U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Pesticide Programs
Antimicrobials Division (7510P)
1200 Pennsylvania Ave., N.W.
Washington, D.C. 20460

NOTICE OF PESTICIDE:
_X_ Registration
___ Reregistration
(under FIFRA, as amended)

EPA Reg. Number:	**Date of Issuance:**
91628-3	10/08/19

Term of Issuance:
Conditional

Name of Pesticide Product:
Oxysan 1522

Name and Address of Registrant (include ZIP Code):

Kevin Kutcel
Biosan LLC
5807 Churchill Way
Medina, OH 44256

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Antimicrobials Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA section 3(c)(7)(A). You must comply with the following conditions:

1. Submit and/or cite all data required for registration/reregistration/registration review of your product under FIFRA when the Agency requires all registrants of similar products to submit such data.

Signature of Approving Official:

Zeno Bain, Product Manager 33
Regulatory Management Branch I
Antimicrobials Division (7510P)
Office of Pesticide Programs

Date:
10/08/19

You are required to comply with the data requirements described in the DCI Order identified below:

a. Hydrogen Peroxide GDCI-000595-1127
b. Ethaneperoxoic Acid (PAA) GDCI-063201-1125

You must comply with all of the data requirements within the established deadlines. If you have questions about the Generic DCI listed above, you may contact the Reevaluation Team Leader (Team 36): http://www2.epa.gov/pesticide-contacts/contacts-office-pesticide-programs-antimicrobial-division

2. Make the following label changes before you release the product for shipment:

    - Revise the EPA Registration Number to read, "EPA Reg. No. 91628-3."

3. Submit one copy of the final printed label for the record before you release the product for shipment.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

If you fail to satisfy these data requirements, EPA will consider appropriate regulatory action including, among other things, cancellation under FIFRA section 6(e). Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records. Please also note that the record for this product currently contains the following CSFs:

- Basic CSF dated 02/13/2019

If you have any questions, please contact Terria Northern by phone at 703-347-0265, or via email at northern.terria@epa.gov.

Enclosure: Approved label

OXYSAN 1522

Alternate Brand Names:
OXYCARE 15 Plus
OXYSAN 1522 for Laundry
OXYSAN 1522

ACTIVE INGREDIENTS:
Peroxyacetic Acid: …… 15.96%
Hydrogen Peroxide: …… 23.34%
INERT INGREDIENTS: …… 60.70%
Total: ……100.00

ACCEPTED
Oct 08, 2019
Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 91628-3

EPA Registration No. 91628-G

EPA Est. No. 91628-NY-1

KEEP OUT OF REACH OF CHILDREN

STRONG OXIDIZING AGENT

DANGER - PELIGRO

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. 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 swallowed	Call a poison control center or doctor immediately for treatment advice. Have a person sip a glass of water if able to swallow. Do not induce vomiting unless told to by a poison control center or doctor. Do not give anything to an unconscious person.
If inhaled	Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.
Note to Physician: Probable mucosal damage may contraindicate the use of gastric lavage. 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.	

See Side Panel for Additional Precautionary Statements and Usage Directions

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.)

Precautionary Statement

Hazards to Humans and Domestic Animals
DANGER: Corrosive. Causes irreversible eye damage and skin burns. May be fatal if swallowed, inhaled or absorbed through skin. Do not get in eyes, on skin or on clothing. Wear goggles, face shield of safety glasses. Wear coveralls worn over long-sleeve shirt and long pants, socks, chemical-resistant footwear, chemical-resistant gloves (Barrier Laminate, or Butyl Rubber, or Nitrile Rubber, or Neoprene Rubber, or Natural Rubber, or Polyethylene, or Polyvinyl Chloride (PVC), or Viton, selection Category A), and chemical-resistant apron. Wear a NIOSH approved respirator with any N, R, P filter with NIOSH approval number prefix TC-84A; or a NIOSH-approved powered air purifying respirator with an HE filter with NIOSH approval number prefix TC-21C. 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 use.

PHYSICAL OR CHEMICAL HAZARDS - Strong oxidizing agent. Mix only with water. Oxysan Acid Sanitizer 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.

Not for use in healthcare or hospital setting

For Institutional / Industrial sanitizing of previously cleaned hard non-porous food contact surfaces in:

- Meat and Poultry Processing / Packaging Plants
- Milk and Dairy Products Processing / Packing Plants
- Seafood and Produce Processing / Packing Plants
- Food Processing / Packing Plants
- Egg Processing / Packing Equipment Surfaces
- Eating Establishments
- For institutional / Industrial sanitizing of previously cleaned hard, non-porous food contact surfaces such as:
    - Eating, Drinking, and Food Preparation Utensils
    - Countertops and Food Preparation Surfaces
    - Tableware
    - Plastic, Glass and Metal Bottles (rinse)

For use in circulation cleaning and institutional/industrial sanitizing of previously cleaned hard, non-porous food-contact surfaces and equipment such as food preparation surfaces, pipelines, tanks, vats, fillers, evaporators, pasteurizers in:

- Dairies, Wineries, Breweries and Beverage Plants
- Meat and Poultry Processing / Packaging Plants
- Milk and Dairy Products Processing / Packing Plants
- Seafood and Produce Processing / Packing Plants
- Food Processing / Packing Plants
- Egg Processing / Packing Equipment Surfaces

- Eating Establishments
- Final Sanitizing Bottle Rinse
- Agriculture and Horticulture Industry
- Oil & Gas
- Water and Sewage Treatment Facilities

(Optional Marketing Statements)
(Note to Reviewer: The following marketing claims may be used with the prefix "This product or "This product is {a} {an}".)

OXYSAN 1522 may be used in rinse or wash water in food processing facilities on commodities that will be further processed.

For use as a sanitizer on hard non-porous surfaces.

OXYSAN 1522 is for use as a coarse spray for hard non-porous surfaces to be sanitized.

OXYSAN 1522 is for sanitizing hard non-porous surfaces such as packinghouse conveyers and harvesting equipment and containers.

OXYSAN 1522 is for sanitization of shell eggs.

OXYSAN 1522 is for use as a sanitizer of hard non-porous surfaces in commercial environments and as an antimicrobial rinse of Precleaned or New Returnable or Non-Returnable Containers.

OXYSAN 1522 can be used for reducing non-public health microorganisms in processing waters for fruits and vegetables.

OXYSAN 1522 is for use as a dip or spray wash, or fog to control the growth of non-public health microorganisms that may cause decay and/or spoilage on raw, post-harvest and fresh cut, fruits and vegetables.

OXYSAN 1522 is for use in process water that contacts raw, post-harvest, fresh-cut and processed fruits and vegetables to control growth of non-public health microorganisms.

OXYSAN 1522 is for non-public health microbial control in wastewater and sewage effluent in public and private treatment facilities.

OXYSAN 1522 is for use in agricultural water and irrigation systems

OXYSAN 1522 is for use in commercial and Institutional /Industrial laundry operations for sanitization.

OXYSAN 1522 is for use in oilfield and gas-field well operations.

OXYSAN 1522 may be used for the non-pesticidal purpose of cleaning room surfaces by fogging.

OXYSAN 1522 for use as an antimicrobial rinse to control beverage spoilage microorganisms.

OXYSAN 1522 for Laundry

The regular use of this product at the recommended pH ranges will prevent the formation of Milkstone, Beerstone, or Mineralstone deposits

Performs acid wash and antimicrobial rinse in one labor saving step which can save water, time and energy.

Liquid formula allows for automatic dispensing and control. This helps reduce over-usage and saves employee time

Removes mineral soils

Removes mineral based soils

Removes milk stone

Removes mineral fouling soils

Improved flux due to removal of mineral soils

Proven to remove mineral soils

Proven to remove mineral soils at lower temperatures

OXYSAN 1522 peracetic acid is very effective cleaner because of its dissolving action on beer stone, proteins, slime, yeast and other matter commonly found in brewery lines, tanks and hoses.

This product is recommended for use as a sanitizer in beer fermentation and holding tanks, bottling or pre-mix dispensing equipment.

Beerstone and scale can build up on pipelines, storage tanks, tank trucks, silos and processing equipment in the brewery industry. Use of this product will aid in the removal of this material from equipment and help maintain the efficiency of the operation as well as eliminate bacterial growth.

Is for use as a sanitizer in bottling and beverage dispensing equipment, beer fermentation and holding tanks, sanitary filling of bottles, caps and cans {In the final rinse application}, and for external spraying of filling and closing machines and In wineries for use on holding tanks, floors and processing equipment.

Can be applied through foaming apparatus, low-pressure sprayers. Follow manufacturers' Instructions when using this equipment.

Clear formula. (Note to Reviewer To be used only when no dyes are present)

Contains no fragrances. (Note to Reviewer: to be used only with non-fragrance formulas)

Is fragrance-free. (Note to Reviewer: to be used only with non-fragrance formulas)

Formulated for effective mushroom farm sanitization on hard non-porous surfaces.

Formulated for effective poultry sanitization on hard non-porous surfaces.

Formulated for effective swine premise sanitization on hard non-porous surfaces.

Is a concentrate that can be used with a mop and bucket, trigger sprayers, sponge or by soaking.

Is easily and quickly dispersed in water to form a completely uniform solution.

Is for use on floors, walls, tile, cages, crates, mats, litter boxes, floor coverings, or any hard, non-porous surfaces soiled by a pet.

Will not leave grit or soap scum. CLEANING AND DEODORIZATION MARKETING CLAIMS (Note to Reviewer: The following marketing claims may be used with the prefix "This product".)

