

# PERASAN® C-5



## (ACID SANITIZER/DISINFECTANT)

PERASAN® C-5 is a peroxyacetic acid-based sanitizer/disinfectant developed for the following uses:  
**Institutional/Industrial Sanitizer and Disinfectant for Previously Cleaned Hard, Non-Porous Food Contact Surfaces in:** Dairies, Wineries, Breweries, Food and Beverage Plants, Poultry Egg Facilities, Hospitals, Schools, Industrial Facilities, Office Buildings, Veterinary Clinics.  
**Bacteria, Slime, Odor and Algae Control in:** Air Washers, Reverse Osmosis and other Membrane Filtration Systems.

### ACTIVE INGREDIENT:

Peroxyacetic Acid	5.0%
Hydrogen Peroxide	22.4%
<b>INERT INGREDIENTS</b>	<b>72.6%</b>
<b>TOTAL</b>	<b>100.0%</b>

EPA Reg. No. 63838-13  
 EPA Est. No. 63838-CA-01; 60156-AR-001

Before Using This Product, Please Read This Entire Label Carefully.

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.

## KEEP OUT OF REACH OF CHILDREN DANGER PELIGRO

### FIRST AID

IF IN EYES	<ul style="list-style-type: none"> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>Call a <u>poison control center or doctor for treatment advice.</u></li> </ul>
IF SWALLOWED:	<ul style="list-style-type: none"> <li>Call a poison control center or doctor immediately for treatment advice.</li> <li>Have person sip a glass of water if able to swallow.</li> <li>Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li><u>Do not give anything by mouth to an unconscious person.</u></li> </ul>
IF ON SKIN OR CLOTHING	<ul style="list-style-type: none"> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>Call a <u>poison control center or doctor for treatment advice.</u></li> </ul>
IF INHALED	<ul style="list-style-type: none"> <li>Move person to fresh air.</li> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.</li> <li>Call a <u>poison control center or doctor for treatment advice.</u></li> </ul>
<b>QUESTIONS? 1-209-581-9576</b>	<b>Have the product container or label with you when calling a poison control center or doctor, or going for treatment.</b>
<b>NOTE TO PHYSICIAN:</b>	<b>Probable mucosal damage may contraindicate the use of gastric lavage.</b>

### PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**DANGER CORROSIVE:** Do not enter an enclosed area without proper respiratory protection. Causes irreversible eye damage and skin burns. May be fatal if inhaled or absorbed through skin. Harmful if swallowed. Do not breathe vapors or spray mist. Do not get in eyes, on skin, or on clothing. Wear goggles and face shield and rubber gloves when handling. Wash thoroughly with soap and water after handling and before eating, drinking or using tobacco. Remove contaminated clothing and wash before reuse.

#### PHYSICAL OR CHEMICAL HAZARDS:

**STRONG OXIDIZING AGENT.** CORROSIVE: Mix only with potable water below 140° F. Product must be diluted in accordance with label directions prior to use. This product is not combustible; however, at temperatures exceeding 156°F, decomposition occurs releasing oxygen. The oxygen released could initiate combustion.

#### ENVIRONMENTAL HAZARDS:

This pesticide is toxic to birds, fish and aquatic invertebrates. Caution must be used when applying indoors because pets may be at risk. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of the National Pollution Discharge System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product into sewer systems without previously notifying the local sewage plant authority.

### STORAGE AND DISPOSAL

**Storage:** Never return this product to the original container after it has been removed. Avoid all contaminants, especially dirt, caustic, reducing agents, and metals. Contamination and impurities will reduce shelf life and can induce decomposition. In case of a decomposition, isolate container, spray container with cool water and dilute this product with large volumes of water. Avoid damage to containers. Keep container closed at all times when not in use. Keep container out of direct sunlight. To maintain product quality, store at temperatures below 86°F.

**Procedure for Leak or Spill:** Stop leak if this can be done without risk. Shut off ignition sources: no flames, smoking, flares, or spark producing tools. Keep combustible and organic materials away. Flush spilled material with large quantities of water. Undiluted material must not enter confined spaces.

