



**United States  
Department of  
Agriculture**

Agricultural  
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Fruit and  
Vegetable  
Programs

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Branch

# **United States Standards for Grades of Frozen Field Peas and Frozen Black-Eye Peas**

Effective December 13, 2001

This is the fifth issue, of the United States Standards for Grades of Frozen Field Peas and Frozen Black-Eye Peas published in the **FEDERAL REGISTER** of November 13, 2001 to become effective December 13, 2001. This issue supersedes the fourth issue, which has been in effect since October 15, 1996.

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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UNITED STATES STANDARDS FOR GRADES OF  
FROZEN FIELD PEAS AND FROZEN BLACK-EYE PEAS

EFFECTIVE DECEMBER 13, 2001

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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.

**§52.1661 Product description.**

**Frozen field peas and frozen Black-eye peas** called **frozen peas** in these standards, means the frozen product prepared from clean, sound, fresh, seed of proper maturity of the field pea plant (*Vigna sinensis*), by shelling, sorting, washing, blanching, and properly draining. The product is frozen and maintained at temperatures necessary for preservation. **Frozen peas** may contain succulent, unshelled pods (snaps) of the field pea plant or small sieve round type succulent pods of the green bean plant as an optional ingredient used as a garnish.

**§52.1662. Styles.**

- (a) **Frozen peas.**
- (b) **Frozen peas with snaps.**

**§52.1663. Types.**

- (a) **Single type.** Frozen peas that have distinct similarities of color and shape for the type are not considered "mixed." Single types include, but are not limited to, the following:
  - (1) **Black-eye peas** or other similar varietal types, such as **Purple-hull peas**, that have a light colored skin, a definite eye (contrasting color around the hilum), and are bean shaped;
  - (2) **Crowder peas** of various groups, such as **Brown Crowder**, that are nearly round in shape and have blunt or square ends;
  - (3) **Cream peas** of various groups, including **White Acre**, that have a solid cream-colored skin and are generally bean shaped; and
  - (4) **Field peas** means any varietal group or type of the field pea plant that has similar color and shape characteristics and includes **Black-eye peas**, **Crowder peas**, and **Cream peas**.
- (b) **Mixed type.** Frozen peas that are a mixture of two or more distinct single varietal groups or are not distinguishable as a single varietal group shall be considered "mixed" type.

§52.1664. **Definitions of terms.**

- (a) **Acceptable quality level (AQL).** The maximum percent of defective units or the maximum number of defects per hundred units of product that, for the purpose of acceptance sampling, can be considered satisfactory as a process average.
- (b) **Appearance.** The overall appearance of a sample unit refers to its brightness and uniform. The color of snaps in the “frozen peas with snaps” style is considered under the overall appearance.
  - (1) **Good appearance.** The sample unit has a bright and uniform overall appearance.
  - (2) **Reasonably good appearance.** The sample unit has an overall appearance that may be dull.
- (c) **Blemished.** Blemished means discolored, spotted, or damaged by any means to the extent that the appearance or eating quality is materially affected.
- (d) **Broken.** Broken means the skin or portions of the skin, the cotyledon or portions of the cotyledon, have become separated from the unit. "Broken" is not applicable to "snaps" in the style of "frozen peas with snaps".
- (e) **Character.** Character refers to the tenderness of the frozen peas, including snaps.
  - (1) **Good character.** The units are tender and are practically uniform in texture and tenderness.
  - (2) **Reasonably good character.** The units are reasonably tender and may be variable in texture and tenderness; and the cotyledons may be mealy or firm but not hard.
- (f) **Color defective.** A unit that varies markedly from the color that is normally expected for the variety and grade.
- (g) **Defect.** Any nonconformance with a specified requirement.
- (h) **Dissimilar varieties.** In single types only, peas that are markedly different varietal colors and/or shapes. **Dissimilar varieties** is not applicable to snaps in the style of **frozen peas with snaps**.

- (i) **Harmless extraneous vegetable material.**
  - (1) In the style of **frozen peas**:
    - (i) Class 1. Hulls or pieces of unshelled pods, leaves, small tender stems, or other similar vegetable material; and
    - (ii) Class 2. Coarse, fibrous units of vegetable material which are harmless.
  - (2) In the style of **frozen peas with snaps**:
    - (i) Class 1. Leaves, small tender stems, or other similar vegetable material, except "snaps"; and
    - (ii) Class 2. Coarse, fibrous units of vegetable material which are harmless.
- (j) **Flavor and odor.**
  - (1) **Good flavor and odor.** The product, after cooking, has a good, characteristic normal flavor and odor and is free from objectionable flavors and objectionable odors of any kind.
  - (2) **Reasonably good flavor and odor.** The product, after cooking, may be lacking in good flavor but is free from objectionable flavors and objectionable odors of any kind.
- (k) **Grit.** Sand, silt, or other earthy materials.
- (l) **Sample.** The number of sample units to be used for inspection of a lot.
- (m) **Sample unit.** The amount of product specified to be used for inspection. It may be:
  - (1) The entire contents of a container; or
  - (2) A portion of the contents of a container; or
  - (3) A combination of the contents of two or more containers; or
  - (4) A portion of unpacked product.

- (n) **Shriveled.** A unit that is seriously wrinkled in appearance, including "snaps".
- (o) **Snap.** A succulent, unshelled pod of the field pea or Black-eye pea plant or small sieve round type succulent pods of the green bean plant that should be able to pass through the openings of a No. 3 sieve.
- (p) **Unit.** Any individual frozen pea; or any individual succulent, unshelled pod.

**§52.1665. Sample unit size .**

Compliance with requirements for all factors of quality is based on the following sample unit sizes:

- (a) White Acre - 5 ounces (141.75 grams).
- (b) All other types - 10 ounces (283.5 grams).

