

AP-PERA 5.3

(ANTIMICROBIAL SOLUTION)

AP-PERA 5.3 is a peroxyacetic acid-based sanitizer/disinfectant developed for the following uses:

For Institutional / Industrial sanitizing of previously cleaned non-porous food contact surfaces in: Dairies, Wineries, Breweries and Beverage Plants, Meat and Poultry Processing / Packaging Plants, Food Processing / Packing Plants, Egg Processing / Packing Equipment Surfaces.

For institutional / Industrial sanitizing of previously cleaned hard, non-porous food contact surfaces such as: Schools, Industrial Facilities, Office Buildings, Veterinary Clinics.

For use as a control in recirculating cooling water and evaporative coolers, reverse osmosis, nano & ultra-filtration and Agricultural waters.

ACTIVE INGREDIENTS:	Peroxyacetic Acid	5.30%	EPA Registration No.	91628-1-83106
	Hydrogen Peroxide	22.50%	EPA Establishment No.	91628-NY-1
	INERT INGREDIENTS:	72.20%		
	TOTAL	100.00%		

KEEP OUT OF REACH OF CHILDREN
DANGER - PELIGRO

Si Usted no entiende la etiqueta, busque a alguien para que se la explique a Usted en detalle.
(If you do not understand the label, find someone to explain it to you in detail.)

FIRST AID	
IF IN EYES	- Hold eye open and rinse slowly and gently with water for 15-20 minutes. - Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. - Call a poison control center or doctor for treatment advice.
IF ON SKIN OR CLOTHING	- Take off contaminated clothing. - Rinse skin immediately with plenty of water for 15-20 minutes. - Call a poison control center or doctor for treatment advice.
IF INHALED	- Move person to fresh air. - If person is not breathing. Call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. - Call a poison control center or doctor for treatment advice.
IF SWALLOWED	- Call poison control center or doctor immediately for treatment advice. - Have person sip a glass of water if able to swallow. - Do not induce vomiting unless told to do so by the poison control center or doctor. - Do not give anything by mouth to an unconscious person.
Note to Physician: Probable mucosal damage may contraindicate the use of gastric lavage. This product is not to be used as a terminal sterilan/high-level disinfectant on any surface or instrument that (1) is introduced directly into the human body, or (2) contacts intact mucous membranes but which does not ordinarily penetrate the blood barrier or otherwise enter normally sterile areas of the body. This product may be used to clean or decontaminate medical devices prior to sterilization or high-level disinfection. Have the product container or label with you when calling a poison control center or doctor or going for treatment. For general information on product use, etc., call the National Pesticides Information Center at 1-800-858-7378. You may also contact the poison control center at 1-800-222-1222 for emergency medical treatment information.	

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

DANGER: CORROSIVE Causes irreversible eye damage. Causes skin burns. Do not get in eyes, on skin, or on clothing. May be fatal if swallowed, inhaled, or absorbed through skin. Do not breathe vapor or spray mist. Wear coveralls worn over long-sleeved shirt and long pants, socks, chemical-resistant footwear, rubber gloves, a NIOSH-approved elastomeric half mask respirator with organic vapor (OV) cartridges and combination N1, R, or P filters; OR a NIOSH-approved gas mask with OV canisters; OR a NIOSH-approved powered air purifying respirator with OV cartridges and combination HE filters, and chemical goggles. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

PHYSICAL OR CHEMICAL HAZARDS - Strong oxidizing agent. Mix only with water. Oxyzan is not combustible, but at temperatures exceeding 156 F, decomposition occurs releasing oxygen. The oxygen released could initiate or promote combustion of other materials.

ENVIRONMENTAL HAZARDS - This pesticide is toxic to birds, mammals, fish and aquatic life. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to the discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment facility authority. For guidance contact your State Water Board or Regional Office of the EPA.

