



Guidance for Sanitizers and Cleansers Used in Organic Facilities

Sanitizers and cleaners used in organic production must be reviewed and approved by PCO. Approved products are included in the Materials Review List, which is published twice a year and provided to PCO clients.

I. Sanitizers and Cleaners used in direct contact with organic products

Sanitizers used in direct food contact, such as fruit/vegetable washing or poultry /meat carcass washes, must contain only substances that appear on the National List and be used in accordance with any restrictions so listed.

This includes the following active ingredients:

- Chlorine
- Hydrogen Peroxide
- Potassium Carbonate
- Sodium Carbonate (soda ash)
- Sodium Bicarbonate
- Sodium Hydroxide
- Ozone
- Peracetic Acid

If products formulated with these approved active ingredients as listed above also contain inerts, these inerts must be listed at §205.605 - §205.606. This includes all surfactants, adjuvants and other additives.

PCO will indicate this permitted use by the following statements on the MRT List:

- Allowed in direct food contact, no rinse required.
- (R) See chlorine restriction for use in direct food contact §205.605(b) *If residual chlorine in direct food contact is greater than 4 ppm product must be rinsed.*

II. Sanitizers and Cleaners Used on Equipment

A. Products approved for use on equipment without rinse.

- Active Ingredients allowed:
 - Phosphoric acid products
 - Chlorine products (Sodium hypochlorite, calcium hypochlorite, chlorine dioxide) - solution must drain and contact surface must be dry before contact with organic product, and must be used according to label instructions.
- All inert ingredients must be reviewed and approved at §§205.605- 205.606):

Products approved for direct food/product contact as described in Section I above may also be used on equipment without rinsing.

Regular household bleach (Clorox Regular EPA Reg. No. 5813-50) contains surfactants and additives that are not permitted on the National List.

PCO will indicate this permitted use by one of the following statements on the MRT List:

- (R) No rinse required on equipment, not for use in direct food contact
- (R) No rinse required on equipment, see chlorine restriction for use in direct food contact, §205.605(b)

B. Products that may be used on equipment with rinsing or purging:

Non-persistent materials can be used on food contact surfaces with an intervening event, such as a hot water rinse or documented purge of product, so that the substance is not in contact with organic food (see 7 CFR §205.272).

This includes typical cleaning compounds with active ingredients such as:

- Alkali cleaners (most common) usually in combinations like sodium metasilicate, trisodium phosphates, tetrapotassium diphosphate, sodium hydroxide, sodium carbonate, plus often include polyphosphates and chelating agents, wetting agents and chlorine
- Acidic cleaners (used to remove insoluble mineral salts) – acetic acid, lactic acid, hydroxyacetic acid, phosphoric acid, sulfuric acid (muriatic acid)
- Household brands of Clorox
- Iodophors – are iodine compounds complexed with surfactants, more effective than chlorine at killing yeasts, kill bacteria at levels of 12-25 ppm (equivalent to 200 ppm Cl) also have detergent properties. Iodine products May be slightly more persistent than other cleaners, and should have a documented thorough rinse.
- 1-octanesulfonic acid, sodium salt
- Octanoic acid

PCO will indicate this permitted use by the following statements on the MRT List:

- (R) No food contact allowed. See cleaners, disinfectants, sanitizer restriction.

III. Quaternary Ammonium Compounds (QAC) used as sanitizers:

QACs are restricted due to known persistence and possible contamination. If a PCO client wishes to use QACs, they must demonstrate that residues do not get *in or on* processed products, and do not **contact** the product.

Examples of QACs include: Benzalkonium chloride, Octyl decyl dimethyl ammonium chloride and Dioctyl dimethyl ammonium chloride

If QAC sanitizers are used:

- The line/food contact surface must be washed with a detergent/high-pressure hot water rinse to effectively remove any QAC residue, **or**
- A product purge must be used to remove residues if processing a liquid or pumpable product.
- The client must have written standard operating procedures in place to document cleaning before any organic runs followed by in –line testing; or use an organic product purge followed by testing to determine the extent of the purge needed to remove the QAC residues.

Protocol for testing after use of QACs:

Residue testing is a required part of the Standard Operating Procedure if using QAC's. The test method needs to be sensitive in a range of 0-5 ppm, and documentation of protocol, and log of cleaning actions and test results must be kept in order to approve use of QACs. Residue test result must be 0 ppm.