added in single strength or concentrated form prior to concentration of the Citrus sinensis juice, or in concentrated form during adjustment of the composition of the finished food. The addition of concentrated juice from Citrus reticulata or Citrus aurantium, or both, shall not exceed, on a single-strength basis, the 10 percent maximum for Citrus reticulata and the 5 percent maximum for Citrus aurantium prescribed by this paragraph. Any of the ingredients of the finished concentrate may have been so treated by heat as to reduce substantially the enzymatic activity and the number of viable microorganisms. The finished food is of such concentration that when diluted according to label directions the diluted article will contain not less than 11.8 percent by weight of orange juice soluble solids, exclusive of the solids of any added optional sweetening ingredients. The dilution ratio shall be not less than 3 plus 1. For the purposes of this section and §146.150, the term “dilution ratio” means the whole number of volumes of water per volume of frozen concentrate required to produce orange juice from concentrate having orange juice soluble solids of not less than 11.8 percent by weight exclusive of the solids of any added optional sweetening ingredients.

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

(c) If one or more of the sweetening ingredients specified in paragraph (b) of this section are added to the frozen concentrated orange juice, the label shall bear the statement “____ plus 1”, the blank being filled in with the name or an appropriate combination of names of the sweetening ingredients used. However, for the purpose of this section, the name “sweetener” may be used in lieu of the specific name or names of the sweetening ingredients.

(d) The name of the food concentrated to a dilution ratio of 3 plus 1 is “frozen concentrated orange juice, 3 plus 1” or “frozen orange juice concentrate, 3 plus 1”. The name of the food concentrated to a dilution ratio greater than 3 plus 1 is “frozen concentrated orange juice, 4 plus 1” or “frozen orange juice concentrate, 4 plus 1”. For containers larger than 1 pint, the dilution ratio in the name may be replaced by the concentration of orange juice soluble solids in degrees Brix; for example, a 62° Brix concentrate in 3½-gallon cans may be named on the label “frozen concentrated orange juice, 62° Brix”.

(e) Wherever the name of the food appears on the label so conspicuously as to be easily seen under customary conditions of purchase, the statements specified in this section for naming the optional ingredients used shall immediately and conspicuously precede or follow the name of the food, without intervening written, printed, or graphic matter.

(f) Nothing in this section is intended to interfere with the adoption and enforcement by any State, in regulating the production of frozen concentrated orange juice in such State, of State standards, consistent with this section, but which impose higher or more restrictive requirements than those set forth in this section.

(g) 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.

§146.148 Reduced acid frozen concentrated orange juice.

(a) Reduced acid frozen concentrated orange juice is the food that complies with the requirements for composition and label declaration of ingredients prescribed for frozen concentrated orange juice by §146.146, except that it may not contain any added sweetening ingredient. A process involving the use of anionic ion-exchange resins permitted by §173.25 of this chapter is used
to reduce the acidity of the food so that the ratio of the Brix reading to the grams of acid, expressed as anhydrous citric acid, per 100 grams of juice is not less than 21 to 1 or more than 26 to 1.

(b) The name of the food is “Reduced acid frozen concentrated orange juice”.


§ 146.150 Canned concentrated orange juice.

(a) Canned concentrated orange juice is the food that complies with the requirements of composition, definition of dilution ratio, and labeling of ingredients prescribed for frozen concentrated orange juice by §146.146, except that it is not frozen and it is sealed in containers and so processed by heat, either before or after sealing, so as to prevent spoilage.

(b) The name of the food when concentrated to a dilution ratio of 3 plus 1 is “Canned concentrated orange juice” or “Canned orange juice concentrate”. The name of the food when concentrated to a dilution ratio greater than 3 plus 1 is “Canned concentrated orange juice, ___ plus 1” or “Canned orange juice concentrate, ___ plus 1”, the blank being filled in with the whole number showing the dilution ratio; for example, “Canned orange juice concentrate, 4 plus 1”. However, where the label bears directions for making 1 quart of single-strength diluted product (or multiples of a quart) the blank in the name may be filled in with a mixed number; for example, “Canned orange juice concentrate, 4½ plus 1”. For containers larger than 1 pint, the dilution ratio in the name may be replaced by the concentration of orange juice soluble solids in degrees Brix; for example, a 62° Brix concentrate in 1-gallon cans may be named on the label “canned concentrated orange juice, 62° Brix”. If the food does not purport to be frozen concentrated orange juice, the word “canned” may be omitted from the name.


§ 146.152 Orange juice with preservative.

(a) Orange juice with preservative is the food prepared for further manufacturing use. It complies with the requirements for composition of orange juice for manufacturing as provided for in §146.151, except that a preservative is added to inhibit spoilage. It may be heat-treated to reduce substantially the enzymatic activity and the number of viable microorganisms.

(b) The preservatives referred to in paragraph (a) of this section are any safe and suitable preservatives or combinations thereof.

(c) The name of the food is “Orange juice with preservative”.

(d) Label declaration. Each of the ingredients used in the food shall be declared on the label as required by the