PERSONAL PROTECTIVE EQUIPMENT (PPE) Handlers who may be exposed to the undiluted product through mixing, loading, application, or other tasks must wear: coveralls over long-sleeved shirt and long pants, rubber gloves, chemical resistant footwear plus socks, and protective eyewear (goggles or face shield). Handlers who may be exposed to the diluted product through application or other tasks must wear: long-sleeved shirt and long pants, and shoes plus socks. Follow manufacturer's instructions for cleaning / maintaining PPE. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product. Do not reuse them. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

USER SAFETY RECOMMENDATIONS Users should remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

Net Contents: 5 GALLONS (47lbs.)
PN: XXXX_5321

LOT NO.:
EXP. DATE:



Manufactured For:
Algonquin Products Co.
29 Russels Mills Rd., Dartmouth, MA 02748
24 hr Emergency No: CareChem 24 1-215-207-0061
Toll Free: 1-866-928-0789



rev.061125

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about Personal Protective Equipment (PPE), notification to workers, and Restricted-Entry Interval (REI). The requirements in this box only apply to the uses of this product that are covered by the Worker Protection Standard.

FOR ENCLOSED ENVIRONMENTS: There is a restricted entry of of one (1) hour for this product whe applied via fogging or spraying to growing plants, surfaces, equipment, structures and non-porous surfaces in enclosed glasshouses and greenhouses. PPE requirement for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil or water, is coveralls worn over long-sleeved shirt and pants, waterproof gloves and shoes plus socks. There is a restricted entry of zero (0) hours for pre-plant dip, seed treatment, soil drench, mop, sponge, dip, soak, rinse or other non-spraying application methods when used in enclosed environments such as glasshouses and greenhouses.

FOR FIELD APPLICATIONS: Keep unprotected persons out of treated areas until sprays have dried.

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are not within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries or greenhouses. Keep unprotected persons out of treated areas until sprays have dried.

Directions for Use

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State, consult the agency in your State responsible for pesticide regulation. Note: All volumes given in ounces are fluid ounces.

SANITIZATION

This peroxyacetic acid sanitizer is recommended for use in circulation cleaning and institutional/industrial sanitizing of previously cleaned hard, non-porous food-contact surfaces and equipment such as pipelines, tanks, vats, fillers, evaporators, pasteurizers, and aseptic equipment in: Dairies, Wineries, Breweries and Beverage Plants, Food Processing / Packing Plants, Egg Processing / Packing, Equipment Surfaces, Eating Establishments. 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 Hard Non-Porous Food Contact Services

An effective sanitizer against Staphylococcus aureus, Escherichia coli, and Salmonella typhimurium. Clean equipment immediately after use: Remove gross particulate matter with a warm water flush. Wash equipment with detergent or cleaning solution. Rinse equipment with potable water. Prepare product solution by adding 1.7 - 5.3 fluid ounces to 5 gallons water. This provides 159-496 ppm peroxyacetic acid and 675-2106 ppm hydrogen peroxide. Fill closed systems with diluted sanitizer solution and allow a contact time of (1) minute. For open or not completely closed systems, use a coarse spray, mop/wipe or flood technique to apply the solution to the surface and allow a contact time of one (1) minute. Allow surfaces to drain thoroughly before resuming operation. Rinsing not required.

Final Sanitizing Bottle Rinse

May be used as a final sanitizing rinse for plastic, glass or metal returnable and non-returnable bottles / cans. Wash bottles with detergent or cleaning solution and rinse with potable water. Rinse bottles with a solution prepared by mixing 1.7 5.3 fluid ounces of product to 5 gallons of water with a water hardness up to 200ppm. Allow contact time of (1) minute. Allow to drain adequately.

Sanitization of Egg Shells Intended for Food

Prepare a dilute solution by adding 1.7 -5.3 fluid ounces of product to 5 gallons of water with a water hardness up to 200ppm. This provides 159-496 ppm peroxyacetic acid and 675-2106 ppm hydrogen peroxide. The solution must be equal to or warmer than the eggs, but not to exceed 130° F. 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. Apply dilute solution as eggs are gathered or prior to setting, as a coarse spray or flood so as to lightly wet all eggshell surfaces. Allow contact time of (1) minute. Allow to drain dry.