Peracetic Acid (PAA) is used in the brewing and dairy industry to aid in the removal and prevention of Beerstone Milkstone, and Limestone deposits

Cleans {and shines} {without bleaching} {by {removing} {dirt} {grime} {and food soils In food preparation and processing areas}} {everyday kitchen messes} {non-food contact kitchen surfaces and food preparation areas} {like dirt, grease and food stains}.

Cleans rodent soiled areas. Inhibits bacterial growth on moist surfaces and deodorizes by killing microorganisms that cause offensive odors.

Is a versatile cleaner and scale remover formulated for use on bath and therapy equipment {whirlpools}.

Is for use in work areas such as tool rooms and garages for odor control and light duty cleaning.

{Maximizes} {Improves} labor results by effectively controlling odors.

Provides long lasting freshness against tough {pet} odors such as odors from litter boxes and pet accidents.

Removes dirt.

Aids in the removal of {Milkstone}{Beerstone}

Removes stains.

Use of this product will control unpleasant {malodors} {odors}.

This product is an effective no-rinse final sanitizer on pre-cleaned food contact surfaces.

This product is a no-rinse disinfectant cleaner that disinfects, cleans and deodorizes in just [1] [one] labor saving step.

This product is for use as a sanitizer on food processing equipment and utensils and as a disinfectant on hard, non-porous surfaces.

This product is for use as a sanitizer in bottling and beverage dispensing equipment.

This product is for use as a sanitizer in sanitary filling of bottles and cans.

This product is for use as a sanitizer in beer fermentation and holding tanks.

This product is for use as a sanitizer in wineries for use on holding tanks, floors and processing equipment

Effective sanitizer to clean equipment (either manually or CIP) in the food, dairy, beer, wine, and beverage industries

The reduction of biofouling bacteria improves flux

The reduction of biofouling bacteria can lead to improved flux

The reduction of biofoulants leads to improved flux

The reduction of biofoulants leads to improved flux resulting in increased production capacity

Performs acid rinse and antimicrobial rinse in one labor saving step

Convenient to use - provides acidified wash and antimicrobial rinse in one labor saving step

This product is a cleaner, food contact sanitizer, and broad-spectrum disinfectant for hard, non-porous surfaces.

This product contains no phosphorous.

This product cleans by removing dirt, grime, blood, urine, fecal matter and other common soils found in animal housing facilities, livestock, swine and poultry facilities, grooming facilities, farms, kennels, pet stores, veterinary clinics, laboratories, or other small animal facilities. It (also) eliminates odors leaving surfaces smelling clean and fresh.

This product is an economical concentrate that can be used with a mop and bucket, trigger spray, sponge, or by soaking.

This product will not leave a grit or soap scum.

When used as directed, this product will deodorize surfaces in restrooms and toilet areas, behind and under sinks and counters, garbage cans and garbage storage areas, and other places where bacterial growth can cause malodors.

This product is approved as a sanitizer in public eating places, dairy processing equipment, packing houses, and on food processing equipment and utensils. A potable rinse is not necessary when used as a sanitizer on food contact surfaces.

This product is for use as a sanitizer on food contact surfaces, food processing equipment and utensils, and as a disinfectant on hard, non-porous surfaces. A potable water rinse is not required when used as a sanitizer on food contact surfaces.

This product is for use as a sanitizer in bottling and beverage dispensing equipment.

This product is for use as a sanitizer in sanitary filling of bottles, caps and cans.

This product is for use as a sanitizer in beer fermentation and holding tanks.

This product is for use as a sanitizer in wineries for use on holding tanks, floors, and processing equipment.

This product is for use as a sanitizer in dairy clean-in-place systems.

This product is for use as a sanitizer in brewing clean-in-place systems

Use This product on the multi-touch surfaces responsible for cross-contamination.

This product is a concentrate formulation designed for use in commercial, institutional, and industrial operations.

This product controls the growth of odor-causing and slime forming bacteria.

This product may be applied through automatic washing systems, immersion tanks, foaming apparatus, low-pressure sprayers and fogging systems. (Fogging and foaming not approved for use in California)

This product is formulated to effectively eliminate offensive odors caused by mold and mildew.

Institutional Fabric Sanitizer

Fabric sanitizer

Fabric bleach

Gentle on fabric fibers

Laundry Brightener

Laundry Sanitizer

Sanitizer

Deodorizer

Easy to use

For sanitizing of hard, non-porous food contact surfaces, structures & equipment

Disinfectant of hard, non-porous surfaces

Contains no phosphates

Sanitizes and deodorizes

Leaves no residue

Chlorine free

A post-harvest treatment for the prevention and control of plant pathogenic diseases on all fruits and vegetables and other agricultural crops in dump tanks, hydro coolers and process waters.

A treatment for the prevention and control of plant pathogenic diseases on surfaces, equipment and structures used in processing post-harvest commodities.

Controls the growth of odor-causing and slime forming bacteria

A treatment for the prevention and control of algae & cyanobacteria in waters

Controls algae blooms

Controls odors

Algaecide

May be used in water features containing fish and plants

Keeps water clean

Rids water of algae

Treats, controls, and prevents algae

Use on water gardens, ornamental ponds, waterfalls, fountains, or stone water features

Liquid algaecide for treating waterscapes

Enhance water's appearance

Removes algae from your water

Fact-acting algae control

Pond algaecide

Reduces algae growth

Inhibits growth of many types of algae

Biodegradable

Will not harm plants

Contains no metals

For algae-free water

Eliminates algae

Broad Spectrum

Optional Graphics:

1. Orthodox Union
2. Hologram
3. 

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 one (1) hour for this product when 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.

§ 156.206 General statements.

(a) ***Application restrictions.*** Each product shall bear the statement: “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.” This statement shall be near the beginning of the DIRECTIONS FOR USE section of the labeling under the heading AGRICULTURAL USE REQUIREMENTS.

(d)***State restrictions.*** Each product shall bear the statement: “For any requirements specific to your State, consult the agency in your State responsible for pesticide regulation.” This statement shall be under the heading AGRICULTURAL USE REQUIREMENTS in the labeling.

(e)***Spanish warning statements.*** If the product is classified as toxicity category I or toxicity category II according to the criteria in § 156.62, the signal word shall appear in Spanish in addition to English followed by the statement, “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.)” The Spanish signal word “PELIGRO” shall be used for products in toxicity category I, and the Spanish signal word “AVISO” shall be used for products in toxicity category II. These statements shall appear on the label close to the English signal word.

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

Sanitizing Non-Porous Food Contact Surfaces

An effective sanitizer against Staphylococcus aureus and Escherichia coli.
Clean equipment immediately after use:

1. Remove gross particulate matter with a warm water flush.
2. Wash equipment with detergent or cleaning solution.
3. Rinse equipment with potable water.
4. Prepare OXYSAN 1522 Acid Sanitizer product solution by adding 0.45 to 1.71 fluid ounces to 5 gallons of potable water containing up to 400 ppm hardness as CaCO3. This provides 131 ppm to 426 ppm peroxyacetic acid and 192 ppm to 624 ppm hydrogen peroxide.
5. Fill closed systems with diluted sanitizer solution and allow a contact time of (1) minute.
6. 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.
7. Allow surfaces to drain thoroughly before resuming operation. Allow to air dry for a minimum of 2 minutes.

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

An effective sanitizer against Staphylococcus aureus and Escherichia coli.
For use in the static or continuous washing, rinsing and sanitizing of conveyor equipment, peelers, collators, slicers, saws, etc.

1. Remove gross particulate matter with a warm water flush.
2. Wash equipment with detergent or cleaning solution.
3. Rinse equipment with potable water.
4. Remove all products from equipment if during treatment the sanitizer will directly contact the items.
5. Prepare product solution by adding 0.45 to 1.71 fluid ounces to 5 gallons of potable water containing up to 400 ppm hardness as CaCO3. This provides 131 ppm to 426 ppm peroxyacetic acid and 192 ppm to 624 ppm hydrogen peroxide.
6. 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 for at least (1) minute or for a contact time as specified by the local governing sanitizing code. 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.
7. Allow equipment to drain adequately before reusing, and allow to air dry for a minimum of 2 minutes.

Final Sanitizing Bottle Rinse

May be used as a final sanitizing rinse for plastic, glass or metal returnable and non-returnable bottles / cans.

1. Wash bottles with detergent or cleaning solution and rinse with potable water.
2. Prepare product solution by adding 0.45 to 1.71 fluid ounces to 5 gallons of potable water containing up to 400 ppm hardness as CaCO3. This provides 131 ppm to 426 ppm peroxyacetic acid and 192 ppm to 624 ppm hydrogen peroxide.
3. Allow to drain adequately. Allow to air dry for a minimum of 2 minutes.

For Sanitization of Laundry in Commercial, Hospitality, Institutional and Industrial Operations.

OXYSAN 1522 is a Sanitizer and Antimicrobial Agent for use in Commercial, Institutional and Industrial including Hospitality Laundry Operations to control microorganisms including:

- Staphylococcus aureus (ATCC6538)
- Klebsiella pneumoniae (ATCC4352)
- Pseudomonas aeruginosa (ATCC 15442)

To Sanitize:

1. Add 3.5 fluid ounces of OXYSAN 1522 per 100 pounds of dry laundry assumes 5-parts water to 1-part laundry based on 100 pounds of dry laundry.
2. Inject OXYSAN 1522 into the rinse step at 3.5 fluid ounces per 60 gallons of water after laundry has gone through the wash cycle. OXYSAN 1522 is effective in water up to 400 ppm of water hardness. Treat laundry for a minimum of 6 minutes at a minimum of 32° C (89.6°F). Following sanitization, laundry can be rinsed with water that may include starch, softener, odor neutralizer, fragrance, soil release agent, sour and/or fluid repellent. If further bleaching is required, add and additional dose of OXYSAN 1522 up 20 fluid ounces/cwt to the bleach or rinse step at a temperature of 32°C (89.6°F). Use level, time and temperature will vary based on stain level, fabric type and load weight.

