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# **United States Standards for Grades of Florida Tangerines**

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## United States Standards for Grades of Florida Tangerines

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### Grades

#### **§51.1810 U.S. Fancy.**

"U.S. Fancy" consists of tangerines which meet the following requirements:

(a) Basic requirements:

(1) Discoloration: Not more than one-tenth of the surface, in the aggregate, may be affected by

discoloration. (See §51.1828.);

- (2) Firm;
- (3) Highly colored;
- (4) Mature; and,
- (5) Well formed.
- (b) Free from:
  - (1) Caked melanose;
  - (2) Decay;
  - (3) Unhealed skin breaks; and,
  - (4) Wormy fruit.
- (c) Free from damage caused by:
  - (1) Ammoniation;
  - (2) Bruises;
  - (3) Buckskin;
  - (4) Creasing;
  - (5) Dirt or other foreign material;
  - (6) Dryness or mushy condition;
  - (7) Disease;
  - (8) Green spots;
  - (9) Hail;
  - (10) Insects;
  - (11) Oil spots;
  - (12) Scab;
  - (13) Scale;
  - (14) Scars;
  - (15) Skin breakdown;
  - (16) Sprayburn;
  - (17) Sunburn; and,
  - (18) Other means.
- (d) For tolerances see §51.1820.

**§51.1811 U.S. No. 1 Bright.**

The requirements for this grade are the same as for U.S. No. 1 except that fruit shall have not more than one-fifth of its surface, in the aggregate, affected by discoloration. For tolerances see §51.1820.

**§51.1812 U.S. No. 1.**

"U.S. No. 1" consists of tangerines which meet the following requirements:

- (a) Basic requirements:
  - (1) Discoloration: Not more than one-third of the surface, in the aggregate, may be affected by discoloration. (See §51.1828.);
  - (2) Fairly well colored;
  - (3) Firm;
  - (4) Mature; and,
  - (5) Well formed.

- (b) Free from:
  - (1) Decay;
  - (2) Unhealed skin breaks; and,
  - (3) Wormy fruit.
- (c) Free from damage caused by:
  - (1) Ammoniation;
  - (2) Bruises;
  - (3) Buckskin;
  - (4) Caked melanose;
  - (5) Creasing;
  - (6) Dirt or other foreign material;
  - (7) Disease;
  - (8) Dryness or mushy condition;
  - (9) Green spots;
  - (10) Hail;
  - (11) Insects;
  - (12) Oil spots;
  - (13) Scab;
  - (14) Scale;
  - (15) Scars;
  - (16) Skin breakdown;
  - (17) Sprayburn;
  - (18) Sunburn; and,
  - (19) Other means.
- (d) For tolerances see §51.1820.

**§51.1813 U.S. No. 1 Golden.**

The requirements for this grade are the same as for U.S. No. 1 except that not more than 30 percent, by count, of the fruit shall have more than one-third of their surface, in the aggregate, affected by discoloration. For tolerances see §51.1820.

**§51.1814 U.S. No. 1 Bronze.**

The requirements for this grade are the same as for U.S. No. 1 except that at least 30 percent, by count, of the fruit shall have more than one-third of their surface, in the aggregate, affected by discoloration. The predominating discoloration on each fruit shall be of rust mite type. For tolerances see §51.1820.

**§51.1815 U.S. No. 1 Russet.**

The requirements for this grade are the same as for U.S. No. 1 except that at least 30 percent, by count, of the fruit shall have more than one-third of their surface, in the aggregate, affected by any type of discoloration. For tolerances see §51.1820.

**§51.1816 U.S. No. 2 Bright.**

The requirements for this grade are the same as for U.S. No. 2 except that fruit shall have more than one-fifth of its surface, in the aggregate, affected by discoloration. For tolerances see §51.1820.

**§51.1817 U.S. No. 2.**

"U.S. No. 2" consists of tangerines which meet the following requirements:

(a) Basic requirements:

(1) Discoloration: Not more than one-half of the surface, in the aggregate, may be affected by discoloration. (See §51.1828.);

(2) Fairly firm;

(3) Fairly well formed;

(4) Mature; and,

(5) Reasonably well colored.

(b) Free from:

(1) Decay;

(2) Unhealed skin breaks; and,

(3) Wormy fruit.

(c) Free from serious damage caused by:

(1) Ammoniation;

(2) Bruises;

(3) Buckskin;

(4) Caked melanose;

(5) Creasing;

(6) Dirt or other foreign material;

(7) Disease;

(8) Dryness or mushy condition;

(9) Green spots;

(10) Hail;

(11) Insects;

(12) Oil spots;

(13) Scab;

(14) Scale;

(15) Scars;

(16) Skin breakdown;

(17) Sprayburn;

(18) Sunburn; and,

(19) Other means.