**Pesticide Disposal:** Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or Hazardous Waste representative at the nearest EPA Regional Office for guidance. If material has been spilled, an acceptable method of disposal is to dilute with at least 20 volumes of water followed by discharge into suitable treatment system in accordance with all local, state and Federal environmental laws, rules, regulations, standards, and other requirements. Because acceptable methods of disposal may vary by location, regulatory agencies must be contacted prior to disposal. This product which is to be discarded, must be disposed of as hazardous waste after contacting the appropriate local state or Federal agency to determine proper procedures.

**Container Disposal:** Nonrefillable container. Do not reuse or refill this container. Clean container promptly after emptying. Offer for recycling if available. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

### DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Note: All volumes given in ounces are fluid ounces.

#### SANITIZATION

This peroxyacetic acid sanitizer is recommended for use on precleaned surfaces such as equipment, pipelines, tanks, vats, filters, evaporators, pasteurizers, and aseptic equipment in dairies, breweries, wineries, beverage and food processing/packing plants, egg processing/packing equipment surfaces. This product is effective as a sanitizer when solution is prepared in water of up to 200 ppm hardness as CaCO3. This product has demonstrated greater than 99.999% reduction of organisms after 60 seconds exposure period in the AOAC Germicidal and Detergent Sanitizing Action of Disinfectants study.

**NOTE: FOR MECHANICAL OPERATIONS:** prepared use solution may not be reused for sanitizing but may be reused for other purposes such as cleaning.

**FOR MANUAL OPERATIONS:** fresh sanitizing solutions must be prepared daily or more often if the solution becomes diluted or soiled.

**Sanitizing Food Contact Surfaces:** This product can be used in Federally inspected Meat and Poultry facilities as a sanitizer. Prior to sanitizing, remove gross food particles, then wash with a detergent solution, followed by a potable water rinse. Sanitize with a concentration of 1.0-5.6 oz. of this product diluted in 5 gallons of water (90-500 ppm active peroxyacetic acid). At this dilution, this product is effective against microorganisms including Staphylococcus aureus, Escherichia coli (E. coli), Salmonella enterica, and Listeria monocytogenes. Use immersion, coarse spray or circulation techniques as appropriate for the equipment. All surfaces must be exposed to sanitizing solution for a period of at least 60 seconds or more if specified by a governing code. Drain any excess solution. Do not rinse.

**Sanitization of Conveyors and Equipment for Meat, Poultry, Seafood, Fruit, Nuts and Vegetables:** For use in the static or continuous sanitizing, washing or rinsing of conveyors, slicers, saws, and equipment, apply a solution of this product using 1.0-5.6 oz. of this product diluted in 5 gallons of water (90-500 ppm active peroxyacetic acid). Apply sanitizer solution to the return portion of the conveyor or equipment using coarse spray or similar means of wetting surfaces, so as to affect draining and prevent puddling. Allow sanitizer to thoroughly wet surface for a minimum 60 seconds contact time. No rinse is needed.

**Sanitizing of Casing, Shell or Hatching Eggs:** To sanitize clean shell eggs intended for food or food products, spray with a solution of this product by diluting 1.0-2.3 oz. of this product diluted in 5 gallons of water. The solution must be equal to or warmer than the eggs, but not to exceed 130° F. Wet eggs thoroughly and allow to drain. Eggs that have been sanitized with this product may be broken for use in the manufacture of egg products without a prior potable water rinse. Eggs must be reasonably dry before casing or breaking. The sanitizing solution must not be reused for sanitizing eggs. For hatching eggs apply the sanitizing solution as eggs are gathered or prior to setting using a coarse spray or flood so as to lightly wet egg shell surfaces. Allow to drain dry.

**Final Sanitizing Bottle Rinse:** This product may be used as a final sanitizer rinse, followed by adequate drying or draining for returnable and non-returnable bottles at 1.0-5.6 fl. oz. of this product diluted in 5 gallons of water, which yields 90-500 ppm active peroxyacetic acid.

