasonably uniform in size for the applicable styles, if the total score is not less than 85 points.

- (b) **U.S. Grade B or U.S. Choice** is the quality of frozen plums that possess similar varietal characteristics; that possess a normal flavor; that possess a reasonably good color; that are reasonably uniform in size for the applicable styles; that are reasonably free from defects; that possess a reasonably good character; 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 frozen plums may vary in size if the total score is not less than 70 points.
- (c) **Substandard** is the quality of frozen plums that fail to meet the requirements of U.S. Grade B or U.S. Choice.

§52.2915 Ascertaining the grade.

- (a) **General.** The grade of frozen plums is determined immediately after thawing to the extent that the units may be separated easily and are free from ice crystals. 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 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
Size	10
Defects	30
Character	<u>40</u>
Total Score	100

- (b) **Normal flavor** means that the product has a normal, characteristic flavor and odor for the varietal type and is free from objectionable flavors and objectionable odors of any kind.

§52.2916 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 such factors 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).

§52.2917 Color.

- (a) "A" classification.** Frozen plums that possess a good color may be given a score of 17 to 20 points. **Good color** means that the frozen plums, internally and externally, possess a practically uniform, bright, typical color of well ripened, properly prepared, and properly processed frozen plums of similar varietal characteristics and that the frozen plums are practically free from any brown color due to oxidation, improper processing, or other causes, which color may affect no more than slightly the appearance or edibility of the product.
- (b) "B" classification.** Frozen plums that possess a reasonably good color may be given a score of 14 to 16 points. Frozen plums 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 color** means that the frozen plums, internally and externally, possess a reasonably uniform, reasonably bright, typical color or reasonably well ripened, properly prepared, and properly processed frozen plums of similar varietal characteristics and that the frozen plums are reasonably free from any brown color due to oxidation, improper processing, or other causes, which color may not materially affect the appearance or edibility of the product.
- (c) "SStd" classification.** Frozen plums that fail 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).

§52.2918 Size.

- (a) General.** The factor of uniformity of size for crushed and broken frozen plums is not based on any detailed requirements and is not scored; the other three factors (color, defects, and character, as applicable) are scored and the total is multiplied by 100 and divided by 90, dropping any fractions to determine the total score.

- (b) **"A" classification.** Halved or whole pitted styles of frozen plums that are practically uniform in size may be given a score of 9 or 10 points. **Practically uniform in size** in halved or whole pitted styles means that in 90 percent, by count, of the units which have the most uniform size, the weight of the largest unit does not exceed the weight of the smallest unit by more than 50 percent.
- (c) **"B" classification.** Halved or whole pitted styles of frozen plums that are reasonably uniform in size may be given a score of 7 or 8 points. **Reasonably uniform in size** in halved or whole pitted styles means that in 90 percent, by count, of the units which have the most uniform size, the weight of the largest unit is not more than twice the weight of the smallest unit.
- (d) **"SStd" classification.** Halved or whole pitted styles of frozen plums that fail to meet the requirements of paragraph (c) of this section may be given a score of 0 to 6 points and 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).

§52.2919 Defects.

- (a) **General.** The factor of defects refers to the degree of freedom from harmless extraneous matter; units that are crushed or broken with respect to halved and whole pitted styles; pit material; blemished and seriously blemished units; and any other defects which detract from the appearance and eating quality of the product.
 - (1) **Harmless extraneous matter** means any vegetable substance (including, but not limited to, a leaf, stem, or portions thereof) that is harmless.
 - (2) **Crushed or broken unit** means a unit in halved or whole pitted styles that is torn, ragged, or otherwise mutilated to the extent that the unit does not retain its normal shape. In halved style, halves of plums that are slightly split are not considered crushed or broken. In whole pitted style, plums that are slit or perforated by pitting operation are not considered crushed or broken unless the unit is ragged or otherwise mutilated to the extent that the appearance of the unit does not have the approximate shape of a whole pitted plum.
 - (3) **Pit material** means any whole pit or any piece of pit material regardless of size.