(d) For tolerances see §51.1820.

**§51.1818 U.S. No. 2 Russet.**

The requirements for this grade are the same as for U.S. No. 2 except that at least 10 percent of the fruit shall have more than one-half of their surface, in the aggregate, affected by any type of discoloration. For tolerances see §51.1820.

**§51.1819 U.S. No. 3.**

"U.S. No. 3" consists of tangerines which meet the following requirements:

(a) Basic requirements:

(1) Mature;

(2) Not flabby; and,

- (3) Not seriously lumpy.
- (b) Free from:
  - (1) Decay;
  - (2) Unhealed skin breaks; and,
  - (3) Wormy fruit.
- (c) Free from very serious damage caused by:
  - (1) Ammoniation;
  - (2) Bruises;
  - (3) Caked melanose;
  - (4) Creasing;
  - (5) Dirt or other foreign material;
  - (6) Disease;
  - (7) Dryness or mushy condition;
  - (8) Hail;
  - (9) Insects;
  - (10) Scab;
  - (11) Scale;
  - (12) Scars;
  - (13) Skin breakdown;
  - (14) Sprayburn;
  - (15) Sunburn; and,
  - (16) Other means.
- (d) For tolerances see §51.1820.

**Tolerances**

**§51.1820 Tolerances.**

In order to allow for variations incident to proper grading and handling in each of the foregoing grades, the following tolerances, by count, based on a minimum 25 count sample, are provided as specified:

(a) **Defects.**

(1) **U.S. Fancy, U.S. No. 1 Bright, U.S. No. 1, U.S. No. 1 Golden, U.S. No. 1 Bronze, U.S. No. 1 Russet, U.S. No. 2 Bright, U.S. No. 2, and U.S. No. 2 Russet grades.**

(i) **For defects at shipping point<sup>1</sup>.** Not more than 10 percent of the fruit in any lot may fail to meet the requirements of the specified grade: **Provided**, that included in this amount not more than 5 percent shall be allowed for defects causing very serious damage, including in this latter amount not more than 1 percent for decay or wormy fruit.

(ii) **For defects en route or at destination.** Not more than 12 percent of the fruit which fail to meet the requirements of the specified grade: **Provided**, that included in this amount not more than the following percentages shall be allowed for defects listed:

(A) 10 percent for fruit having permanent defects; or,

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<sup>1</sup>Shipping point, as used in these standards, means the point of origin of the shipment in the producing area or at port of loading for ship stores or overseas shipment, or, in the case of shipments from outside the continental United States, the port of entry into the United States.

(B) 7 percent for defects causing very serious damage, including therein not more than 5 percent for very serious damage by permanent defects and not more than 3 percent for decay or wormy fruit.

(2) **U.S. No. 3.**

(i) **For defects at shipping point**<sup>1</sup>. Not more than 10 percent of the fruit in any lot may fail to meet the requirements of the grade: **Provided**, that included in this amount not more than 1 percent shall be for decay or wormy fruit.

(ii) **For defects en route or at destination.** Not more than 12 percent of the fruit which fail to meet the requirements of the grade: **Provided**, that included in this amount not more than the following percentages shall be allowed for defects listed:

(A) 10 percent for fruit having permanent defects; or,

(B) 3 percent for decay or wormy fruit.

(b) **Discoloration.**

(1) **U.S. No. 1 Bright, U.S. No. 1, U.S. No. 2 Bright, and U.S. No. 2.** Not more than 10 percent of the fruit in any lot may fail to meet the requirements relating to discoloration as specified in each grade. No sample may have more than 20 percent of the fruit with excessive discoloration: **And provided further**, that the entire lot averages within the percentage specified.

(2) **U.S. No. 1 Golden.** Not more than 30 percent of the fruit shall have in excess of one-third of their surface, in the aggregate, affected by discoloration, and no part of any tolerance shall be allowed to increase this percentage. No sample may have more than 40 percent of the fruit with excessive discoloration: **And provided further**, that the entire lot averages within the percentage specified.

(3) **U.S. No. 1 Bronze, and U.S. No. 1 Russet.** At least 30 percent of the fruit shall have in excess of one-third of the surface, in the aggregate, affected by discoloration, and no part of any tolerance shall be allowed to reduce this percentage. No sample may have less than 20 percent of the fruit with required discoloration: **And provided further**, that the entire lot averages within the percentage specified.

(4) **U.S. No. 2 Russet.** At least 10 percent of the fruit shall have in excess of one-half of the surface, in the aggregate, affected by discoloration, and no part of any tolerance shall be allowed to reduce this percentage: **And provided further**, that the entire lot averages within the percentage specified.

