

[Code of Federal Regulations]
[Title 21, Volume 3]
[Revised as of April 1, 2017]
[CITE: 21CFR173.315]

TITLE 21--FOOD AND DRUGS
CHAPTER I--FOOD AND DRUG ADMINISTRATION
DEPARTMENT OF HEALTH AND HUMAN SERVICES
SUBCHAPTER B--FOOD FOR HUMAN CONSUMPTION (CONTINUED)

PART 173 -- SECONDARY DIRECT FOOD ADDITIVES PERMITTED IN FOOD FOR HUMAN CONSUMPTION

Subpart D--Specific Usage Additives

Sec. 173.315 Chemicals used in washing or to assist in the peeling of fruits and vegetables.

Chemicals may be safely used to wash or to assist in the peeling of fruits and vegetables in accordance with the following conditions:

(a) The chemicals consist of one or more of the following:

(1) Substances generally recognized as safe in food or covered by prior sanctions for use in washing fruits and vegetables.

(2) Substances identified in this subparagraph and subject to such limitations as are provided:

Substances	Limitations
A mixture of alkylene oxide adducts of alkyl alcohols and phosphate esters of alkylene oxide adducts of alkyl alcohols consisting of: [alpha]-alkyl (C12-C18)-omega-hydroxy-poly (oxyethylene) (7.5-8.5 moles)/poly (oxypropylene) block copolymer having an average molecular weight of 810; [alpha]-alkyl (C12-C18)-omega-hydroxy-poly (oxyethylene) (3.3-3.7 moles) polymer having an average molecular weight of 380, and subsequently esterified with 1.25 moles phosphoric anhydride; and [alpha]-alkyl (C10-C12)-omega-hydroxypoly (oxyethylene) (11.9-12.9 moles)/poly (oxypropylene) copolymer, having an average molecular weight of 810, and subsequently esterified with 1.25 moles phosphoric anhydride	May be used at a level not to exceed 0.2 percent in lye-peeling solution to assist in the lye peeling of fruit and vegetables.

Aliphatic acid mixture consisting of valeric, caproic, enanthic, caprylic, and pelargonic acids	May be used at a level not to exceed 1 percent in lye peeling solution to assist in the lye peeling of fruits and vegetables.
Polyacrylamide	Not to exceed 10 parts per million in wash water. Contains not more than 0.2 percent acrylamide monomer. May be used in the washing of fruits and vegetables.
Potassium bromide	May be used in the washing or to assist in the lye peeling of fruits and vegetables.
Sodium n-alkylbenzene-sulfonate (alkyl group predominantly C12 and C13 and not less than 95 percent C10 to C16)	Not to exceed 0.2 percent in wash water. May be used in washing or to assist in the lye peeling of fruits and vegetables.
Sodium dodecylbenzene-sulfonate (alkyl group predominantly C12 and not less than 95% C10 to C16)	Do.
Sodium 2 ethyl-hexyl sulfate	Do.
Sodium hypochlorite	May be used in the washing or to assist in the lye peeling of fruits and vegetables.
Sodium mono- and dimethyl naphthalene sulfonates (mol. wt. 245-260)	Not to exceed 0.2 percent in wash water. May be used in the washing or to assist in the lye peeling of fruits and vegetables.

(3) Sodium mono- and dimethyl naphthalene sulfonates (mol. wt. 245-260) may be used in the steam/scald vacuum peeling of tomatoes at a level not to exceed 0.2 percent in the condensate or scald water.

(4) Substances identified in this paragraph (a)(4) for use in flume water for washing sugar beets prior to the slicing operation and subject to the limitations as are provided for the level of the substances in the flume water:

Substance	Limitations
[alpha]-Alkyl-omega-hydroxypoly-(oxyethylene) produced by condensation of 1 mole of C11-C486315 straight chain randomly substituted secondary alcohols with an average of 9 moles of ethylene oxide	Not to exceed 3 ppm.
Linear undecylbenzenesulfonic acid	Do.

Dialkanolamide produced by condensing 1 mole of methyl laurate with 1.05 moles of diethanolamine	Not to exceed 2 ppm.
Triethanolamine	Do.
Ethylene glycol monobutyl ether	Not to exceed 1 ppm.
Oleic acid conforming with 172.860 of this chapter	Do.
Tetrapotassium pyrophosphate	Not to exceed 0.3 ppm.
Monoethanolamine	Do.
Ethylene dichloride	Not to exceed 0.2 ppm.
Tetrasodium ethylenediaminetetraacetate	Not to exceed 0.1 ppm.

(5) Substances identified in this paragraph (a) (5) for use on fruits and vegetables that are not raw agricultural commodities and subject to the limitations provided:

Substances	Limitations
Hydrogen peroxide	Used in combination with acetic acid to form peroxyacetic acid. Not to exceed 59 ppm in wash water.
1-Hydroxyethylidene-1,1-diphosphonic acid	May be used only with peroxyacetic acid. Not to exceed 4.8 ppm in wash water.
Peroxyacetic acid	Prepared by reacting acetic acid with hydrogen peroxide. Not to exceed 80 ppm in wash water.

(b) The chemicals are used in amounts not in excess of the minimum required to accomplish their intended effect.

(c) The use of the chemicals listed under paragraphs (a) (1), (a) (2), and (a) (4) is followed by rinsing with potable water to remove, to the extent possible, residues of the chemicals.

(d) To assure safe use of the additive:

(1) The label and labeling of the additive container shall bear, in addition to the other information required by the act, the name of the additive or a statement of its composition.

(2) The label or labeling of the additive container shall bear adequate use directions to assure use in compliance with all provisions of this section.

[42 FR 14526, Mar. 15, 1977, as amended at 42 FR 29856, June 10, 1977; 42 FR 32229, June 24, 1977; 43 FR 54926, Nov. 24, 1978; 61 FR 46376, 46377, Sept. 3, 1996; 63 FR 7069, Feb. 12, 1998; 64 FR 38564, July 19, 1999]

