Ⅲ. Food Contact Surface Sanitizing Solutions

Article 2. Use Level

Hydrogen Peroxide Preparations

Hydrogen Peroxide should be only used for sanitizing food contact material, container, and packaging below.

1. When using sterilizing and fumigating of food contact surfaces, the usage is as below
   1) Food-contact surfaces in public eating places (including food service providing food for less than 50 persons at a time) : not more than 91㎎/l (as Hydrogen Peroxide)
   2) Dairy-processing equipment : not more than 465㎎/l (as Hydrogen Peroxide)
   3) Food-processing equipment : not more than 1,100㎎/l (as Hydrogen Peroxide)
2. When using for sterilization of food container and packaging
   1) It should be removed by rinsing with sterile water or drying with hot air.
   2) Residual quantity test below should be proceeded, the residue of Hydrogen Peroxide in container・packaging should be not more than 0.5㎎/l.

Peroxyacetic Acid Preparations

Peroxyacetic acid should be only used for sanitizing food contact material, container, and packaging below.

1. When using sterilizing and fumigating of food contact material, the usage is as below

1) Food-contact surfaces in public eating places (including food service providing food for less than 50 persons at a time)

Peroxyacetic Acid	Not more than 58㎎/*l*
Hydrogen peroxide	Not more than 91㎎/*l*
Peroxyoctanoic acid	Not more than 52㎎/*l*
Octanoic acid	Not more than 52㎎/*l*
(1-hydroxyethylidene)bis-, phosphoric acid	Not more than 14㎎/*l*
1-Octanesulfonic acid, sodium salt	Not more than 46㎎/*l*

2) Dairy-processing equipment

Peroxyacetic Acid	Not more than 315㎎/*l*
Hydrogen peroxide	Not more than 465㎎/*l*
Peroxyoctanoic acid	Not more than 122㎎/*l*
Octanoic acid	Not more than 176㎎/*l*
(1-hydroxyethylidene)bis-, phosphoric acid	Not more than 34㎎/*l*
1-Octanesulfonic acid, sodium salt	Not more than 297㎎/*l*

3) Food-processing equipment

Peroxyacetic Acid	Not more than 315㎎/*l*
Hydrogen peroxide	Not more than 1,100㎎/*l*
Peroxyoctanoic acid	Not more than 122㎎/*l*
Octanoic acid	Not more than 234㎎/*l*
(1-hydroxyethylidene)bis-, phosphoric acid	Not more than 34㎎/*l*
1-Octanesulfonic acid, sodium salt	Not more than 312㎎/*l*

2. When using for sterilization of food container and packaging

1) It should be removed by rinsing with sterile water or drying with hot air.

2) Residual quantity test below should be proceeded, the residue of Hydrogen Peroxide in container · packaging should be not more than 0.5㎎/l.

Citric Acid Preparations

Citric acid should be only used for sanitizing food contact material below.

1. Food-contact surfaces in public eating places (including food service providing food for less than 50 persons at a time)
2. Dairy-processing equipment
3. Food-processing equipment

Ethanol Preparations

Ethanol should be only used for sanitizing food contact material below. The usage is as below.

1. Food-contact surfaces in public eating place (including food service providing food for less than 50 persons at a time)

2. Dairy-processing equipment
3. Food-processing equipment

Quaternary ammonium Compounds, n-Alkyl(C_{12}-C_{18})benzyldimethyl Chloride Preparations

Quaternary ammonium Compounds, n-Alkyl(C12-C18)benzyldimethyl Chloride should be only used for sanitizing food contact material below. The usage is as below.