**Application of Tolerances**

**§51.1821 Application of tolerances.**

Individual samples are subject to the following limitations, unless otherwise specified in §51.1820. Individual samples shall have not more than one and one-half times a specified tolerance of 10 percent or more, and not more than double a specified tolerances of less than 10 percent:

**Provided**, that at least one decayed or wormy fruit may be permitted in any sample:

<sup>1</sup>Shipping point, as used in these standards, means the point of origin of the shipment in the producing area or at port of loading for ship stores or overseas shipment, or, in the case of shipments from outside the continental United States, the port of entry into the United States.

**And provided further**, that the averages for the entire lot are within the tolerances specified for the grade

**Size**

**§51.1822 Size.**

- (a) Fruits shall be fairly uniform in size and shall be packed in containers according to approved and recognized methods.
- (b) "Fairly uniform in size" means that not more than 10 percent of the tangerines per sample may vary more than one-half inch in diameter.
- (c) In order to allow for variations incident to proper sizing, not more than 10 percent of the samples in any lot may fail to meet the requirements of size.

**Definitions**

**§51.1823 Mature.**

"Mature" shall have the same meaning assigned the term in the Florida Citrus Code, Chapter 601, 1995 Edition, and the Official Rules Affecting the Florida Citrus Industry, in effect as of February 12, 1995. These tangerine maturity requirements are contained in the Florida Citrus Code, Chapter 601, Florida Statutes, Sections 601.21, and 601.22, 1995 Edition, and the State of Florida Department of Citrus Official Rules Affecting the Florida Citrus Industry, Part 1, Chapter 20-13 Market Classification, Maturity Standards and Processing or Packing Restrictions for Hybrids in effect as of February 12, 1995. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR Part 51. Copies may be obtained from, Florida Department of Citrus, Post Office Box 148, Lakeland, Florida 33802 or copies of both regulations may be inspected at USDA, AMS, F&VD, FPB, Standardization Section, Room 2065-S, 14th and Independence Ave., Washington, DC 20250 or at the Office of the Federal Register, Suite 700, 800 North Capitol Street, Washington, DC.

**§51.1824 Firm.**

"Firm" means that the flesh is not soft and the fruit is not badly puffy and that the skin has not become materially separated from the flesh of the tangerine.

**§51.1825 Well formed.**

"Well formed" means that the fruit has the characteristic tangerine shape and is not deformed.

**§51.1826 Damage.**

"Damage" means any specific defect described in §51.1837, Table I; 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 fruit.

**§51.1827 Highly colored.**

"Highly colored" means that the ground color of each fruit is a deep tangerine color, or characteristic color for the variety, with practically no trace of yellow color.

**§51.1828 Discoloration.**

"Discoloration" means russetting of a light shade of golden brown caused by rust mite or other means. Lighter shades of discoloration caused by smooth or fairly smooth superficial scars or other means may be allowed on a greater area, or darker shades may be allowed on a lesser area, provided no discoloration caused by speck type melanose or other means may detract from the appearance of the fruit to a greater extent than the shade and amount of discoloration allowed in the grade.

**§51.1829 Well colored.**

"Well colored" means that a good yellow or better ground color predominates over the green color on the entire fruit surface with no distinct green color present, and that some portion of the surface has a reddish tangerine blush, or characteristic color for the variety.

**§51.1830 Fairly well colored.**

"Fairly well colored" means that the surface of the fruit may have green color which does not exceed the aggregate area of a circle 1-1/4 inches (31.8 mm) in diameter and that the remainder of the surface has a yellow or better ground color with some portion of the surface showing reddish tangerine blush, or characteristic color for the variety.

**§51.1831 Fairly firm.**

"Fairly firm" means that the flesh may be slightly soft but is not bruised or badly puffy, and that the skin has not become seriously separated from the flesh of the tangerine.

**§51.1832 Fairly well formed.**

"Fairly well formed" means that the fruit may not have the shape characteristic of the variety but that it is not badly deformed.

**§51.1833 Serious damage.**

"Serious damage" means any specific defect described in §51.1837, Table I; or an equally objectionable variation of any one of these defects, any other defect, or any combination of defects, which seriously detracts from the appearance, or the edible or marketing quality of the fruit.

**§51.1834 Reasonably well colored.**

"Reasonably well colored" means that a good yellow or reddish tangerine color shall predominate over the green color on at least one-half of the fruit surface in the aggregate, and that each fruit shall show practically no lemon color.

**§51.1835 Very serious damage.**

"Very serious damage" means any specific defect described in §51.1837, Table I; or an equally objectionable variation of any one of these defects, any other defect, or any combination of defects, which very seriously detracts from the appearance, or the edible or marketing quality of the fruit.