**Foam Cleaning of Food and Non-Food Contact Hard Surfaces:** As an adjunct to cleaning and sanitizing procedures this product may be added to the foaming cleaner PERAFOAM™ and foamed on environmental or equipment surfaces using conventional foam-generating equipment. The resultant foam blend can be used on equipment, floors, walls, ceilings, drains, etc and must be left on surface for a minimum of 1-5 minutes or longer. On food contact surfaces do not exceed 5.6 oz of this product per 5 gallons of water. A potable water rinse is not required. **Directions for mixing:** Manually or mechanically blend 1-5.6 fl. oz of this product and 5-10 fl. oz. of PERAFOAM™ (foam additive) per 5 gallons of water. The dilution water must not exceed 140° F.

#### NON FOOD CONTACT HARD SURFACE DISINFECTION

This product is effective against Staphylococcus aureus ATCC 6538), and Salmonella enterica (ATCC 10708) at 0.39%-3% v/v (2.5-20 fl oz./5 gal.) in hard water (400 ppm as CaCO<sub>3</sub>) and 5% organic soil loading on hard nonporous surfaces. For heavily soiled areas a pre-cleaning step is required, followed by a potable water rinse. Apply solution with a mop, cloth, sponge, brush, or coarse spray, or by soaking or immersion so as to wet all surfaces thoroughly. Allow to remain wet for 10 minutes, then remove solution and entrapped soil with a clean wet mop, cloth, wet vacuum pickup, or by draining. Surfaces that may directly or indirectly contact food must be rinsed with potable water before operations resume. A rinse for non-food contact surfaces is optional. Prepare a fresh solution daily or when it becomes soiled or diluted.

#### SANITIZATION OF GRANULAR ACTIVATED CARBON BEDS AND DEIONIZING (DI) SYSTEM RESIN BEDS

*Not for use in California.* This product can be used to reduce or eliminate most microbiological contamination of Granular Activated Carbon (GAC) beds and Dionizing (DI) Systems without negatively affecting the GAC or DI resin if used as directed. All new systems must be soaked in process water for at least 12 hours before sanitizing. Drain and refill system with a solution containing 150-450 ppm (as peroxyacetic acid) by mixing 9.5-29 fl. oz. of this product in 10 gal of water. Typically, the system would be backwashed and circulated through the GAC or resin beds during and/or after adding this product. Add this product as quickly as possible to the backwash process if a metering pump is used. Backwash and circulate for 20-30 minutes. Stop the backwash process and allow system to stand for 60 minutes. Drain system. Refill with fresh water and soak for 1-4 hrs or more, which should be a long enough period for all residual peroxygen to dissipate. Small amounts of sodium metabisulfite may be used to neutralize any trace amounts of peroxygen. For potable water systems, total residual peroxide must be less than 0.5 ppm before operations resume.

#### AIR WASHER TREATMENT

This product may be used to control bacteria and biofouling in industrial air washing/scrubbing systems. The air washer must have operational and effective mist elimination systems. Prior to use of this product, heavily fouled systems must be pre-cleaned using the appropriate cleaner. Continuous dosing methods will require 2-7 ppm as peroxyacetic acid (2.0-7.0 fl. oz. of this product per 430 gallons of process water) and intermittent dosing methods require 7-14 ppm as peroxyacetic acid (7.0-14.0 fl. oz. of this product per 430 gallons of process water) depending on the type of system and the level of microbiological control desired.

#### EVAPORATED OR CONDENSED WATER

This product may be used to treat SWEET or COW water (e.g. condensate of whey) collected from evaporated or condensing water systems in food or dairy plants. Continuous dosing methods will require 2-7 ppm and intermittent dosing methods require 7-14 ppm (as peroxyacetic acid), as described in the previous paragraph, depending on the type of system and the level of microbiological control desired.

