obtained sucrose value by the first method prescribed in "Correction of Refractometer Sucrose Readings for Citric Acid Content for Lemonade," by Yeatman, Senzel, and Springer, "Journal of the Association of Official Analytical Chemists," vol. 59 p. 368 (1976). Copies are available from the AOAC INTERNATIONAL, 481 North Frederick Ave., suite 500, Gaithersburg, MD 20877, or available for inspection at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

The food may contain one or any combination of the optional ingredients specified in paragraph (a)(2) of this section. Grapefruit juice, as defined in this paragraph, may be preserved by heat sterilization (canning), refrigeration, or freezing. When sealed in a container to be held at ambient temperatures, it is so processed by heat, before or after sealing, as to prevent spoilage.

(2) **Optional ingredients.** The optional ingredients referred to in paragraph (a)(1) of this section are:

(i) **Concentrated grapefruit juice** (grapefruit juice from which part of the water has been removed).

(ii) **Water and/or grapefruit juice to reconstitute concentrated grapefruit juice** in the manufacture of grapefruit juice from concentrate.

(iii) **One or any combination of two or more of the dry or liquid forms of sugar, invert sugar sirup, dextrose, glucose sirup, and fructose.** Sweeteners defined in part 168 of this chapter shall be as defined therein.

(3) **Labeling.** (i) The name of the food is:

(a) “Grapefruit juice” (1) if the food is prepared from unconcentrated, undiluted liquid extracted from mature grapefruit; or (2) if the food is prepared from concentrated, undiluted liquid extracted from mature grapefruit to which concentrated grapefruit juice is added to adjust soluble solids as provided for in paragraph (a)(1) of this section.

(b) “Grapefruit juice from concentrate” (1) if the food is prepared from concentrated grapefruit juice and water and/or grapefruit juice; or (2) if the food is prepared from grapefruit juice from concentrate and grapefruit juice. The words “from concentrate” shall be shown in letters not less than one-half the height of the letters in the words “grapefruit juice.”

(ii) If any nutritive sweetener is added, the principal display panel of the label shall bear the statement “Sweetener added.” If no sweetener is added, the word “unsweetened” may immediately precede or follow the words “Grapefruit Juice” or “Grapefruit Juice from Concentrate.”

(iii) **Label declaration.** Each of the ingredients used in the food shall be declared on the label as required by the applicable sections of parts 101 and 130 of this chapter.

(b) [Reserved]

(c) **Fill of container.** (1) **The standard of fill of container for grapefruit juice, except when the food is frozen, is not less than 90 percent of the total capacity of the container as determined by the general method for fill of container prescribed in §130.12(b) of this chapter.**

(2) Compliance is determined as specified in §146.3(g)(2).

(3) **If the grapefruit juice fails to meet the standard of fill as prescribed in paragraphs (c)(1) and (2) of this section, the label shall bear the general statement of substandard fill specified in §130.14(b) of this chapter, in the manner and form therein prescribed.**


§ 146.135 **Orange juice.**

(a) Orange juice is the unfermented juice obtained from mature oranges of the species *Citrus sinensis* or of the citrus hybrid commonly called “Ambersweet” (1/2 *Citrus sinensis* X 3/8 *Citrus reticulata* X 1/8 *Citrus paradisi* (USDA Selection:1–100–29: 1972 Whitmore Foundation Farm)). Seeds (except embryonic seeds and small fragments of seeds that cannot be separated by current good manufacturing practice) and excess pulp are removed. The juice may be chilled, but it is not frozen.
(b) The name of the food is “orange juice”. The name “orange juice” may be preceded on the label by the varietal name of the oranges used, and if the oranges grew in a single State, the name of such State may be included in the name, as for example, “California Valencia orange juice”.


§ 146.137 Frozen orange juice.

(a) Frozen orange juice is orange juice as defined in §146.135, except that it is frozen.

(b) The name of the food is “Frozen orange juice”. Such name may be preceded on the label by the varietal name of the oranges used, and if the oranges grew in a single State, the name of such State may be included in the name, as for example, “California Valencia frozen orange juice”.

§ 146.140 Pasteurized orange juice.

(a) Pasteurized orange juice is the food prepared from unfermented juice obtained from mature oranges as specified in §146.135, to which may be added not more that 10 percent by volume of the unfermented juice obtained from mature oranges of the species *Citrus reticulata* or *Citrus reticulata* hybrids (except that this limitation shall not apply to the hybrid species described in §146.135). Seeds (except embryonic seeds and small fragments of seeds that cannot be separated by good manufacturing practice) are removed, and pulp and orange oil may be adjusted in accordance with good manufacturing practice. If the adjustment involves the addition of pulp, then such pulp shall not be of the washed or spent type. The solids may be adjusted by the addition of one or more of the optional concentrated orange juice ingredients specified in paragraph (b) of this section. One or more of the optional sweetening ingredients listed in paragraph (c) of this section may be added in a quantity reasonably necessary to raise the Brix or the Brix-acid ratio to any point within the normal range usually found in unfermented juice obtained from mature oranges as specified in §146.135. The orange juice is so treated by heat as to reduce substantially the enzymatic activity and the number of viable microorganisms. Either before or after such heat treatment, all or a part of the product may be frozen. The finished pasteurized orange juice contains not less than 10.5 percent by weight of orange juice soluble solids, exclusive of the solids of any added optional sweetening ingredients, and the ratio of the Brix hydrometer reading to the grams of anhydrous citric acid per 100 milliliters of juice is not less than 10 to 1.

(b) The optional concentrated orange juice ingredients referred to in paragraph (a) of this section are frozen concentrated orange juice as specified in §146.146 and concentrated orange juice for manufacturing as specified in §146.153 when made from mature oranges; but the quantity of such concentrated orange juice ingredients added shall not contribute more than one-fourth of the total orange juice solids in the finished pasteurized orange juice.

(c) The optional sweetening ingredients referred to in paragraph (a) of this section are sugar, invert sugar, dextrose, dried corn sirup, dried glucose sirup.

(d)(1) The name of the food is “Pasteurized orange juice”. If the food is filled into containers and preserved by freezing, the label shall bear the name “Frozen pasteurized orange juice”. The words “pasteurized” or “frozen pasteurized” shall be shown on labels in letters not less than one-half the height of the letters in the words “orange juice”.

(2) If the pasteurized orange juice is filled into containers and refrigerated, the label shall bear the name of the food, “chilled pasteurized orange juice”. If it does not purport to be either canned orange juice or frozen pasteurized orange juice, the word “chilled” may be omitted from the name. The words “pasteurized” or “chilled pasteurized” shall be shown in letters not less than one-half the height of the letters in the words “orange juice”.

(e)(1) If a concentrated orange juice ingredient specified in paragraph (b) of this section is used in adjusting the orange juice solids of the pasteurized orange juice, the label shall bear the