To Bleach Only:

To bleach only, add OXYSAN 1522 up to 20 fluid ounces/cwt in the bleach step at a temperature of 32°C (89.6°F). Use level, time and temperature will vary based on stain level, fabric type and load weight. Following sanitization, laundry can be rinsed with water that may include starch, softener, odor neutralizer, fragrance, soil release agent, sour and/or fluid repellent.

Combination Disinfection and Cleaning

OXYSAN 1522 is effective against Staphylococcus aureus and Salmonella enterica at 1.0 oz of this product per 10 gallons of water on hard non-porous surfaces. A pre-cleaning step is required for all surfaces. Apply solution with a mop, cloth, sponge, brush or by soaking, spraying or immersion so as to wet all surfaces thoroughly. Allow to remain wet for 10 minutes, then remove excess solution and entrapped soil with a clean wet mop, cloth, wet vacuum pick-up or by draining. Prepare a fresh solution daily when it becomes soiled or diluted.

Surfaces Treated to Control the Spread of Citrus Canker

Use OXYSAN 1522 Acid Sanitizer to control the spread of citrus canker between inanimate surfaces and inanimate surfaces to plants. This product is for sanitizing surfaces such as packinghouse conveyers and harvesting equipment and containers. This product is not for treatment of infected plants.

NON PESTICIDAL CLEANING

All surfaces must be cleaned and disinfected prior to fogging.

Fogging in Filling, Packaging, Processing, Storage, Warehouse, and Worker Welfare Rooms or Areas:

Prior to fogging remove food products and packaging materials from the room or area or carefully protect them. Fog desired areas using 32 – 64 fl. oz of use dilution per 1000 cu. ft. using equipment with an automated timer. Conventional corrosion resistant fogging devices are recommended. Vacate the area of all personnel prior to, during and after fogging until the hydrogen peroxide concentration is below 0.5 ppm**.**

Biofouling Control in Pulp. Paper and Paperboard Mill and Water Systems

For use in the manufacture of paper and paperboard intended for food and non-food contact. OXYSAN 1522 Acid Sanitizer can be used to control bacterial, fungal and yeast growth in pulp, paper and paperboard or non-woven process water and influent systems.

Influent Water Systems: This product should be fed continuously to incoming fresh water streams for non-potable use only, at dosages ranging from 1.5-25fl. oz of this product per 1000 gallons of raw or process water this produces 2.0-31ppm peroxyacetic acid and 46 ppm hydrogen peroxide. Adjust dosage as necessary to maintain microbiological control.

1. **Severely fouled systems:** should be cleaned before initial treatment with OXYSAN 1522. Refer to the plant operations manual for directions for cleaning severely fouled systems. The product should be added directly to the system and not mixed with any other chemicals or additives. Other chemicals can be added separately. Contamination with other chemicals could result in product decomposition.
2. **Add the OXYSAN 1522:** at a point in the system where it can be mixed uniformly with the pulp, e.g., the beater, hydro-pulper, fan pump, broke pump etc.

3. **Intermittent feed method:** Apply 7 to 16 fluid ounces of OXYSAN 1522 Acid Sanitizer per ton (dry basis) of pulp or paper produced for two to three hours every eight-hour shift. Maintain a concentration that provides adequate control. Daily rate could change depending on the severity of the biofouling.
4. **Continuous feed method:** Initially, use the intermittent feed method to achieve control. When control is accomplished, apply OXYSAN 1522 continuously at the rate determined adequate for intermittent control.
5. Then reduce the rate of addition to the lowest level sufficient to maintain control. Depending on the severity of the biofouling, control usually can be maintained using a continuous rate of 2.6 to 16 fluid ounces of OXYSAN 1522 solution per ton (dry basis) of pulp or paper produced on a continuous basis. This will provide 16 to 97 ppm of peroxyacetic acid and 23 to 142 ppm of hydrogen peroxide.

Mill Process Waters:

Intermittent Feed: Apply 7 to 16 fluid ounces of OXYSAN 1522 per ton (dry basis) of pulp or paper produced for two to three hours every eight-hour shift. Maintain a concentration that provides adequate control. Daily rate could change depending on the severity of the biofouling.

Continuous Feed: Initially, use the intermittent feed method to achieve control. When control is accomplished, apply OXYSAN 1522 continuously at the rate determined adequate for intermittent control. Then reduce the rate of addition to the lowest level sufficient to maintain control. Depending on the severity of the biofouling, control usually can be maintained using a continuous rate of 2.6 to 15.2 fluid ounces of OXYSAN 1522 solution per ton (dry basis) of pulp or paper produced on a continuous basis. This will provide 16 to 79 ppm of peroxyacetic acid and 23 to 115 ppm of hydrogen peroxide.

Shock (slug) Dose: This product may be used to shock dose systems requiring a high level of biofouling control. Use rates ranging from 13.5-108 fl. oz. of this product per ton (dry basis) of pulp or paper produced may be necessary. This dosage is equivalent to 82-657 ppm peroxyacetic acid. Shock dose every 1-3 hrs. as necessary until biofouling control is evident. Thereafter, revert to continuous or intermittent feed methods.

Control of Bacteria and Fungi in Dispersed Pigments

OXYSAN 1522 can be used to control bacteria and fungi in the manufacture and storage of dispersed pigments used in paint and paper production such as kaolin day, titanium dioxide, calcium carbonate, calcium sulfate, barium sulfate, magnesium silicate and kieselguhr.

Apply 2.6 to 16 fluid ounces of OXYSAN 1522 solution to each 1,000 lb. of dispersed pigment. This will provide 32 to 164 ppm of peroxyacetic acid and 46 to 240 ppm of hydrogen peroxide.

Control of Slime Forming Bacteria and Biofouling in Recirculating Cooling Water Systems (Cooling Towers, Evaporative Condensers, Air Washers) Non-Food Contact Water Systems and Ornamental or Recreation Water Features.

OXYSAN 1522 is for use in treating raw (make-up) and process waters, closed and opened loop systems such as heat exchanges, wet scrubbers, cooling towers, evaporative condensers and recirculating industrial process waters, such as pulp and paper mill water systems.

Severely fouled systems: should be cleaned before adding the OXYSAN 1522 solution. (Refer to the system operation manual for directions to clean severely fouled systems). The product should be added directly to the system and not mixed with any other chemicals or additives. additives. Other chemicals should be added separately.

Never add OXYSAN 1522 into any feeding device, such as shot feeders, filter housings, by-pass feeders, or miscellaneous piping of any kind, because dangerous acute decomposition can occur.

Discontinue the use of chlorine or bromine products prior to using OXYSAN 1522. Contamination. Contamination with other chemicals could result in product decomposition.

Add the OXYSAN 1522 solution only to water at a point in the system where uniform mixing and even distribution will occur.

Intermittent feed method: When the system is noticeably fouled, apply 10 to 16 fluid ounces of OXYSAN 1522 solution per 1000 gallons of water in the system. Repeat until control is achieved. When microbial control is evident, add 7-16 fluid ounces of the solution per 1000 gallons of water in the system every day, or as needed, to maintain control. The daily dose rate could vary depending upon the severity of the biofouling.

Continuous feed method: When the system is just noticeably fouled, apply 2.6 to 14 fluid ounces of OXYSAN 1522 solution per 1000 gallons of water in the system. When microbial control is achieved, start adding OXYSAN 1522 solution continuously at a rate of 14 fluid ounces per 1000 gallons of water provides 17 ppm peroxyacetic acid and 26 ppm of hydrogen peroxide. Then reduce the rate of addition to a level, sufficient to maintain control. The dose rate may have to be adjusted to account for losses due to blowdown and evaporation. Add 1.4 fluid ounces of OXYSAN 1522 for every 100 gals of make-up water.

Shock (Slug) Dose: For moderately to severely fouled systems add 5-20 fl. oz. of this product per 1000 gallons of process water (7-29 ppm peroxyacetic acid). Repeat as necessary until microbiological control is evident.

Air Washers: OXYSAN 1522 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 an appropriate cleaner. Continuous dosing methods will require 2-7 ppm and intermittent dosing methods require 7-14 ppm (as peroxyacetic acid) depending on the type of system and the level of microbiological control desired.

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

To reduce the number of nonpathogenic beverage spoilage organisms such as Byssochlamys fulva, Pediococcus damnosus. Lactobacillus buchneri and Saccharomyces cerevisiae.

1. Prepare solution by adding 9.25 fluid oz. to 5 gallons of potable water containing up to 400 ppm hardness as CaCO3 This will provide 2307 ppm of peroxyacetic acid and 3373 hydrogen peroxide.
2. Apply solution. Immerse for at least (1) minute or for a contact time as specified by local governing sanitation codes.
3. Allow containers to drain thoroughly and then rinse with sterile or potable water. Allow to air dry for a minimum of 2 minutes.

