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- (b) The component substances are used solely as a solvent mixture and in a manner that does not result in formation of products not present in conventionally produced citric acid.
- (c) The citric acid so produced meets the specifications of the "Food Chemicals Codex," 3d Ed. (1981), pp. 86–87, which is incorporated by reference (copies may be obtained from the National Academy Press, 2101 Constitution Ave. NW., Washington, DC 20418, or may be examined at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC 20408), and the polynuclear aromatic hydrocarbon specifications of §173.165.
- (d) Residues of n-octyl alcohol and synthetic isoparaffinic petroleum hydrocarbons are removed in accordance with good manufacturing practice. Current good manufacturing practice results in residues not exceeding 16 parts per million (ppm) n-octyl alcohol and 0.47 ppm synthetic isoparaffinic petroleum hydrocarbons in citric acid.
- (e) Tridodecyl amine may be present as a residue in citric acid at a level not to exceed 100 parts per billion.

 $[42\ {\rm FR}\ 14491,\ {\rm Mar.}\ 15,\ 1977,\ {\rm as\ amended}\ {\rm at}\ 49\ {\rm FR}\ 10106,\ {\rm Mar.}\ 19,\ 1984]$

§173.290 Trichloroethylene.

Tolerances are established for residues of trichloroethylene resulting from its use as a solvent in the manufacture of foods as follows:

Decaffeinated ground coffee.

Decaffeinated soluble (instant) coffee extract.

Spice oleoresins

25 parts per million.10 parts per million.

30 parts per million (provided that if residues of other chlorinated solvents are also present, the total of all residues of such solvents in spice oleoresins shall not exceed 30 parts per mil-

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lion)

§173.300 Chlorine dioxide.

Chlorine dioxide (CAS Reg. No. 10049–04-4) may be safely used in food in accordance with the following prescribed conditions:

- (a) The additive is generated by one of the following methods: Treating an aqueous solution of sodium chlorite with either chlorine gas or a mixture of sodium hypochlorite and hydrochloric acid, or treating an aqueous solution of sodium chlorate with hydrogen peroxide in the presence of sulfuric acid. In either case, the generator effluent contains at least 90 percent (by weight) of chlorine dioxide with respect to all chlorine species as determined by Method 4500-ClO₂ E in the "Standard Methods for the Examination of Water and Wastewater," 18th ed., 1992, or an equivalent method. Method 4500-ClO₂ E is incorporated by reference in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies are available from the Center for Food Safety and Applied Nutrition (HFS-200), Food and Drug Administration, 200 C St. SW., Washington, DC 20204-0001, and the American Public Health Association, 1015 Fifteenth St. NW., Washington, DC 20005, or may be examined at the Office of the Federal Register, 800 North Capitol St. NW., suite 700, Washington, DC.
- (b)(1) The additive may be used as an antimicrobial agent in water used in poultry processing in an amount not to exceed 3 parts per million (ppm) residual chlorine dioxide as determined by Method 4500–ClO₂ E, referenced in paragraph (a) of this section, or an equivalent method.
- (2) The additive may be used as an antimicrobial agent in water used to wash fruits and vegetables that are not raw agricultural commodities in an amount not to exceed 3 ppm residual chlorine dioxide as determined by Method 4500–ClO₂ E, referenced in paragraph (a) of this section, or an equivalent method. Treatment of the fruits and vegetables with chlorine dioxide shall be followed by a potable water rinse or by blanching, cooking, or canning.

[60 FR 11900, Mar. 3, 1995. Redesignated at 61 FR 14245, Apr. 1, 1996, as amended at 61 FR 14480, Apr. 2, 1996; 63 FR 38747, July 20, 1998; 65 FR 34587, May 31, 2000]

§173.310 Boiler water additives.

Boiler water additives may be safely used in the preparation of steam that will contact food, under the following conditions: