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Crops
Program

Specialty
Crops
Inspection
Division

United States Standards for Grades of Cauliflower

Effective June 26, 2017

This issue of the United States Standards for Grades of Cauliflower (82 FR 24095) supersedes the previous issue which has been in effect since March 15, 1968.

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, DC 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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Grades
§51.540 U.S. No. 1.

“U.S. No. 1” consists of heads of cauliflower which meet the following requirements:

- (a) Basic requirements for curds:
 - (1) Clean;
 - (2) Compact;
 - (3) Color -- white, creamy white, or cream, unless otherwise specified;
 - (4) Size -- not less than 4 inches in diameter, unless marked to a maximum diameter of less than 4 inches. Cauliflower curds marked less than four inches may not be comingled with cauliflower curds packed to be 4 inches and larger. For marking requirements see §51.556.
- (b) Basic requirements for jacket leaves:
 - (1) Fresh;
 - (2) Closely trimmed, unless otherwise specified;
 - (3) Fairly clean.
- (c) Free from:
 - (1) Soft or wet decay.
- (d) Free from damage caused by:
 - (1) Bruising;
 - (2) Cuts;
 - (3) Discoloration;
 - (4) Enlarged bracts;
 - (5) Fuzziness;
 - (6) Hollow stem;
 - (7) Insects;

- (8) Mold;
 - (9) Riciness;
 - (10) Wilting; and
 - (11) Other means.
- (e) Free from serious damage by any cause.
- (f) For tolerances (see §51.543).

§51.541 U.S. Commercial.

“**U.S. Commercial**” consists of heads of cauliflower which meet the requirements for the U.S. No. 1 grade except for the increased tolerances for defects specified in §51.543.

Reserved

§51.542 Reserved.

Tolerances

§51.543 Tolerances.

In order to allow for variations incident to proper grading and handling in each of the foregoing grades, the following tolerances, by count, are provided as specified:

(a) Defects

- (1) **U.S. No. 1.** 10 percent for heads of cauliflower in any lot which fail to meet the requirements of the grade, but not more than one-half of this tolerance, or 5 percent, shall be allowed for defects causing serious damage, including in this latter amount not more than 1 percent for soft or wet decay affecting the curd or butt. (See §51.544.)
 - (2) **U.S. Commercial.** 20 percent for heads of cauliflower in any lot which fail to meet the requirements of the grade, but not more than one-half of this tolerance, or 10 percent, shall be allowed for defects causing serious damage, including in this latter amount not more than 1 percent for soft or wet decay affecting the curd or butt. (See §51.544.)
- (b) **For off-size.** 5 percent for heads of cauliflower smaller than the specified minimum curd size and 5 percent for heads of cauliflower larger than any specified maximum curd size. (See §51.544.)

Application of Tolerances

§51.544 Application of tolerances.

The contents of individual packages in the lot, based on sample inspection, are subject to the following limitations:

- (a) A package may contain not more than double any specified tolerance except that at least two defective and two off-size specimens may be permitted in any package: *Provided*, That not more than one specimen which is affected by soft or wet decay occurring on the curd or butt portion of the head may be permitted in any package: *And provided further*, That the averages for the lot are within the tolerances specified for the grade.

Standard Sizing

§51.545 Standard sizing.

- (a) Any lot of cauliflower may be designated as meeting the requirements for standard sizing provided the variation in diameter of the curd in any individual package is not more than 1-1/2 inches.
- (b) In order to allow for variations incident to proper packing not more than 10 percent of the containers in any lot may fail to meet the requirements for standard sizing.

Definitions

§51.546 Clean.

“Clean” means that the curd is practically free from dirt or other foreign matter.

§51.547 Compact.

“Compact” means that the flower clusters are closely united and the curd is solid.

§51.548 Diameter.

“Diameter” means the greatest dimension measured in a straight line which would pass through the center of the curd.

§51.549 Fresh.

“Fresh” means that the jacket leaves are of normal color and are not wilted.

§51.550 Closely trimmed.

“Closely trimmed” means that the butts are smoothly trimmed and jacket leaves do not exceed the number and length necessary for protection against bruising, and do not

extend above the crown of the curd. No jacket leaves are required on heads which are individually wrapped, or packed with cushions, partitions or other protective means.

§51.551 Fairly clean.

“**Fairly clean**” means the jacket leaves are not caked or badly smeared with dirt or other foreign matter.

§51.552 Curd.

“**Curd**” means the edible portion of the head exclusive of the butt and any attached jacket leaves.

§51.553 Soft or wet decay.

“**Soft or wet decay**” means any soft or mushy breakdown of the curd, butt, or leaves.

§51.554 Damage.

“**Damage**” means any specific defect described in this section; or an equally objectionable variation of any one of these defects, any other defect, or any combination of defects, which materially detracts from the appearance, or the edible or marketing quality of the cauliflower. The following specific defects shall be considered as damage:

- (a) **Bruising** when the size or color of the affected area materially detracts from the appearance or marketing quality, or when more than a small portion of the curd has broken off;
- (b) **Cuts** when materially detracting from the appearance or marketing quality, or when any cut exposes the flower stem;
- (c) **Discoloration** when yellow or other abnormal color materially detracts from the appearance of the curd, or of the jacket leaves of closely trimmed cauliflower, or seriously detracts from the appearance of the jacket leaves of cauliflower not closely trimmed;
- (d) **Enlarged bracts** when leaves growing up through and extending above the curd materially detract from the appearance of the head;
- (e) **Fuzziness** when more than one-third of the curd surface has a distinct fuzzy appearance;
- (f) **Hollow stem** when the opening extends into the curd, or when the opening is more than slightly discolored or watersoaked;
- (g) **Insects** when any feeding injury on the curd is evident, or when the curd is more

than slightly infested or the jacket leaves are more than moderately infested with aphids or other insects;

- (h) **Mold** when the aggregate area of all spots exceeds that of a circle three-eighths inch in diameter, or when the area of any individual spot exceeds that of a circle one-eighth inch in diameter. Mold which causes disintegration of the curd is considered soft decay; and,
- (i) **Riciness** when causing the surface of the curd to be abnormally rough or granular.

§51.555 Serious damage.

“**Serious damage**” means any specific defect described in this section, any other defect, or any combination of defects, which seriously detracts from the appearance, or the edible or marketing quality of the cauliflower. The following specific defects shall be considered as serious damage:

- (a) **Insects** when the curd is more than slightly infested or the jacket leaves badly infested with aphids or other insects, or when insect feeding injury seriously detracts from the appearance of the head;
- (b) **Soft or wet decay** affecting any portion of the head.

Marking Requirements

§51.556 Marking requirements.

When the product is packed to be less than 4 inches in maximum diameter, 90 percent or more of the master containers shall be plainly stamped, printed, labeled, or otherwise marked with the maximum diameter. The term “maximum,” or its recognized abbreviation, when following a diameter size marking, means that the heads are of the size marked or smaller.

Metric Conversion Table
§51.557 Metric conversion table.

Inches	Millimeters (mm)
1/3 =	3.2
1/4=	6.4
1/2=	12.7
3/4=	19.1
1=	25.4
1-1/2=	38.1
2=	50.8
3=	76.2
4=	101.6
5=	127.0
6=	152.4
7=	177.8
8=	203.2
9=	228.6