Treatment of Processing Waters and Surfaces to Control Growth of Non-Public Health Microorganisms that can Cause Spoilage of Fresh-Cut, Raw Post-Harvest or Processed Fruits, Nuts and Vegetables

1. Ensure that the water is recirculating or mixing in the processing tank or water line.
2. Prepare OXYSAN 1522 solution by diluting 0.68 -4.0 fl. oz. per 25 gallons of water. Ensure that the solution is thoroughly mixed. This provides 40-200 ppm of peroxyacetic acid and 292 ppm hydrogen peroxide. Allow the solution to circulate at least 45 seconds before adding or treating raw fruits and vegetables.
3. Dose as needed to maintain 40-500 ppm of peroxyacetic acid by adding OXYSAN 1522 to processing water.
4. Allow a minimum contact time of 45 seconds.
5. Do not rinse.
6. Prepare fresh process water daily to ensure effectiveness. Do not reuse water that is badly fouled.

Fogging Instructions: Apply OXYSAN 1522 as a fog 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.

Commercially-applied fogging methods may be used, provided, the dilution rate of the resultant solution does not exceed those prescribed in this section (85-100 ppm 100% Peracetic acid in the use solution). Conventional corrosion-resistant fogging devices are recommended. Applicable for use on all types of post-harvest commodities.

1. Vacate all personnel from the room during fogging.
2. Fog areas using one quart per 1,000 cu. ft. of room area with a 0.06% OXYSAN 1522 solution per 1,000 cu. ft. of room volume.
3. Exit the area or space immediately and remain outside the treated area or space until the area or space is thoroughly ventilated and until fog or mist has dispersed.
4. Do not enter room until hydrogen peroxide concentrations are tested and are below 1 ppm on a time weighted average. Reentry times may vary.

For Non-Public Health Microbial Control in Sewage and Wastewater Effluent Treatment Plants.

Use OXYSAN 1522 to treat sewage and wastewater effluent related to public and private wastewater treatment plants. OXYSAN 1522 can be applied directly to the effluent or may be used with an appropriate activator such as hydrogen peroxide or other technology such as Ultra Violet (UV). OXYSAN 1522 may be applied to effluent water discharged from trickle bed or percolating fluidized bed filters.

The application rate for individual facilities will depend on the degree of bio loading of the effluent stream to be discharged and the local microbial discharge limit. Adjust application rate to meet the need of the individual facility.

1. Add OXYSAN 1522 to effluent water at a concentration of 0.5 ppm to 45 ppm peracetic acid and 69 ppm hydrogen peroxide. Allow contact time of approximately 15 to 60 minutes.
2. The maximum amount of Peracetic acid that can be discharged from the treatment facility is 1 ppm. Use an appropriate Peracetic acid test kit analyzer to ensure that this level is not exceeded.

Antimicrobial use with Aqueous Treatment Fluids in Subterranean Oilfield and Gas Field Well Operations such as Well Drilling, Formation Fracturing, Productivity Enhancement and Secondary Recovery

OXYSAN 1522 Acid Sanitizer can be for control of slime forming and spoilage bacteria, yeast and fungi and anaerobic sulfate reducing bacteria, Desulfovibrio vulgaris, that lead to reservoir souring and metal corrosion. This product must be introduced through a closed mixed/loading and delivery transfer system equipped with a metering device that Is appropriate for its intended use.

Drilling Muds, Fracturing Fluids, Well Squeezed Fluids:

For the preservation of drilling muds, workover and completion fluids and other product susceptible to contamination, pre-mix with the fluid or add directly at the point of use at 3.75- 70 fluid ounces per 1000 gallons of water (5-87 ppm of Peroxyacetic and 8-128 ppm of Hydrogen Peroxide) as required. Depending on the severity of the contamination, initial application may be added up to 685 fluid ounces per 1000 gallons of water (1000 ppm of Peroxyacetic Acid and 1462 ppm of Hydrogen Peroxide).

Flooding, injection and Produced Water:

Water Flooding Operations: Add initially at 3.75-70 fluid ounces per 1000 gallons of water (5-87 ppm of Peroxyacetic acid and 8-128 ppm of Hydrogen Peroxide) and repeat until control is achieved. Subsequent treatment may be continued on a weekly basis or as required.

Injection Wells: The well that are associated with gas storage systems may be treated up to 122 ppm of Peroxyacetic Acid and 136 ppm of Hydrogen Peroxide when diluted in the formation water. Any additional top-up water should be treated as required.

Hydrostatic Systems: Apply 3.75-75.5 fluid ounces per 1000 gallons of water (5-110 ppm of Peroxyacetic acid and 8-161 ppm of Hydrogen Peroxide) depending on the water quality and the duration of the shut-in.

Pipeline and Tank Maintenance: For microbial control in water-bottoms in crude and refined hydrocarbon storage tanks, piping, and transportation systems. Apply 3.75 fluid ounces per 1000 gallons of water (5 ppm of Peroxyacetic and 8 ppm of Hydrogen Peroxide) to 70 fluid ounces per 1000 gallons of water 87ppm of Peroxyacetic and 128 ppm of Hydrogen Peroxide) in the aqueous phase, directly injected into the water-bottom, pipeline or may be added to the hydrocarbon phase. Treatment may be applied daily or monthly for both storage and transportation systems as needed.

Agricultural and Horticultural Uses

A Restricted-Entry-Interval of zero (0) hours is required for OXYSAN 1522 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 OXYSAN 1522 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 OXYSAN 1522 to control sulfides, odor, slime, and algae in sand filters, humidification systems, storage tanks, ponds, reservoirs, canals. Apply OXYSAN 1522 at 15 to 70 fluid ounces per 10,000 gallons of water. This provides 2 ppm to 9 ppm peroxyacetic acid and 13 ppm hydrogen peroxide. 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 OXYSAN 1522).

Drip Irrigation Systems: To clean slime and algae from drip system filters, tapes and emitters, add OXYSAN 1522 at 7.5 to 14 fluid ounces per 1000 gallons. This provides 11 ppm to 17 ppm peracetic acid and 26 ppm hydrogen peroxide. 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: 40,000 to 1:5000 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: 1,600 dilution).

Pre-Plant Dip Treatment: (Not for Use in California) This product can be used to control damping-off, root disease and stem rot disease that has been caused by the following:

- Pythium (root rot) – Phytophthora (blights, rots)
- Rhizoctonia (blight, stem rot) Fusarium (root-rot, leaf spot, Pink Snow Mold)
- Thielaviopsis (black root rot), on seeds, seedlings, bulbs, or cuttings.

Prior to dipping, remove dead or dying foliage. Use 7.4 fl. oz. per 50 gallons of water. Immerse plants or cuttings; remove and allow to drain. Do not rinse.

If excessive foaming or bubbling occurs during the dipping process, it is an indication of high levels of disease contamination.

Seed Treatment: (Not for Use in California) This product can be used to control damping-off, root disease and stem rot disease that has been caused by the following:

- Pythium (root rot)
- Phytophthora (blights, rots)
- Rhizoctonia (blight, stem rot)
- Fusarium (root-rot, leaf spot, Pink Snow Mold)
- Thielaviopsis (black root rot), on seeds of seed sprout crops such as mung bean, red clover, soybeans and alfalfa, and on crops grown exclusively for seed for planting.

Use 6.5 fl. oz. per 50 gallons of water. This provides 162ppm peracetic acid and 237ppm hydrogen peroxide. Soak for two minutes; remove and allow to drain. Do not rinse. Plant seeds according to seed package directions.

Soil Applications: (Not for Use in California) To control soil-borne diseases such as Fusarium, Phytophthora, Pythium, Verticillim, Thielaviopsis, and Rhizoctonia, add this product at 15.1-30.1 fl. oz. per 100 gal of water (220-439 ppm active peroxyacetic acid).

Apply this product by drenching, flooding, or by drip or sprinkler irrigation systems. For best results apply prior to and during seeding or transplant operations. Wait one day before inoculating the soil with beneficial microbes.

Foliar Applications: (Not for Use in California) This product may be used on growing agricultural crops to cure or prevent bacterial and fungal diseases. Crops include all row crops, spices, grains, tobacco, herbs, berries, fruit and nut trees and vines (such as grapes). The product is applied at 30–100 gal of mixed solution per acre of foliage at use rates of 5.3-45.5 fl. oz. per 100 gal of water (77-567ppm active peroxyacetic acid and 830 ppm hydrogen peroxide). For preventative treatments, use the higher dilution rates whereas curative (or rescue) treatment requires the lower dilution rates.

Good coverage and wetting of the foliage are required. Apply curative treatments for 2-3 days and then resume preventative treatments every week. Not all plant diseases have been tested, but some of the common diseases controlled are: Algae, Alternaria spp., Anthracnose, Aphanomyces, Bacterial Blight, Black Spot, Botrytis (gray mold), Brown Spot, Copper Spot, Dollar Spot, Early and Late Blights, Erwinia spp. (such as bacterial wilt), Fairy Ring, Fusarium Root Rot and Blight, Fruit, Black, Brown, Stem and Sour Rots, Leaf and Bacterial Spots, Plasmopara, Powdery and Downy mildews, Phytophthora Blight/Rots, Pink Snow Mold, Pseudomonas and Xanthomonas spp. (such as bacterial angular leaf spot, bacterial leaf spec, black soft rot), Pythium spp., Rhizoctonia spp., Rusts, Scabs, Scum, Slime Molds, Smut, Summer Patch, Stripe Smut, Take-all Patch, and Thielaviopsis. To improve uniform coverage and penetration, use a nonionic surfactant.