Sanitization of Conveyors, Peelers, Slicers and Saws for Meat, Poultry, Seafood, Fruits and Vegetables

An effective sanitizer against Staphylococcus aureus, Escherichia coli and Salmonella Typhimurium. For use in the static or continuous washing, rinsing and sanitizing of conveyor equipment, peelers, collators, slicers, saws, etc. Remove all products from equipment if during treatment the sanitizer will directly contact the items. Prepare sanitizer solution by adding 1.7 -5.3 fluid ounces to 5 gallons of water with a water hardness up to 200ppm. Apply sanitizer solution to the return portion of the conveyor or to the equipment by using a coarse spray or other means of wetting the surfaces. Allow contact time of (1) minute. Control the volume of solutions so as to permit maximum drainage and to prevent puddles. The conveyor may still be damp when food contact occurs. Allow equipment to drain adequately before reusing, a dry surface is not required. No rinse is needed.

Antimicrobial Rinse of Pre-Cleaned or New Returnable or Non-Returnable Containers:

To reduce the number of nonpathogenic beverage spoilage organisms such as Aspergillus versicolor, Byssoschlamys fulva, Pediococcus damnosus, Lactobacillus buchneri, and Saccharomyces cerevisiae. Prepare solution by adding 7.0 to 30 fluid oz. to 5 gallons of water with a water hardness up to 200ppm. This will provide 614 to 2630 ppm of peroxyacetic acid and 2614 to 11,200 ppm hydrogen peroxide. Apply solution, allowing a contact time of (1) minute. Allow containers to drain thoroughly and then rinse with sterile or potable water.

Entryway Sanitizing Systems (Not for Use in California):

To help prevent cross-contamination from treated area to treated area, apply (spray) a sanitizing foam to the entryway. The foam must cover the entire path of the doorway. For effective coverage of footwear and forklift tires, etc., apply a foam layer 0.5-2 inches in depth. Set the system to deliver 1-6.1 fl. oz. 94-571 ppm active PAA) of this product and 1.25 to 5.0 fl. oz. of Biofoam (foam additive) per 5 gallons of water. Adjust the PAA concentration by testing the collapsed foam solution using a peroxyacetic acid test kit.

Alkaline Detergent Cleaning Adjunct (Booster):

To Clean Food Processing Equipment, This product is an effective cleaning booster (hypochlorite alternative) for use with alkaline detergents. It may be used as a cleaning additive for Clean-In-Place (CIP) operations involving the circulation cleaning of pipelines, tanks, vessels, evaporators, HTSTs, and other food processing equipment. For cleaning applications as a detergent booster, use 0.5 to 6 fl. oz. per gallon of water, to assist in the removal of organic soils. All hard-non-porous food contact surfaces treated with this boosted detergent must be thoroughly rinsed with potable water followed by sanitizing with an approved food contact surface sanitizer.

AGRICULTURAL AND HORTICULTURAL USES

A Restricted-Entry-Interval of zero (0) hours is required for this product in agricultural or horticultural uses. This product should not be mixed or combined with any pesticides or fertilizers. Upon soil contact, the diluted product decomposes rapidly to oxygen, carbon dioxide and water. This product may be harmful to fish if exposed on a continuous basis at concentrations greater than 1 ppm of active Peracetic acid. Meter this product into pressurized pipes using a plastic or stainless-steel injection/backflow device installed upstream from the equipment to ensure thorough mixing prior to application. For open bodies of water, allow adequate mixing prior to product flow entering anybody of water. If open pouring of this product is required, pour product close to the surface of the water as possible to reduce odor and exposure.

Treatment of Agricultural and Irrigation Water Systems: Use this product to control sulfides, odor, slime, and algae in sand filters, humidification systems, storage tanks, ponds, reservoirs, canals. Apply this product at 33 to 200 fluid ounces per 10,000 gallons of water. This provides 2 ppm to 9 ppm peroxyacetic acid. Repeat dose as necessary to maintain control. For prevention of algae, some systems may require continuous low-level dosing during warm, sunny periods (2 ppm to 5 ppm peracetic acid).

Drip Irrigation Systems: To clean slime and algae from drip system filters, tapes and emitters, add this product at 23 to 37 fluid ounces per 1000 gallons. This provides 11 ppm to 17 ppm peroxyacetic acid. Use this product at the recommended dose for a minimum of 30 minutes during normal irrigation cycles. Upon irrigation cycle completion, discontinue use and flush the lines.