1. Food-contact surfaces in public eating places (including food service providing food for less than 50 persons at a time)

Quaternary ammonium compounds, alkyl(C_{12}-C_{18})benzyl-dimethyl chlorides	Not more than 200㎎/*l* (as sum of quaternary ammonium, if used with other quaternary ammonium, not more than 200 ㎎/*l* as sum of quaternary ammonium)
Quaternary ammonium compounds, n-alkyl(C_{12}-C_{14})dimethyl thylbenzyl ammonium chloride (average molecular weight 377 to 384)	Not more than 200㎎/*l* (as sum of quaternary ammonium, if used with other quaternary ammonium, not more than 200 ㎎/*l* as sum of quaternary ammonium)
Quaternary ammonium compounds, n-alkyl(C_{12}-C_{18}) dimethyl ethylbenzyl ammonium chloride, average molecular weight(in amu), 384	Not more than 200㎎/*l* (as sum of quaternary ammonium, if used with other quaternary ammonium, not more than 200 ㎎/*l* as sum of quaternary ammonium)
Quaternary ammonium compounds, di-n-alkyl(C_{8}-C_{10}) dimethyl ammonium chloride (average molecular weight 332 to 361)	Not more than 150㎎/*l* (as sum of quaternary ammonium, if used with other quaternary ammonium, not more than 200 ㎎/*l* as sum of quaternary ammonium)
Poly(hexamethylene biguanide) hydrochloride	Not more than 550㎎/*l*

2. Dairy-processing equipment

Quaternary ammonium compounds, alkyl(C_{12}-C_{18})benzyl-dimethyl chlorides	Not more than 200㎎/*l* (as sum of quaternary ammonium, if used with other quaternary ammonium, not more than 200 ㎎/*l* as sum of quaternary ammonium)
Quaternary ammonium compounds, n-alkyl(C_{12}-C_{14})dimethyl thylbenzyl ammonium chloride (average molecular weight 377 to 384)	Not more than 200㎎/*l* (as sum of quaternary ammonium, if used with other quaternary ammonium, not more than 200 ㎎/*l* as sum of quaternary ammonium)
Quaternary ammonium compounds, n-alkyl(C_{12}-C_{18}) dimethyl ethylbenzyl ammonium chloride, (average molecular weight, 384)	Not more than 200㎎/*l* (as sum of quaternary ammonium, if used with other quaternary ammonium, not more than 200 ㎎/*l* as sum of quaternary ammonium)
Quaternary ammonium compounds, di-n-alkyl(C_8-C_{10}) dimethyl ammonium chloride (average molecular weight 332 to 361)	Not more than 150㎎/*l* (as sum of quaternary ammonium, if used with other quaternary ammonium, not more than 200 ㎎/*l* as sum of quaternary ammonium)
Poly(hexamethylene biguanide) hydrochloride	Not more than 550㎎/*l*

3. Food-processing equipment

Quaternary ammonium compounds, alkyl(C_{12}-C_{18})benzyl-dimethyl chlorides	Not more than 200㎎/*l* (as sum of quaternary ammonium, if used with other quaternary ammonium, not more than 400 ㎎/*l* as sum of quaternary ammonium)
Quaternary ammonium compounds, n-alkyl(C_{12}-C_{14})dimethyl thylbenzyl ammonium chloride (average molecular weight 377 to 384)	Not more than 200㎎/*l* (as sum of quaternary ammonium, if used with other quaternary ammonium, not more than 400 ㎎/*l* as sum of quaternary ammonium)

Quaternary ammonium compounds, n-alkyl(C_{12}-C_{18}) dimethyl ethylbenzyl ammonium chloride, (average molecular weight, 384)	Not more than 200㎎/*l* (as sum of quaternary ammonium, if used with other quaternary ammonium, not more than 400 ㎎/*l* as sum of quaternary ammonium)
Quaternary ammonium compounds, di-n-alkyl(C_8-C_{10}) dimethyl ammonium chloride (average molecular weight 332 to 361)	Not more than 240㎎/*l* (as sum of quaternary ammonium, if used with other quaternary ammonium, not more than 400 ㎎/*l* as sum of quaternary ammonium)
Poly(hexamethylene biguanide) hydrochloride	Not more than 550㎎/*l*

1-Decanaminium, N-decyl-N,N-dimethyl-, Chloride Preparations

1-Decanaminium, N-decyl-N,N-dimethyl-, Chloride should be only used for sanitizing food contact surface for preparing and processing of food. The usage should be not more than 200㎎/l (as quaternary ammonium).