Cleaning Poultry, Swine, Livestock Watering Operating Systems (When Animals Are Present): After water lines have been cleaned, use OXYSAN 1522 at 0.3-0.45 fl. oz. per 100 gallons of water to control mineral build up in watering lines. This produces 6 ppm peracetic acid. Never use OXYSAN 1522 more than 5 consecutive days to clean the operating system. Never mix OXYSAN 1522 with any other product. If cleaning the operating system, stop the use of OXYSAN 1522 twenty-four (24) hours prior to vaccination or medication via the water line.

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 (RO), Ultra Filtration (UF) and Other Membrane Cleaning

This product may be used on ultra-filtration (UF) and reverse osmosis (RO) membranes and their associated piping systems. This product is not for use in kidney dialysis equipment. Do not use the intermittent dosing methods for nano or ultra-filtration food or drinking water applications. 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 0.42% of this product by volume. This will equal 680 ppm peracetic acid and 1000 ppm hydrogen peroxide. Recirculate solution through the piping and membrane system at 20º 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. Rinse the system with RO permeate or potable water until residual peroxygen concentration is below 1 ppm.

Continuous or Intermittent Addition: For continuous addition (dosing) for RO systems, use 1.5- 3.5 fl. oz per 1000 gallons of water. This produces 4 ppm peracetic acid and 6 ppm hydrogen peroxide. For intermittent feed, do not exceed 93 ppm active peracetic acid, which equals 0.64 fl. oz. of this product per 10 gallons of feed water. Intermittent dosing of this product is not allowed for use in NF or UF systems for on-line food or drinking water applications.

Note: May cause bleaching of treated surfaces

Note: Before using OXYSAN 1522 Acid Sanitizer to sanitize metal surfaces, it is recommended that the diluted solution be tested on a small area to determine compatibility.

In all applications always prepare new solution daily to ensure effectiveness. Do not re-use solutions. Dispose of un-used solutions responsibly.

UN 3109, Organic Peroxide Type F, Liquid (Peroxyacetic Acid) 5.2 (8), PG II

Storage and Disposal

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

Pesticide Storage

NEVER RETURN OXYSAN ACID SANITIZER 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 greater than or equal to five gallons.

Nonrefillable container. Do not reuse or refill this container. Offer for recycling. If available. 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.

Manufactured by: BIOSAN LLC, 26 Freedom Way, Saratoga Springs, NY 12866, (518) 886-9827

CHEMTREC EMERGENCY 800-424-9300 (CCN205494)

OXYSAN 1522

ACCEPTED
10/08/2019
Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 91628-3

Alternate Brand Names:
OXYCARE 15 Plus
OXYSAN 1522 for Laundry
OXYSAN 1522

ACTIVE INGREDIENTS:
Peroxyacetic Acid: …… 15.96%
Hydrogen Peroxide: …… 23.34%
INERT INGREDIENTS: ……. 60.70%
Total: ……100.00

EPA Registration No. 91628-3

EPA Est. No. 91628-NY-1

KEEP OUT OF REACH OF CHILDREN

STRONG OXIDIZING AGENT

DANGER - PELIGRO

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. 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 swallowed	Call a poison control center or doctor immediately for treatment advice. Have a person sip a glass of water if able to swallow. Do not induce vomiting unless told to by a poison control center or doctor. Do not give anything to an unconscious person.
If inhaled	Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.
Note to Physician: Probable mucosal damage may contraindicate the use of gastric lavage. 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.	

See Side Panel for Additional Precautionary Statements and Usage Directions

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.)

Precautionary Statement

Hazards to Humans and Domestic Animals
DANGER: Corrosive. Causes irreversible eye damage and skin burns. May be fatal if swallowed, inhaled or absorbed through skin. Do not get in eyes, on skin or on clothing. Wear goggles, face shield of safety glasses. Wear coveralls worn over long-sleeve shirt and long pants, socks, chemical-resistant footwear, chemical-resistant gloves (Barrier Laminate, or Butyl Rubber, or Nitrile Rubber, or Neoprene Rubber, or Natural Rubber, or Polyethylene, or Polyvinyl Chloride (PVC), or Viton, selection Category A), and chemical-resistant apron. Wear a NIOSH approved respirator with any N, R, P filter with NIOSH approval number prefix TC-84A; or a NIOSH-approved powered air purifying respirator with an HE filter with NIOSH approval number prefix TC-21C. 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 use.

PHYSICAL OR CHEMICAL HAZARDS - Strong oxidizing agent. Mix only with water. Oxysan Acid Sanitizer 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.

Not for use in healthcare or hospital setting

For Institutional / Industrial sanitizing of previously cleaned hard non-porous food contact surfaces in:

- Meat and Poultry Processing / Packaging Plants
- Milk and Dairy Products Processing / Packing Plants
- Seafood and Produce Processing / Packing Plants
- Food Processing / Packing Plants
- Egg Processing / Packing Equipment Surfaces
- Eating Establishments
- For institutional / Industrial sanitizing of previously cleaned hard, non-porous food contact surfaces such as:
    - Eating, Drinking, and Food Preparation Utensils
    - Countertops and Food Preparation Surfaces
    - Tableware
    - Plastic, Glass and Metal Bottles (rinse)

For use in circulation cleaning and institutional/industrial sanitizing of previously cleaned hard, non-porous food-contact surfaces and equipment such as food preparation surfaces, pipelines, tanks, vats, fillers, evaporators, pasteurizers in:

- Dairies, Wineries, Breweries and Beverage Plants
- Meat and Poultry Processing / Packaging Plants
- Milk and Dairy Products Processing / Packing Plants
- Seafood and Produce Processing / Packing Plants
- Food Processing / Packing Plants
- Egg Processing / Packing Equipment Surfaces

- Eating Establishments
- Final Sanitizing Bottle Rinse
- Agriculture and Horticulture Industry
- Oil & Gas
- Water and Sewage Treatment Facilities

(Optional Marketing Statements)
(Note to Reviewer: The following marketing claims may be used with the prefix "This product or "This product is {a} {an}".)

OXYSAN 1522 may be used in rinse or wash water in food processing facilities on commodities that will be further processed.

For use as a sanitizer on hard non-porous surfaces.

OXYSAN 1522 is for use as a coarse spray for hard non-porous surfaces to be sanitized.

OXYSAN 1522 is for sanitizing hard non-porous surfaces such as packinghouse conveyers and harvesting equipment and containers.

OXYSAN 1522 is for sanitization of shell eggs.

OXYSAN 1522 is for use as a sanitizer of hard non-porous surfaces in commercial environments and as an antimicrobial rinse of Precleaned or New Returnable or Non-Returnable Containers.

OXYSAN 1522 can be used for reducing non-public health microorganisms in processing waters for fruits and vegetables.

OXYSAN 1522 is for use as a dip or spray wash, or fog to control the growth of non-public health microorganisms that may cause decay and/or spoilage on raw, post-harvest and fresh cut, fruits and vegetables.

OXYSAN 1522 is for use in process water that contacts raw, post-harvest, fresh-cut and processed fruits and vegetables to control growth of non-public health microorganisms.

OXYSAN 1522 is for non-public health microbial control in wastewater and sewage effluent in public and private treatment facilities.

OXYSAN 1522 is for use in agricultural water and irrigation systems

OXYSAN 1522 is for use in commercial and Institutional /Industrial laundry operations for sanitization.

OXYSAN 1522 is for use in oilfield and gas-field well operations.

OXYSAN 1522 for use as an antimicrobial rinse to control beverage spoilage microorganisms.

OXYSAN 1522 for Laundry

The regular use of this product at the recommended pH ranges will prevent the formation of Milkstone, Beerstone, or Mineralstone deposits

Performs acid wash and antimicrobial rinse in one labor saving step which can save water, time and energy.

Liquid formula allows for automatic dispensing and control. This helps reduce over-usage and saves employee time

Removes mineral soils

Removes mineral based soils

Removes milk stone

Removes mineral fouling soils

Improved flux due to removal of mineral soils

Proven to remove mineral soils

Proven to remove mineral soils at lower temperatures

OXYSAN 1522 peracetic acid is very effective cleaner because of its dissolving action on beer stone, proteins, slime, yeast and other matter commonly found in brewery lines, tanks and hoses.

This product is recommended for use as a sanitizer in beer fermentation and holding tanks, bottling or pre-mix dispensing equipment.

Beerstone and scale can build up on pipelines, storage tanks, tank trucks, silos and processing equipment in the brewery industry. Use of this product will aid in the removal of this material from equipment and help maintain the efficiency of the operation as well as eliminate bacterial growth.

Is for use as a sanitizer in bottling and beverage dispensing equipment, beer fermentation and holding tanks, sanitary filling of bottles, caps and cans {In the final rinse application}, and for external spraying of filling and closing machines and In wineries for use on holding tanks, floors and processing equipment.

Can be applied through foaming apparatus, low-pressure sprayers. Follow manufacturers' Instructions when using this equipment.

Clear formula. (Note to Reviewer To be used only when no dyes are present)

Contains no fragrances. (Note to Reviewer: to be used only with non-fragrance formulas)

Is fragrance-free. (Note to Reviewer: to be used only with non-fragrance formulas)

Formulated for effective mushroom farm sanitization on hard non-porous surfaces.

Formulated for effective poultry sanitization on hard non-porous surfaces.

Formulated for effective swine premise sanitization on hard non-porous surfaces.

Is a concentrate that can be used with a mop and bucket, trigger sprayers, sponge or by soaking.