**§52.1666. Grades.**

- (a) **U.S. Grade A** is the quality of frozen peas that:
  - (1) Meets the following prerequisites:
    - (i) Has a good appearance;
    - (ii) Has a good flavor and odor;
    - (iii) Is practically free from grit;
    - (iv) Has a good character;
    - (v) Weight of broken peas does not exceed 0.25 ounce (7.1 grams) for "White Acre" peas and does not exceed 0.5 ounce (14.2 grams) for all other types; and
  - (2) Is within the limits for defects as classified in Table I and specified in Tables II and III.
- (b) **U.S. Grade B** is the quality of frozen peas that:
  - (1) Meets the following prerequisites:

- (i) Has a reasonably good appearance;
  - (ii) Has a reasonably good flavor and odor;
  - (iii) Is practically free from grit;
  - (iv) Has a reasonably good character;
  - (v) Weight of broken peas does not exceed 0.5 ounce (14.2 grams) for "White Acre" peas and 1 ounce (28.35 grams) for all other types; and
- (2) Is within the limits for defects as classified in Table I and specified in Tables II and III.
- (c) **Substandard** is the quality of frozen peas that fail to meet the requirements for U.S. Grade B.

**§52.1667. Factors of quality.**

- (a) The grade of a sample of frozen peas is based on compliance with the prerequisites specified in **§52.1666** and with limits for the following quality factors.
- (1) Dissimilar varieties and shriveled units;
  - (2) Harmless extraneous vegetable material;
  - (3) Blemished units; and
  - (4) Color defectives.

§52.1668. Classification of defects.

**TABLE I**

**AQL's AND TOLERANCES (TOL.) FOR DEFECTS IN FROZEN PEAS (EXCEPT "WHITE ACRE) BASED ON 700 UNITS OF PRODUCT FOR 13 SAMPLE UNITS, 700x13 = 9100 UNITS**

Sample Units x Sample unit Size			1x700	3x700	6x700	13x700	21x700	29x700
Units of Product			700	2100	4200	9100	14700	20300
Defects	AQL	TOL						
<b>GRADE A</b>			<b>ACCEPTANCE NUMBERS</b>					
Blemished	4.3	4.6	39	106	202	424	674	922
EVM (Minor)	0.575	0.7	7	18	32	64	99	134
EVM (Major)	0.218	0.3	3	8	14	27	41	55
Dissimilar Varieties & Shriveled units	3.7	4.0	34	92	176	367	582	796
Color Defective <sup>1/</sup>	9.9	10.4	83	231	450	950	1,518	2,083
Color Defective <sup>2/</sup>	16.4	17.0	131	372	728	1,550	2,484	3,416
<b>GRADE B</b>			<b>ACCEPTANCE NUMBERS</b>					
Blemished	6.6	7.0	57	158	304	641	1,022	1,400
EVM (Minor)	1.12	1.3	12	31	58	118	186	252
EVM (Major)	0.486	0.6	6	15	28	55	85	115
Dissimilar Varieties & Shriveled units	5.0	5.4	45	122	234	490	780	1,068

<sup>1/</sup> - For Black-eye Peas, Cream Peas, Field Peas and Mixed Types only.

<sup>2/</sup> - For Crowder Peas Only

**TABLE II**  
**AQL's AND TOLERANCES (TOL.) FOR DEFECTS IN “WHITE ACRE” FROZEN PEAS**  
**BASED ON 1400 UNITS OF PRODUCT FOR 13 SAMPLE UNITS, 1400x13 = 18200 UNITS**

Sample Units x Sample unit Size			1x1400	3x1400	6x1400	13x1400	21x1400	29x1400
Units of Product			1400	4200	8400	18200	29400	40600
Defects	AQL	TOL						
<b>GRADE A</b>			<b>ACCEPTANCE NUMBERS</b>					
Blemished	2.13	2.3	39	105	201	4200	667	913
EVM (Minor)	0.297	0.36	7	18	33	66	102	138
EVM (Major)	0.1	0.14	3	7	13	25	38	51
Dissimilar Varieties & Shriveled units	1.84	2.0	34	92	175	365	579	792
Color Defective	4.9	5.2	82	229	445	941	1,503	2,063
<b>GRADE B</b>			<b>ACCEPTANCE NUMBERS</b>					
Blemished	3.3	3.5	57	158	304	641	1,022	1,400
EVM (Minor)	0.548	0.64	12	31	57	116	182	247
EVM (Major)	0.233	0.29	6	15	27	53	82	110
Dissimilar Varieties & Shriveled units	2.5	2.7	45	122	234	490	780	1,068

**§52.1669. Sample size.**

The sample size used to determine whether the requirements of these standards are met shall be as specified in the sampling plans and procedures in the "Regulations Governing Inspection and Certification of Processed Fruits and Vegetables, Processed Products Thereof, and Certain Other Processed Products" (7 CFR 52.1 through 52.83).

**§52.1670. Acceptance criteria.**

- (a) **Quality Factors.** A lot of frozen field peas and black-eye peas is considered as meeting the requirements for quality if:
  - (1) The prerequisites specified in **§52.1666** are met; and
  - (2) The Acceptance Numbers in Table I or II in **§52.1667**, as applicable, are not exceeded.
  
- (c) **Single Sample Unit.** Each unofficial sample unit submitted for quality evaluation will be treated individually and is considered as meeting requirements for quality and style if:
  - (1) The prerequisites specified in **§52.1666** are met; and
  - (2) The Acceptable Quality Levels (AQL's) in Tables I & II in **§52.1667**, as applicable, are not exceeded.