



**United States
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Agriculture**

**Agricultural
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Service**

**Fruit and
Vegetable
Division**

**Fresh
Products
Branch**

United States Standards for Grades of Bunched Carrots

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United States Standards for Grades of Bunched Carrots¹

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Grades

§51.2455 U.S. No. 1.

"U.S. No. 1" consists of carrots of similar varietal characteristics the roots of which are firm, fairly clean, fairly well colored, fairly smooth, well formed, and which are free from soft rot, and free from damage caused by freezing, growth cracks, sunburn, pithiness, woodiness, internal discoloration, oil spray, dry rot, other disease, insects or mechanical or other means. Bunches shall have tops which are fresh and free from decay and free from damage caused by freezing, seedstems, yellowing or other discoloration, disease, insects or mechanical or other means. Unless otherwise specified, the bunches shall have full tops and the length of tops shall be not more than 20 inches. (See §51.2459.)

(a) **Size.** Unless otherwise specified, the diameter of each carrot shall be not less than three-fourths inch.

¹Compliance 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.

(b) **Tolerances.** In order to allow for variations incident to proper grading and handling the following tolerances shall be permitted:

(1) **For defects of roots.** 10 percent, by count, for carrot roots in any lot which fail to meet the requirements of the grade, other than for size: **Provided**, That not more than one-half of this amount, or 5 percent, shall be allowed for defects causing serious damage, including therein not more than one percent for carrot roots affected by soft rot;

(2) **For defects of tops.** 10 percent, by count, for bunches in any lot which fail to meet the requirements of the grade, including therein not more than 5 percent for decay;

(3) **For off-length tops.** 25 percent, by count, for bunches in any lot which have tops longer than the specified length; and,

(4) **For off-size roots.** 5 percent, by count, for carrot roots in any lot which are smaller than the specified minimum diameter, and 10 percent, by count, for carrot roots which are larger than any specified maximum diameter.

§51.2456 U.S. Commercial.

"U.S. Commercial" consists of carrots which meet the requirements of U.S. No. 1 except for the increased tolerance for defects of the roots specified below:

(a) **Tolerances.** In order to allow for variations incident to proper grading and handling the following tolerances shall be permitted:

(1) **For defects of roots.** 20 percent, by count, for carrot roots in any lot which fail to meet the requirements of the grade, other than for size: **Provided**, That not more than one-half of this amount, or 10 percent, shall be allowed for defects causing serious damage, including therein not more than 1 percent for carrot roots affected by soft rot;

(2) **For defects of tops.** 10 percent, by count, for bunches in any lot which fail to meet the requirements of the grade, including therein not more than 5 percent for decay;

(3) **For off-length tops.** 25 percent, by count, for bunches in any lot which have tops longer than the specified length; and,

(4) **For off-size roots.** 5 percent, by count, for carrot roots in any lot which are smaller than the specified minimum diameter, and 10 percent, by count, for carrot roots which are larger than any specified maximum diameter.

Unclassified

§51.2457 Unclassified.

"Unclassified" consists of carrots which have not been classified in accordance with either of the foregoing grades. The term "unclassified" is not a grade within the meaning of these standards, but is provided as a designation to show that no grade has been applied to the lot.

Application of Tolerances

§51.2458 Application of tolerances.

(a) The contents of individual packages in the lot, based on sample inspection, are subject to the following limitations, provided the averages for the entire lot are within the tolerances specified for the grade:

(1) For a tolerance of 10 percent or more, individual packages in any lot shall have not more than one and one-half times the tolerance specified, except that at least one defective and one off-size specimen may be permitted in a package; and,

(2) For a tolerance of less than 10 percent, individual packages in any lot shall have not more than

double the tolerance specified, except that at least one defective and one off-size specimen may be permitted in a package.

Length of Tops

§51.2459 Length of tops.

In addition to the statement of grade, the length of tops may be specified in accordance with the following length classifications:

Short	Medium	Long	Extra long
Under 12 inches.	12 to 16 inches, inclusive.	Over 16 to 20 inches, inclusive.	Over 20 in.

Standard Bunches

§51.2460 Standard bunches.

(a) When specified as "standard bunches" the carrots shall meet the following requirements:

(1) Each bunch of carrots including tops, shall weigh not less than 1 pound and contain at least 4 carrots;

(2) When the diameter of the smallest carrot in the bunch is less than 1-1/4 inches, not over one-fourth inch variation in the size of carrots in the bunch shall be permitted;

(3) When the diameter of the smallest carrot in the bunch is 1-1/4 to 1-3/4 inches, inclusive, not over three-eighths inch variation in the size of carrots in the bunch shall be permitted; and,

(4) When the diameter of the smallest carrot in the bunch is larger than 1-3/4 inches, not over one-half inch variation in the size of carrots in the bunch shall be permitted.

(b) In order to allow for variations incident to proper bunching not more than 10 percent, by count, of the bunches may fail to meet the requirements for "standard bunches."

Definitions

§51.2461 Similar varietal characteristics.

"Similar varietal characteristics" means that the carrots in any lot are of the same general type. For example, carrots with a short, but blunt growth, like the Oxheart variety, shall not be mixed with long or half-long carrots, like the Emperor or Danvers varieties.

§51.2462 Firm.

"Firm" means that the carrot is not soft, flabby, or shriveled.

§51.2463 Fairly clean.

"Fairly clean" means that the individual carrot is reasonably free from dirt, stain or other foreign matter and that the general appearance of the carrots in the lot is not more than slightly affected.

§51.2464 Fairly well colored.

"Fairly well colored" means that the carrot has an orange, orange red, or orange scarlet color, but not a pale orange or distinct yellow color.

§51.2465 Fairly smooth.

"Fairly smooth" means that the carrot is not rough, ridged, or covered with secondary rootlets to the extent that the appearance is materially affected.

§51.2466 Well formed.

"Well formed" means that the carrot is not forked, or misshapen to the extent that the appearance is more than slightly affected.

§51.2467 Damage.

"Damage" means any defect which materially affects the appearance, or the edible or shipping quality of the individual carrot root, or the general appearance of the carrot roots in the container, or causes a loss of more than 3 percent, by weight, in the ordinary preparation for use, or which materially affects the appearance or shipping quality of the tops. Any one of the following defects, or any combination of defects, the seriousness of which exceeds the maximum allowed for any one defect, shall be considered as damage:

(a) Growth cracks which are not shallow or not smooth, or which materially affect the appearance of the carrot;

(b) Sunburn which causes a loss of more than 3 percent, by weight, in the ordinary preparation for use, except that superficial light green color at the stem end which does not materially affect the appearance of the root shall be permitted; and,

(c) Yellowing or other discoloration or injury to the tops when the appearance of the bunch is materially affected. The appearance of the individual bunch shall be considered materially affected when the tops are trimmed to the extent that only a relatively few leaves remain. The appearance of bunches with tops having slight discoloration such as yellowing, browning or other abnormal color affecting a few leaflets shall not be considered materially affected if the tops as a whole show a predominantly normal green color.

§51.2468 Fresh.

"Fresh" means that the tops are not badly wilted.

§51.2469 Full tops.

"Full tops" means that the leafstems have not been cut back, but dried or damaged leaves or leafstems may have been removed.

§51.2470 Diameter.

"Diameter" means the greatest dimension of the root measured at right angles to the longitudinal axis.

§51.2471 Serious damage.

"Serious damage" means any defect which seriously affects the appearance, or the edible or shipping quality of the individual carrot or the general appearance of the carrots in the container, or causes a loss of more than 20 percent, by weight, in the ordinary preparation for use.