Is easily and quickly dispersed in water to form a completely uniform solution.

Is for use on floors, walls, tile, cages, crates, mats, litter boxes, floor coverings, or any hard, non-porous surfaces soiled by a pet.

Will not leave grit or soap scum. CLEANING AND DEODORIZATION MARKETING CLAIMS (Note to Reviewer: The following marketing claims may be used with the prefix "This product".)

Peracetic Acid (PAA) is used in the brewing and dairy industry to aid in the removal and prevention of Beerstone Milkstone, and Limestone deposits

Cleans {and shines} {without bleaching} {by {removing} {dirt} {grime} {and food soils In food preparation and processing areas}} {everyday kitchen messes} {non-food contact kitchen surfaces and food preparation areas} {like dirt, grease and food stains}.

Cleans rodent soiled areas. Inhibits bacterial growth on moist surfaces and deodorizes by killing microorganisms that cause offensive odors.

Is a versatile cleaner and scale remover formulated for use on bath and therapy equipment {whirlpools}.

Is for use in work areas such as tool rooms and garages for odor control and light duty cleaning.

{Maximizes} {Improves} labor results by effectively controlling odors.

Provides long lasting freshness against tough {pet} odors such as odors from litter boxes and pet accidents.

Removes dirt.

Aids in the removal of {Milkstone}{Beerstone}

Removes stains.

Use of this product will control unpleasant {malodors} {odors}.

This product is an effective no-rinse final sanitizer on pre-cleaned food contact surfaces.

This product is a no-rinse disinfectant cleaner that disinfects, cleans and deodorizes in just [1] [one] labor saving step.

This product is for use as a sanitizer on food processing equipment and utensils and as a disinfectant on hard, non-porous surfaces.

This product is for use as a sanitizer in bottling and beverage dispensing equipment.

This product is for use as a sanitizer in sanitary filling of bottles and cans.

This product is for use as a sanitizer in beer fermentation and holding tanks.

This product is for use as a sanitizer in wineries for use on holding tanks, floors and processing equipment

Effective sanitizer to clean equipment (either manually or CIP) in the food, dairy, beer, wine, and beverage industries

The reduction of biofouling bacteria improves flux

The reduction of biofouling bacteria can lead to improved flux

The reduction of biofoulants leads to improved flux

The reduction of biofoulants leads to improved flux resulting in increased production capacity

Performs acid rinse and antimicrobial rinse in one labor saving step

Convenient to use - provides acidified wash and antimicrobial rinse in one labor saving step

This product is a cleaner, food contact sanitizer, and broad-spectrum disinfectant for hard, non-porous surfaces.

This product contains no phosphorous.

This product cleans by removing dirt, grime, blood, urine, fecal matter and other common soils found in animal housing facilities, livestock, swine and poultry facilities, grooming facilities, farms, kennels, pet stores, veterinary clinics, laboratories, or other small animal facilities. It (also) eliminates odors leaving surfaces smelling clean and fresh.

This product is an economical concentrate that can be used with a mop and bucket, trigger spray, sponge, or by soaking.

This product will not leave a grit or soap scum.

When used as directed, this product will deodorize surfaces in restrooms and toilet areas, behind and under sinks and counters, garbage cans and garbage storage areas, and other places where bacterial growth can cause malodors.

This product is approved as a sanitizer in public eating places, dairy processing equipment, packing houses, and on food processing equipment and utensils. A potable rinse is not necessary when used as a sanitizer on food contact surfaces.

This product is for use as a sanitizer on food contact surfaces, food processing equipment and utensils, and as a disinfectant on hard, non-porous surfaces. A potable water rinse is not required when used as a sanitizer on food contact surfaces.

This product is for use as a sanitizer in bottling and beverage dispensing equipment.

This product is for use as a sanitizer in sanitary filling of bottles, caps and cans.

This product is for use as a sanitizer in beer fermentation and holding tanks.

This product is for use as a sanitizer in wineries for use on holding tanks, floors, and processing equipment.

This product is for use as a sanitizer in dairy clean-in-place systems.

This product is for use as a sanitizer in brewing clean-in-place systems

Use This product on the multi-touch surfaces responsible for cross-contamination.

This product is a concentrate formulation designed for use in commercial, institutional, and industrial operations.

This product controls the growth of odor-causing and slime forming bacteria.

This product may be applied through automatic washing systems, immersion tanks, foaming apparatus, low-pressure sprayers and fogging systems. (Fogging and foaming not approved for use in California)

This product is formulated to effectively eliminate offensive odors caused by mold and mildew.

Institutional Fabric Sanitizer

Fabric sanitizer

Fabric bleach

Gentle on fabric fibers

Laundry Brightener

Laundry Sanitizer

Sanitizer

Deodorizer

Easy to use

For sanitizing of hard, non-porous food contact surfaces, structures & equipment

Disinfectant of hard, non-porous surfaces

Contains no phosphates

Sanitizes and deodorizes

Leaves no residue

Chlorine free

A post-harvest treatment for the prevention and control of plant pathogenic diseases on all fruits and vegetables and other agricultural crops in dump tanks, hydro coolers and process waters.

A treatment for the prevention and control of plant pathogenic diseases on surfaces, equipment and structures used in processing post-harvest commodities.

Controls the growth of odor-causing and slime forming bacteria

A treatment for the prevention and control of algae & cyanobacteria in waters

Controls algae blooms

Controls odors

Algaecide

May be used in water features containing fish and plants

Keeps water clean

Rids water of algae

Treats, controls, and prevents algae

Use on water gardens, ornamental ponds, waterfalls, fountains, or stone water features

Liquid algaecide for treating waterscapes

Enhance water's appearance

Removes algae from your water

Fact-acting algae control

Pond algaecide

Reduces algae growth

Inhibits growth of many types of algae

Biodegradable

Will not harm plants

Contains no metals

For algae-free water

Eliminates algae

Broad Spectrum

Optional Graphics:

1. Orthodox Union

2. ☐
   Hologram

3. Made in the USA

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 one (1) hour for this product when 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.

§ 156.206 General statements.

(a) ***Application restrictions.*** Each product shall bear the statement: “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.” This statement shall be near the beginning of the DIRECTIONS FOR USE section of the labeling under the heading AGRICULTURAL USE REQUIREMENTS.

(d)***State restrictions.*** Each product shall bear the statement: “For any requirements specific to your State, consult the agency in your State responsible for pesticide regulation.” This statement shall be under the heading AGRICULTURAL USE REQUIREMENTS in the labeling.

(e)***Spanish warning statements.*** If the product is classified as toxicity category I or toxicity category II according to the criteria in § 156.62, the signal word shall appear in Spanish in addition to English followed by the statement, “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.)” The Spanish signal word “PELIGRO” shall be used for products in toxicity category I, and the Spanish signal word “AVISO” shall be used for products in toxicity category II. These statements shall appear on the label close to the English signal word.

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

Sanitizing Non-Porous Food Contact Surfaces

An effective sanitizer against Staphylococcus aureus and Escherichia coli.
Clean equipment immediately after use:

1. Remove gross particulate matter with a warm water flush.
2. Wash equipment with detergent or cleaning solution.
3. Rinse equipment with potable water.
4. Prepare OXYSAN 1522 Acid Sanitizer product solution by adding 0.45 to 1.71 fluid ounces to 5 gallons of potable water containing up to 400 ppm hardness as CaCO3. This provides 131 ppm to 426 ppm peroxyacetic acid and 192 ppm to 624 ppm hydrogen peroxide.
5. Fill closed systems with diluted sanitizer solution and allow a contact time of (1) minute.
6. 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.
7. Allow surfaces to drain thoroughly before resuming operation. Allow to air dry for a minimum of 2 minutes.

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

An effective sanitizer against Staphylococcus aureus and Escherichia coli.
For use in the static or continuous washing, rinsing and sanitizing of conveyor equipment, peelers, collators, slicers, saws, etc.

1. Remove gross particulate matter with a warm water flush.
2. Wash equipment with detergent or cleaning solution.
3. Rinse equipment with potable water.
4. Remove all products from equipment if during treatment the sanitizer will directly contact the items.
5. Prepare product solution by adding 0.45 to 1.71 fluid ounces to 5 gallons of potable water containing up to 400 ppm hardness as CaCO3. This provides 131 ppm to 426 ppm peroxyacetic acid and 192 ppm to 624 ppm hydrogen peroxide.
6. 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 for at least (1) minute or for a contact time as specified by the local governing sanitizing code. 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.
7. Allow equipment to drain adequately before reusing, and allow to air dry for a minimum of 2 minutes.

Final Sanitizing Bottle Rinse

May be used as a final sanitizing rinse for plastic, glass or metal returnable and non-returnable bottles / cans.

1. Wash bottles with detergent or cleaning solution and rinse with potable water.
2. Prepare product solution by adding 0.45 to 1.71 fluid ounces to 5 gallons of potable water containing up to 400 ppm hardness as CaCO3. This provides 131 ppm to 426 ppm peroxyacetic acid and 192 ppm to 624 ppm hydrogen peroxide.
3. Allow to drain adequately. Allow to air dry for a minimum of 2 minutes.

For Sanitization of Laundry in Commercial, Hospitality, Institutional and Industrial Operations.