**§51.1836 Diameter.**

"Diameter" means the greatest dimension measured at right angles to a line from stem to blossom end.

§51.1837 Classification of defects.

Table I

Factor	Damage	Serious Damage	Very Serious Damage
Ammoniation	Not occurring as light speck type, or detracts more than discoloration permitted in the grade.	Scars are cracked or dark and aggregating more than a circle 5/8 inch (15.9 mm) in diameter.	Aggregating more than 25 percent of the surface.
Bruises	Segment walls are collapsed, or rag is ruptured and juice sacs are ruptured.	Segment walls are collapsed, or rag is ruptured and juice sacs are ruptured.	Fruit is split open, peel is badly watersoaked, or rag is ruptured and juice sacs are ruptured causing a mushy condition affecting all segments more than 1/2 inch (12.7 mm) at bruised area or the equivalent of this amount, by volume, when affecting more than one area on the fruit.
Buckskin	Aggregating more than a circle 3/4 inch (19.1 mm) in diameter.	Aggregating more than 25 percent of the surface.	Aggregating more than 50 percent of the surface.
Caked melanose	Aggregating more than a circle 3/8 inch (9.5 mm) in diameter.	Aggregating more than a circle 5/8 inch (15.9 mm) in diameter.	Aggregating more than 25 percent of the surface.
Creasing	Materially weakens the skin, or extends over more than one-third of the surface.	Seriously weakens the skin, or extends over more than one-half of the surface.	Very seriously weakens the skin, or is distributed over practically the entire surface.
Dryness or mushy condition	Affecting all segments more than 1/8 inch (3.2 mm) at stem end, or the equivalent of this amount, by volume, when occurring in other portions of the fruit.	Affecting all segments more than 1/4 inch (6.4 mm) at stem end, or the equivalent of this amount, by volume, when occurring in other portions of the fruit.	Affecting all segments more than 1/2 inch (12.7 mm) at stem end, or the equivalent of this amount, by volume, when occurring in other portions of the fruit.
Green spots	Aggregating more than a circle 1/2 inch (12.7 mm) in diameter.	Aggregating more than a circle 5/8 inch (15.9 mm) in diameter.	Aggregating more than 25 percent of the surface.

Oil spots	Aggregating more than a circle 1/2 inch (12.7 mm) in diameter.	Aggregating more than a circle 3/4 inch (19.1 mm) in diameter.	Aggregating more than 25 percent of the surface.
Scab	Materially detracts from the shape or texture, or aggregating more than a circle 3/8 inch (9.5 mm) in diameter.	Seriously detracts from the shape or texture, or aggregating more than a circle 5/8 inch (15.9 mm) in diameter.	Aggregating more than 25 percent of the surface.
Scale	Aggregating more than a circle 3/8 inch (9.5 mm) in diameter	Aggregating more than a circle 5/8 inch (15.9 mm) in diameter.	Aggregating more than 25 percent of the surface.
Scars, Hail, and Thorn scratches <b>[For smooth or fairly smooth superficial scars see §51.1828.]</b>	Deep or rough aggregating more than a circle 1/4 inch (6.4 mm) in diameter; slightly rough with slight depth aggregating more than a circle 3/4 inch (19.1 mm) in diameter; smooth or fairly smooth with slight depth aggregating more than a circle 1-1/8 inches (28.6 mm) in diameter.	Deep or rough aggregating more than a circle 1/2 inch (12.7 mm) in diameter; slightly rough with slight depth aggregating more than a circle 1-1/8 inches (28.6 mm) in diameter; smooth or fairly smooth with slight depth aggregating more than 10 percent of fruit surface.	Deep or rough or unsightly that appearance is very seriously affected.
Skin breakdown	Aggregating more than a circle 1/2 inch (12.7 mm) in diameter.	Aggregating more than a circle 3/4 inch (19.1 mm) in diameter.	Aggregating more than 25 percent of the surface.
Sprayburn	Skin is hard and aggregating more than a circle 3/4 inch (19.1 mm) in diameter.	Skin is hard and aggregating more than a circle 1-1/4 inches (31.8 mm) in diameter.	Aggregating more than 25 percent of the surface.
Sunburn	Skin is flattened, dry, darkened, or hard and the affected area exceeds 25 percent of the surface.	Skin is hard and affects more than one-third of the surface.	Aggregating more than 50 percent of the surface.

Note: All references to area or aggregate area, or length in this standard are based on a tangerine 2-1/2 inches (63.5 mm) in diameter, allowing proportionately greater areas on larger fruit and lesser areas on smaller fruit.