#### REVERSE OSMOSIS AND OTHER FILTRATION MEMBRANE CLEANING-SANITIZATION

This product may be used in the sanitization of all types of membrane systems, including sizes from Ultra Filtration (UF) through Reverse Osmosis (RO) membranes and their associated piping systems. This product may be added continuously in food, beverage, and drinking water systems for RO (reverse osmosis) systems only and in accordance with the instructions below. This product is not for use in kidney dialysis equipment. This product may not totally eliminate all vegetative microorganisms in RO or NF or UF membranes and their associated piping systems due to their construction or assembly, but can be relied upon to reduce the number of microorganisms to acceptable levels when used as directed. Prior to using this product, check with the membrane manufacturer to confirm compatibility of membranes with various types or concentrations of peroxyacetic acid solutions.

**Batch Sanitation of NF, UF and RO Systems:** Isolate incompatible equipment, such as carbon filters and ion exchangers. Clean system with an appropriate cleaner and follow with RO permeate water or potable water. Remove mineral deposits if necessary with an acidic cleaner, and rinse as before. Fill entire system with water and add up to 1.1% of this product by volume (620 ppm peroxyacetic acid) for heavily fouled systems. The typical sanitation use solution dosing of this product is 1-2 fl oz per 5 gallons of water (94-190 ppm peroxyacetic acid). Recirculate the sanitizing solution through the piping and membrane system at 20° C for 10 minutes minimum, or up to 4 hours, depending on the severity of cleaning to be done. Open and close process valves and solenoids to be sure all parts are in contact with the solution. For occasional intermittent feed, do not exceed 94 ppm active peroxyacetic acid, which equals 1 oz. of this product per 5 gallons of feed water. Do not use the intermittent feed method for on-line use for potable water or direct food contact systems. Rinse the system with RO permeate or potable water until residual peroxygen concentration is below 1 ppm.

**RO Continuous or Intermittent Addition:** For continuous addition methods for RO systems, use 2-5 ppm active peroxyacetic acid (41-100 ppm as product), which equals 2.0-5.1 oz. of this product per 430 gallons of process water. For occasional intermittent feed, do not exceed 94 ppm active peroxyacetic acid, which equals 1 fl oz. of this product per 5 gallons of feed water. Do not use the intermittent feed method for on-line use in potable water or direct food contact systems.

#### FRUIT AND VEGETABLE WATER TREATMENT

This product may be used to help control spoilage or decay-causing bacteria and fungi in water or ice that contacts raw, unprocessed fruits and vegetables in commercial operations and packinghouses. For the target commodity, use continuous spray (coarse spray) or submerge using a solution containing 4.4 oz. of this product per 20 gallons of water (100 ppm peroxyacetic acid). Adjust dose as necessary to obtain satisfactory efficacy. Remove excess water or allow to drain. If using the submersion method, replace with a fresh solution as necessary, or when it becomes visibly soiled. A final potable water rinse is not necessary.

**Fogging in Filling, Packaging, and Dispensing Rooms or Areas: Not for Use in California.** This product can be applied by fogging to control the growth of non-public health microorganisms that may cause decay and/or spoilage on raw, post-harvest fruits and vegetables during the post-harvest process.

Ensure room is properly ventilated. Vacate all personnel from room during fogging and for a minimum of 2 hours after fogging. Ensure there is no strong odor characteristic of acetic acid before having personnel return to work area. Do not enter room until hydrogen peroxide concentrations are correctly tested and are below 1 ppm on a time weighted average.

Fog area using one quart of a 0.12% solution of this product (1 fl. oz. of this product per 5 gallons of water) per 1,000 cu. ft. of room volume. Allow surfaces to drain thoroughly before operations are resumed.

Manufactured By: Enviro Tech Chemical Services, Inc.  
 500 Winmoore Way, MODESTO, CA (209-581-9576)  
 24 hr Transportation Emergency ChemTel No.: 800-255-3924

Code: 038/V4b

Net: 53.76 gallons / 500 lbs LOT #:

**DOT: UN3098, Oxidizing liquid, corrosive, n.o.s. (contains hydrogen peroxide and peroxyacetic acid mixture, stabilized), 5.1(8), PG II**