



Figure 1.



Figure 2.

## PART 93—PROCESSED FRUITS AND VEGETABLES

### Subpart A—Citrus Juices and Certain Citrus Products

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AUTHORITY: 7 U.S.C. 1622, 1624.

SOURCE: 61 FR 51351, Oct. 2, 1996, unless otherwise noted.

### Subpart A—Citrus Juices and Certain Citrus Products

#### §93.1 General.

Domestic and imported citrus products are tested to determine whether quality and grade standards are satisfied as set forth in the Florida Citrus Code.

#### §93.2 Definitions.

Words used in the regulations in this subpart in the singular form will import the plural, and vice versa, as the case may demand. As used throughout the regulations in this subpart, unless the context requires otherwise, the following terms will be construed to mean:

*Acid.* The grams of total acidity, calculated as anhydrous citric acid, per 100 grams of juice or citrus product. Total acidity is determined by titration with standard sodium hydroxide solution, using phenolphthalein as indicator.

*Brix or degrees Brix.* The percent by weight concentration of the total soluble solids of the juice or citrus product when tested with a Brix hydrometer calibrated at 20 °C (68 °F) and to which any applicable temperature correction has been made. The Brix or degrees Brix may be determined by any other method which gives equivalent results.

*Brix value.* The pure sucrose or soluble solids value of the juice or citrus product determined by using the refractometer along with the "International Scale of Refractive Indices of Sucrose Solutions" and to which the applicable correction for acidity is added. The Brix value is determined in accordance with the refractometer

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method outlined in the Official Methods of Analysis of AOAC INTERNATIONAL, Volumes I & II.

*Brix value/acid ratio.* The ratio of the Brix value of the juice or citrus product, in degrees Brix, to the grams of anhydrous citric acid per 100 grams of juice or citrus product.

*Brix/acid ratio.* The ratio of the degrees Brix of the juice to the grams of anhydrous citric acid per 100 grams of the juice.

*Citrus.* All plants, edible parts and commodity products thereof, including pulp and juice of any orange, lemon, lime, grapefruit, mandarin, tangerine, kumquat or other tree or shrub in the genera *Citrus*, *Fortunella*, or *Poncirus* of the plant family Rutaceae.

*Recoverable oil.* The percent of oil by volume, determined by the bromate titration method after distillation and acidification as described in the current edition of the Official Methods of Analysis of AOAC INTERNATIONAL, Volumes I & II.

[61 FR 51351, Oct. 2, 1996, as amended at 65 FR 64316, Oct. 26, 2000]

### § 93.3 Analyses available and location of laboratory.

(a) Laboratory analyses of citrus juice and other citrus products are being performed at the following Science and Technology location: USDA, AMS, S&T Eastern Laboratory (Citrus), 98 Third Street, SW., Winter Haven, FL 33880.

(b) Laboratory analyses of citrus fruit and products in Florida are available in order to determine if such commodities satisfy the quality and grade standards set forth in the Florida Citrus Code (Florida Statutes Pursuant to Chapter 601). Such analyses include tests for acid as anhydrous citric acid, Brix, Brix/acid ratio, recoverable oil, and artificial coloring matter additive, as turmeric. The Fruit and Vegetable Inspectors of the Division of Fruit and Vegetable of the Florida Department of Agriculture and Consumer Services may also request analyses for arsenic metal, pulp wash (ultraviolet and fluorescence), standard plate count, yeast with mold count, and nutritive sweetening ingredients as sugars.

(c) There are additional laboratory tests available upon request at the

Science and Technology Eastern (Citrus) Laboratory at Winter Haven, Florida. Such analyses include tests for vitamins, naringin, sodium benzoate, *Salmonella*, protein, salt, pesticide residues, sodium metal, ash, potassium metal, and coliforms for citrus products.

[65 FR 64316, Oct. 26, 2000]

### § 93.4 Analytical methods.

(a) The majority of analytical methods for citrus products are found in the Official Methods of Analysis of AOAC INTERNATIONAL, Volumes I & II, AOAC INTERNATIONAL, 481 North Frederick Avenue, Suite 500, Gaithersburg, MD 20877-2417.

(b) Other analytical methods for citrus products may be used as approved by the AMS Deputy Administrator, Science and Technology (S&T).

[65 FR 64317, Oct. 26, 2000]

### § 93.5 Fees for citrus product analyses set by cooperative agreement.

The fees for the analyses of fresh citrus juices and other citrus products shall be set by mutual agreement between the applicant, the State of Florida, and the AMS Deputy Administrator, Science and Technology programs. A Memorandum of Understanding (MOU) or cooperative agreement exists presently with the AMS Science and Technology and the State of Florida, regarding the set hourly rate and the costs to perform individual analytical tests on Florida citrus products, for the State.

[65 FR 64317, Oct. 26, 2000]

## Subpart B—Peanuts, Tree Nuts, Corn and Other Oilseeds

### § 93.10 General.

Chemical analyses are performed to detect the presence of aflatoxin in lots of shelled peanuts and peanut products, as well as in other nuts and agricultural products. In addition, proximate chemical analyses for quality determination are performed on oilseeds.