Greenhouses: This product can be used to suppress/control algae and slime formations in and around greenhouses. For normal use in various process, irrigation or sprinkler water systems, this product may be used at 1:12,000 to 1:17000 dilutions (4-31 ppm as peroxyacetic acid). Heavily fouled systems, such as evaporative coolers or irrigation/drip lines may need shock doses of up to 100 ppm as peroxyacetic acid (1:550 dilution).

CONTROL OF SLIME FORMING BACTERIA IN RECIRCULATING AND COOLING WATER SYSTEMS (COOLING TOWERS, EVAPORATIVE CONDENSERS, PASTEURIZERS AND AIR WASHERS)

Severly fouled systems must be cleaned before adding this product. This product must be added in the system directly and not mixed with any other chemicals or additives. Discontinue the use of chlorine and bromine products prior to using this product. Contamination with other chemicals could result in product decomposition. Add this product at a point in the system where uniform mixing and even distribution will occur.

For slug treatment add 20 oz. of product per 1000 gallons of process water. Repeat as necessary until microbiological control is evident. Thereafter, to maintain control, use 0.3 to 1.5 lbs (4.0-19 fl. oz.) of this product per 1000 gallons of process water (2-9 ppm active peroxyacetic acid) as a continuous or intermittent slug treatment. Continuous dosing methods usually require 2-5 ppm active peroxyacetic acid (4.0-10 fl. oz. per 1000 gal of process water) to achieve adequate control.

AIR WASHERS: 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 the use of this product, heavily fouled systems must be pre-cleaned using the appropriate cleaner. 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.

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. Typically, the dosing regimen would be using intermittent or continuous methods at 2-14 ppm as peroxyacetic acid.

Reverse Osmosis (RO), Ultra Filtration (UF) and other Membrane Cleaning-Sanitizing

This product may be used in the sanitization of ultra-filtration (UF) and reverse osmosis (RO) membranes and other similar type 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 membrane manufacturer to confirm compatibility of membranes with various types or concentration of peracetic 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% 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 oz. per 5 gallons of water (98-195 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 98 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 concentration is below 1 ppm.

RO Continuous or Intermittent Addition:

For continuous addition methods for RO systems, use 2-5 ppm active peroxyacetic acid (36-90 ppm as product), which equals 1.8-4.5 oz. of this product per 430 gallons of process water. For occasional intermittent feed, do not exceed 98 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 in potable water or direct food contact systems.

TREATMENT OF FRUIT AND VEGETABLE PROCESS WATER SYSTEMS

This product can be used in water or ice that contacts raw or fresh, post-harvest or further processed fruits and vegetables (in accordance with FCN 2036) for the control of spoilage and decay causing bacteria and fungi in commercial operations and packinghouses.

FOGGING IN FILLING, PACKAGING, PROCESSING, STORAGE, WAREHOUSE, DISPENSING ROOMS, AND WORKER WELFARE 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 0.5 ppm on a time weighted average. Fog area using one quart of a 0.13% solution of this product (1 fl. oz. of this product per 6 gallons of water) per 1,000 cu. ft. of room volume. Allow surfaces to drain thoroughly before operations are resumed.

STORAGE AND DISPOSAL

Do Not Contaminate Water, Food or Feed by Storage and Disposal.

Pesticide Storage NEVER RETURN 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, douse container with cool water and dilute with large volumes of water. Avoid damage to containers. Keep closed at all times when not in use. Keep container out of direct sunlight. To maintain product quality, store at temperatures below 86 F. Do not store on wooden pallets.

Procedure for Leak or Spill Stop leaks 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 should not enter confined spaces.

Pesticide Disposal 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, regulations, standards, and other requirements. Because acceptable methods of disposal may vary by location, regulatory agencies should be contacted prior to disposal. Product to be discarded should be disposed of as hazardous waste after contacting the appropriate local, state, or Federal agency to determine proper procedures.

Container Handling

Non-refillable containers equal to or less than five gallons.

Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. 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 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 rinsate into application equipment or mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Empty drums are not returnable to unless special arrangements have been made. Dispose of drums in accordance with local state, and Federal regulations.

UN3149, HYDROGEN PEROXIDE AND PEROXYACETIC ACID, STABILIZED, 5.1 (8), PG II