Iodine Preparations

Iodine should be only used for sanitizing food contact material below. The usage is as below.

1. Food-contact surfaces in public eating places (including food service providing food for less than 50 persons at a time)

Iodine	Not more than 25㎎/*l* (as titrated iodine, if used with other iodide, not more than 25㎎/*l* as sum of titrated iodine)
Iodine Potassium	Not more than 25㎎/*l* (as titrated iodine, if used with other iodide, not more than 25㎎/*l* as sum of titrated iodine)

2. Dairy-processing equipment

Iodine	Not more than 25㎎/*l* (as titrated iodine, if used with other iodide, not more than 25㎎/*l* as sum of titrated iodine)
Iodine Potassium	Not more than 25㎎/*l* (as titrated iodine, if used with other iodide, not more than 25㎎/*l* as sum of titrated iodine)

3. Food-processing equipment

Iodine	Not more than 25㎎/*l* (as titrated iodine, if used with other iodide, not more than 25㎎/*l* as sum of titrated iodine)
Iodine Potassium	Not more than 25㎎/*l* (as titrated iodine, if used with other iodide, not more than 25㎎/*l* as sum of titrated iodine)

Sodium Dichloroisocyanurate Preparations

Sodium Dichloroisocyanurate should be only used for sanitizing food contact material below.

1. Food-contact surfaces in public eating places (including food service providing food for less than 50 persons at a time) : not more than 100㎎/l (as active chlorine)
2. Dairy-processing equipment : not more than 100㎎/l (as active chlorine)
3. Food-processing equipment : not more than 100㎎/l (as active chlorine)

Hypochlorous Acid, Sodium Salt Sodium Hypochlorite Preparations

Ethanol should be only used for sanitizing food contact material below. The usage is as below.

1. Food-contact surfaces in public eating place (including food service providing food for less than 50 persons at a time) : not more than 200㎎/l (as active chlorine)
2. Dairy-processing equipment : not more than 200㎎/l (as active chlorine)
3. Food-processing equipment : not more than 200㎎/l (as active chlorine)

Hypochlorous Acid Water Preparations

Hypochlorous Acid Water should be only used for sanitizing food contact material below. The usage is as below.

1. Food-contact surfaces in public eating places (including food service providing food for less than 50 persons at a time) : not more than 200㎎/l (as active chlorine)
2. Dairy-processing equipment : not more than 200㎎/l (as active chlorine)
3. Food-processing equipment : not more than 200㎎/l (as active chlorine)

Poly(hexamethylenebiguanide)hydrochloride Preparations

Poly(hexamethylenebiguanide)hydrochloride should be only used for sanitizing food

contact material below. The usage is as below.

1. Food-contact surfaces in public eating places (including food service providing food for less than 50 persons at a time)

Poly(hexamethylenebiguanide)hydrochloride	Not more than 550㎎/*l*
Quaternary ammonium compounds, di-n-alkyl(C_8-C_{10}) dimethyl ammonium chloride (average molecular weight 332 to 361)	Not more than 150㎎/*l* (as quaternary ammonium)

2. Dairy-processing equipment

Poly(hexamethylenebiguanide)hydrochloride	Not more than 550㎎/*l*
Quaternary ammonium compounds, di-n-alkyl(C_8-C_{10}) dimethyl ammonium chloride (average molecular weight 332 to 361)	Not more than 150㎎/*l* (as quaternary ammonium)

3. Food-processing equipment

Poly(hexamethylenebiguanide)hydrochloride	Not more than 550㎎/*l*
Quaternary ammonium compounds, di-n-alkyl(C_8-C_{10}) dimethyl ammonium chloride (average molecular weight 332 to 361)	Not more than 240㎎/*l* (as quaternary ammonium)

Chlorine Dioxide Preparations

Chlorine Dioxide Preparations should be only used for sanitizing food contact material below. The usage is as below.

1. Food-contact surfaces in public eating places (including food service providing food for less than 50 persons at a time) : not more than 200㎎/l
2. Dairy-processing equipment : not more than 200㎎/l
3. Food-processing equipment : not more than 200㎎/l