OXYSAN 1522 is a Sanitizer and Antimicrobial Agent for use in Commercial, Institutional and Industrial including Hospitality Laundry Operations to control microorganisms including:

- Staphylococcus aureus (ATCC6538)
- Klebsiella pneumoniae (ATCC4352)
- Pseudomonas aeruginosa (ATCC 15442)

To Sanitize:

1. Add 3.5 fluid ounces of OXYSAN 1522 per 100 pounds of dry laundry assumes 5-parts water to 1-part laundry based on 100 pounds of dry laundry.
2. Inject OXYSAN 1522 into the rinse step at 3.5 fluid ounces per 60 gallons of water after laundry has gone through the wash cycle. OXYSAN 1522 is effective in water up to 400 ppm of water hardness. Treat laundry for a minimum of 6 minutes at a minimum of 32° C (89.6°F). Following sanitization, laundry can be rinsed with water that may include starch, softener, odor neutralizer, fragrance, soil release agent, sour and/or fluid repellent. If further bleaching is required, add and additional dose of OXYSAN 1522 up 20 fluid ounces/cwt to the bleach or rinse step at a temperature of 32°C (89.6°F). Use level, time and temperature will vary based on stain level, fabric type and load weight.

To Bleach Only:

To bleach only, add OXYSAN 1522 up to 20 fluid ounces/cwt in the bleach step at a temperature of 32°C (89.6°F). Use level, time and temperature will vary based on stain level, fabric type and load weight. Following sanitization, laundry can be rinsed with water that may include starch, softener, odor neutralizer, fragrance, soil release agent, sour and/or fluid repellent.

Combination Disinfection and Cleaning

OXYSAN 1522 is effective against Staphylococcus aureus and Salmonella enterica at 1.0 oz of this product per 10 gallons of water on hard non-porous surfaces. A pre-cleaning step is required for all surfaces. Apply solution with a mop, cloth, sponge, brush or by soaking, spraying or immersion so as to wet all surfaces thoroughly. Allow to remain wet for 10 minutes, then remove excess solution and entrapped soil with a clean wet mop, cloth, wet vacuum pick-up or by draining. Prepare a fresh solution daily when it becomes soiled or diluted.

Surfaces Treated to Control the Spread of Citrus Canker

Use OXYSAN 1522 Acid Sanitizer to control the spread of citrus canker between inanimate surfaces and inanimate surfaces to plants. This product is for sanitizing surfaces such as packinghouse conveyers and harvesting equipment and containers. This product is not for treatment of infected plants.

NON PESTICIDAL CLEANING

All surfaces must be cleaned and disinfected prior to fogging.

Fogging in Filling, Packaging, Processing, Storage, Warehouse, and Worker Welfare Rooms or Areas:

Prior to fogging remove food products and packaging materials from the room or area or carefully protect them. Fog desired areas using 32 – 64 fl. oz of use dilution per 1000 cu. ft. using equipment with an automated timer. Conventional corrosion resistant fogging devices are recommended. Vacate the area of all personnel prior to, during and after fogging until the hydrogen peroxide concentration is below 0.5 ppm**.**

Biofouling Control in Pulp. Paper and Paperboard Mill and Water Systems

For use in the manufacture of paper and paperboard intended for food and non-food contact. OXYSAN 1522 Acid Sanitizer can be used to control bacterial, fungal and yeast growth in pulp, paper and paperboard or non-woven process water and influent systems.

Influent Water Systems: This product should be fed continuously to incoming fresh water streams for non-potable use only, at dosages ranging from 1.5-25fl. oz of this product per 1000 gallons of raw or process water this produces 2.0-31ppm peroxyacetic acid and 46 ppm hydrogen peroxide. Adjust dosage as necessary to maintain microbiological control.

1. **Severely fouled systems:** should be cleaned before initial treatment with OXYSAN 1522. Refer to the plant operations manual for directions for cleaning severely fouled systems. The product should be added directly to the system and not mixed with any other chemicals or additives. Other chemicals can be added separately. Contamination with other chemicals could result in product decomposition.
2. **Add the OXYSAN 1522:** at a point in the system where it can be mixed uniformly with the pulp, e.g., the beater, hydro-pulper, fan pump, broke pump etc.

3. **Intermittent feed method:** Apply 7 to 16 fluid ounces of OXYSAN 1522 Acid Sanitizer per ton (dry basis) of pulp or paper produced for two to three hours every eight-hour shift. Maintain a concentration that provides adequate control. Daily rate could change depending on the severity of the biofouling.
4. **Continuous feed method:** Initially, use the intermittent feed method to achieve control. When control is accomplished, apply OXYSAN 1522 continuously at the rate determined adequate for intermittent control.
5. Then reduce the rate of addition to the lowest level sufficient to maintain control. Depending on the severity of the biofouling, control usually can be maintained using a continuous rate of 2.6 to 16 fluid ounces of OXYSAN 1522 solution per ton (dry basis) of pulp or paper produced on a continuous basis. This will provide 16 to 97 ppm of peroxyacetic acid and 23 to 142 ppm of hydrogen peroxide.

Mill Process Waters:

Intermittent Feed: Apply 7 to 16 fluid ounces of OXYSAN 1522 per ton (dry basis) of pulp or paper produced for two to three hours every eight-hour shift. Maintain a concentration that provides adequate control. Daily rate could change depending on the severity of the biofouling.

Continuous Feed: Initially, use the intermittent feed method to achieve control. When control is accomplished, apply OXYSAN 1522 continuously at the rate determined adequate for intermittent control. Then reduce the rate of addition to the lowest level sufficient to maintain control. Depending on the severity of the biofouling, control usually can be maintained using a continuous rate of 2.6 to 15.2 fluid ounces of OXYSAN 1522 solution per ton (dry basis) of pulp or paper produced on a continuous basis. This will provide 16 to 79 ppm of peroxyacetic acid and 23 to 115 ppm of hydrogen peroxide.

Shock (slug) Dose: This product may be used to shock dose systems requiring a high level of biofouling control. Use rates ranging from 13.5-108 fl. oz. of this product per ton (dry basis) of pulp or paper produced may be necessary. This dosage is equivalent to 82-657 ppm peroxyacetic acid. Shock dose every 1-3 hrs. as necessary until biofouling control is evident. Thereafter, revert to continuous or intermittent feed methods.

Control of Bacteria and Fungi in Dispersed Pigments

OXYSAN 1522 can be used to control bacteria and fungi in the manufacture and storage of dispersed pigments used in paint and paper production such as kaolin day, titanium dioxide, calcium carbonate, calcium sulfate, barium sulfate, magnesium silicate and kieselguhr.

Apply 2.6 to 16 fluid ounces of OXYSAN 1522 solution to each 1,000 lb. of dispersed pigment. This will provide 32 to 164 ppm of peroxyacetic acid and 46 to 240 ppm of hydrogen peroxide.

Control of Slime Forming Bacteria and Biofouling in Recirculating Cooling Water Systems (Cooling Towers, Evaporative Condensers, Air Washers) Non-Food Contact Water Systems and Ornamental or Recreation Water Features.

OXYSAN 1522 is for use in treating raw (make-up) and process waters, closed and opened loop systems such as heat exchanges, wet scrubbers, cooling towers, evaporative condensers and recirculating industrial process waters, such as pulp and paper mill water systems.

Severely fouled systems: should be cleaned before adding the OXYSAN 1522 solution. (Refer to the system operation manual for directions to clean severely fouled systems). The product should be added directly to the system and not mixed with any other chemicals or additives. additives. Other chemicals should be added separately.

Never add OXYSAN 1522 into any feeding device, such as shot feeders, filter housings, by-pass feeders, or miscellaneous piping of any kind, because dangerous acute decomposition can occur.

Discontinue the use of chlorine or bromine products prior to using OXYSAN 1522. Contamination. Contamination with other chemicals could result in product decomposition.

Add the OXYSAN 1522 solution only to water at a point in the system where uniform mixing and even distribution will occur.

Intermittent feed method: When the system is noticeably fouled, apply 10 to 16 fluid ounces of OXYSAN 1522 solution per 1000 gallons of water in the system. Repeat until control is achieved. When microbial control is evident, add 7-16 fluid ounces of the solution per 1000 gallons of water in the system every day, or as needed, to maintain control. The daily dose rate could vary depending upon the severity of the biofouling.

Continuous feed method: When the system is just noticeably fouled, apply 2.6 to 14 fluid ounces of OXYSAN 1522 solution per 1000 gallons of water in the system. When microbial control is achieved, start adding OXYSAN 1522 solution continuously at a rate of 14 fluid ounces per 1000 gallons of water provides 17 ppm peroxyacetic acid and 26 ppm of hydrogen peroxide. Then reduce the rate of addition to a level, sufficient to maintain control. The dose rate may have to be adjusted to account for losses due to blowdown and evaporation. Add 1.4 fluid ounces of OXYSAN 1522 for every 100 gals of make-up water.

Shock (Slug) Dose: For moderately to severely fouled systems add 5-20 fl. oz. of this product per 1000 gallons of process water (7-29 ppm peroxyacetic acid). Repeat as necessary until microbiological control is evident.

Air Washers: OXYSAN 1522 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 an appropriate cleaner. Continuous dosing methods will require 2-7 ppm and intermittent dosing methods require 7-14 ppm (as peroxyacetic acid) depending on the type of system and the level of microbiological control desired.

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

To reduce the number of nonpathogenic beverage spoilage organisms such as Byssochlamys fulva, Pediococcus damnosus. Lactobacillus buchneri and Saccharomyces cerevisiae.