- (4) **Blemished** means blemished by sunburn, scab, or blemished by discoloration or by other means to the extent that the appearance and eating quality of the unit is materially affected.
 - (5) **Seriously blemished** means blemished by sunburn, scab, or blemished by discoloration or by other means to the extent that the appearance and eating quality of the unit is seriously affected.
 - (6) **Other defects** means growth cracks, doubles, or other abnormalities which materially affect the appearance or eating quality of the unit (shriveled areas are not considered defects).
- (b) **"A" classification.** Frozen plums that are practically free from defects may be given a score of 25 to 30 points. **Practically free from defects** means that the product is practically free from pit material and that, individually and collectively, harmless extraneous matter; crushed and broken units with respect to halved and whole pitted styles; blemished and seriously blemished units; and other defects do not materially affect the appearance and eating quality of the product; and that there may be present:
- (1) Not more than 5 percent, by weight, of crushed or broken units in halved and whole pitted styles;
 - (2) Not more than 10 percent, by weight, of blemished and seriously blemished units: **Provided**, that not more than 5 percent, by weight, of all the units may be seriously blemished.
- (c) **"B" classification.** Frozen plums that are reasonably free from defects may be given a score of 21 to 24 points. Frozen plums 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 the product is practically free from pit material and that, individually and collectively, harmless extraneous matter; crushed and broken units with respect to halved and whole pitted styles; blemished and seriously blemished units; and other defects do not seriously affect the appearance and eating quality of the product; and that there may be present:
- (1) Not more than 10 percent, by weight, of crushed or broken units in halved and whole pitted styles;
 - (2) Not more than 20 percent, by weight, of blemished and seriously blemished units: **Provided**, that not more than 10 percent, by weight, of all the units may be seriously blemished.

- (d) **"SStd" classification.** Frozen plums that fail to meet the requirements of paragraph (c) 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).

§52.2920 Character.

- (a) **General.** The factor of character refers to the degree of ripeness, the texture and tenderness of the frozen plums, and to shriveled areas of skin.
- (b) **"A" classification.** Frozen plums that possess a good character may be given a score of 34 to 40 points. **Good character** means that the units possess a tender, fleshy texture, typical of well ripened, properly processed frozen plums; and that not more than 15 percent, by weight, of the units may possess a reasonably good character or possess shriveled areas that materially affect the appearance of the unit.
- (c) **"B" classification.** Frozen plums that possess a reasonably good character may be given a score of 28 to 33 points. Frozen plums 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 units possess the texture of reasonably well ripened frozen plums that are properly processed; the texture is reasonably fleshy and the units reasonably tender, or the tenderness may be variable from slightly soft to slightly firm; and that not more than 30 percent, by weight, of the units may fail to meet at least a reasonably good character or possess shriveled areas that materially affect the appearance of the unit.
- (d) **"SStd" classification.** Frozen plums that fail 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).

§52.2921 Ascertaining the grade of a lot.

The grade of a lot of the processed product 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).

§52.2922 Score sheet for frozen plums.

Number, size and kind of container			
Label; style of pack; fruit-sugar ratio (if shown)			
Container marks or identification			
Net weight (ounces)			
Type			
Style			
Count			
Factors		Score Points	
Color	20	"A" 17-20 "B" 14-16 <u>1/</u> "SStd" 0-13 <u>1/</u>	
Size	10	"A" 9-10 "B" 7- 8 "SStd" 0- 6 <u>2/</u>	
Defects	30	"A" 25-30 "B" 21-24 <u>1/</u> "SStd" 0-20 <u>1/</u>	
Character	<u>40</u>	"A" 34-40 "B" 28-33 <u>1/</u> "SStd" 0-27 <u>1/</u>	
Total Score	100		
Normal flavor			
Grade			

1/ Indicates limiting rule

2/ Indicates partial limiting rule

The United States Standards for Grades of Frozen Plums (which is the first issue) contained in this subpart shall become effective 30 days after publication hereof in the Federal Register.

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