1. Prepare solution by adding 9.25 fluid oz. to 5 gallons of potable water containing up to 400 ppm hardness as CaCO3 This will provide 2307 ppm of peroxyacetic acid and 3373 hydrogen peroxide.
2. Apply solution. Immerse for at least (1) minute or for a contact time as specified by local governing sanitation codes.
3. Allow containers to drain thoroughly and then rinse with sterile or potable water. Allow to air dry for a minimum of 2 minutes.

Treatment of Processing Waters and Surfaces to Control Growth of Non-Public Health Microorganisms that can Cause Spoilage of Fresh-Cut, Raw Post-Harvest or Processed Fruits, Nuts and Vegetables

1. Ensure that the water is recirculating or mixing in the processing tank or water line.
2. Prepare OXYSAN 1522 solution by diluting 0.68 -4.0 fl. oz. per 25 gallons of water. Ensure that the solution is thoroughly mixed. This provides 40-200 ppm of peroxyacetic acid and 292 ppm hydrogen peroxide. Allow the solution to circulate at least 45 seconds before adding or treating raw fruits and vegetables.
3. Dose as needed to maintain 40-500 ppm of peroxyacetic acid by adding OXYSAN 1522 to processing water.
4. Allow a minimum contact time of 45 seconds.
5. Do not rinse.
6. Prepare fresh process water daily to ensure effectiveness. Do not reuse water that is badly fouled.

Fogging Instructions: Apply OXYSAN 1522 as a fog 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.

Commercially-applied fogging methods may be used, provided, the dilution rate of the resultant solution does not exceed those prescribed in this section (85-100 ppm 100% Peracetic acid in the use solution). Conventional corrosion-resistant fogging devices are recommended. Applicable for use on all types of post-harvest commodities.

1. Vacate all personnel from the room during fogging.
2. Fog areas using one quart per 1,000 cu. ft. of room area with a 0.06% OXYSAN 1522 solution per 1,000 cu. ft. of room volume.
3. Exit the area or space immediately and remain outside the treated area or space until the area or space is thoroughly ventilated and until fog or mist has dispersed.
4. Do not enter room until hydrogen peroxide concentrations are tested and are below 1 ppm on a time weighted average. Reentry times may vary.

For Non-Public Health Microbial Control in Sewage and Wastewater Effluent Treatment Plants.

Use OXYSAN 1522 to treat sewage and wastewater effluent related to public and private wastewater treatment plants. OXYSAN 1522 can be applied directly to the effluent or may be used with an appropriate activator such as hydrogen peroxide or other technology such as Ultra Violet (UV). OXYSAN 1522 may be applied to effluent water discharged from trickle bed or percolating fluidized bed filters.

The application rate for individual facilities will depend on the degree of bio loading of the effluent stream to be discharged and the local microbial discharge limit. Adjust application rate to meet the need of the individual facility.

1. Add OXYSAN 1522 to effluent water at a concentration of 0.5 ppm to 45 ppm and 69 ppm hydrogen peroxide. Allow contact time of approximately 15 to 60 minutes.
2. The maximum amount of Peracetic acid that can be discharged from the treatment facility is 1 ppm. Use an appropriate Peracetic acid test kit analyzer to ensure that this level is not exceeded.

Antimicrobial use with Aqueous Treatment Fluids in Subterranean Oilfield and Gas Field Well Operations such as Well Drilling, Formation Fracturing, Productivity Enhancement and Secondary Recovery

OXYSAN 1522 Acid Sanitizer can be for control of slime forming and spoilage bacteria, yeast and fungi and anaerobic sulfate reducing bacteria, Desulfovibrio vulgaris, that lead to reservoir souring and metal corrosion. This product must be introduced through a closed mixed/loading and delivery transfer system equipped with a metering device that Is appropriate for its intended use.

Drilling Muds, Fracturing Fluids, Well Squeezed Fluids:

For the preservation of drilling muds, workover and completion fluids and other product susceptible to contamination, pre-mix with the fluid or add directly at the point of use at 3.75- 70 fluid ounces per 1000 gallons of water (5-87 ppm of Peroxyacetic and 8-128 ppm of Hydrogen Peroxide) as required. Depending on the severity of the contamination, initial application may be added up to 685 fluid ounces per 1000 gallons of water (1000 ppm of Peroxyacetic Acid and 1462 ppm of Hydrogen Peroxide).

Flooding, injection and Produced Water:

Water Flooding Operations: Add initially at 3.75-70 fluid ounces per 1000 gallons of water (5-87 ppm of Peroxyacetic acid and 8-128 ppm of Hydrogen Peroxide) and repeat until control is achieved. Subsequent treatment may be continued on a weekly basis or as required.

Injection Wells: The well that are associated with gas storage systems may be treated up to 122 ppm of Peroxyacetic Acid and 136 ppm of Hydrogen Peroxide when diluted in the formation water. Any additional top-up water should be treated as required.

Hydrostatic Systems: Apply 3.75-75.5 fluid ounces per 1000 gallons of water (5-110 ppm of Peroxyacetic acid and 8-161 ppm of Hydrogen Peroxide) depending on the water quality and the duration of the shut-in.

Pipeline and Tank Maintenance: For microbial control in water-bottoms in crude and refined hydrocarbon storage tanks, piping, and transportation systems. Apply 3.75 fluid ounces per 1000 gallons of water (5 ppm of Peroxyacetic and 8 ppm of Hydrogen Peroxide) to 70 fluid ounces per 1000 gallons of water 87ppm of Peroxyacetic and 128 ppm of Hydrogen Peroxide) in the aqueous phase, directly injected into the water-bottom, pipeline or may be added to the hydrocarbon phase. Treatment may be applied daily or monthly for both storage and transportation systems as needed.

Agricultural and Horticultural Uses

A Restricted-Entry-Interval of zero (0) hours is required for OXYSAN 1522 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 OXYSAN 1522 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 OXYSAN 1522 to control sulfides, odor, slime, and algae in sand filters, humidification systems, storage tanks, ponds, reservoirs, canals. Apply OXYSAN 1522 at 15 to 70 fluid ounces per 10,000 gallons of water. This provides 2 ppm to 9 ppm peroxyacetic acid and 13 ppm hydrogen peroxide. 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 OXYSAN 1522).

Drip Irrigation Systems: To clean slime and algae from drip system filters, tapes and emitters, add OXYSAN 1522 at 7.5 to 14 fluid ounces per 1000 gallons. This provides 11 ppm to 17 ppm peracetic acid and 26 ppm hydrogen peroxide. 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: 40,000 to 1:5000 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: 1,600 dilution).

Pre-Plant Dip Treatment: (Not for Use in California) This product can be used to control damping-off, root disease and stem rot disease that has been caused by the following:

- Pythium (root rot) – Phytophthora (blights, rots)
- Rhizoctonia (blight, stem rot) Fusarium (root-rot, leaf spot, Pink Snow Mold)
- Thielaviopsis (black root rot), on seeds, seedlings, bulbs, or cuttings.

Prior to dipping, remove dead or dying foliage. Use 7.4 fl. oz. per 50 gallons of water. Immerse plants or cuttings; remove and allow to drain. Do not rinse.

If excessive foaming or bubbling occurs during the dipping process, it is an indication of high levels of disease contamination.

Seed Treatment: (Not for Use in California) This product can be used to control damping-off, root disease and stem rot disease that has been caused by the following:

- Pythium (root rot)
- Phytophthora (blights, rots)
- Rhizoctonia (blight, stem rot)
- Fusarium (root-rot, leaf spot, Pink Snow Mold)
- Thielaviopsis (black root rot), on seeds of seed sprout crops such as mung bean, red clover, soybeans and alfalfa, and on crops grown exclusively for seed for planting.

Use 6.5 fl. oz. per 50 gallons of water. This provides 162ppm peracetic acid and 237ppm hydrogen peroxide. Soak for two minutes; remove and allow to drain. Do not rinse. Plant seeds according to seed package directions.

Soil Applications: (Not for Use in California) To control soil-borne diseases such as Fusarium, Phytophthora, Pythium, Verticillim, Thielaviopsis, and Rhizoctonia, add this product at 15.1-30.1 fl. oz. per 100 gal of water (220-439 ppm active peroxyacetic acid).

Apply this product by drenching, flooding, or by drip or sprinkler irrigation systems. For best results apply prior to and during seeding or transplant operations. Wait one day before inoculating the soil with beneficial microbes.

Foliar Applications: (Not for Use in California) This product may be used on growing agricultural crops to cure or prevent bacterial and fungal diseases. Crops include all row crops, spices, grains, tobacco, herbs, berries, fruit and nut trees and vines (such as grapes). The product is applied at 30–100 gal of mixed solution per acre of foliage at use rates of 5.3-45.5 fl. oz. per 100 gal of water (77-567ppm active peroxyacetic acid and 830 ppm hydrogen peroxide). For preventative treatments, use the higher dilution rates whereas curative (or rescue) treatment requires the lower dilution rates.

Good coverage and wetting of the foliage are required. Apply curative treatments for 2-3 days and then resume preventative treatments every week. Not all plant diseases have been tested, but some of the common diseases controlled are: Algae, Alternaria spp., Anthracnose, Aphanomyces, Bacterial Blight, Black Spot, Botrytis (gray mold), Brown Spot, Copper Spot, Dollar Spot, Early and Late Blights, Erwinia spp. (such as bacterial wilt), Fairy Ring, Fusarium Root Rot and Blight, Fruit, Black, Brown, Stem and Sour Rots, Leaf and Bacterial Spots, Plasmopara, Powdery and Downy mildews, Phytophthora Blight/Rots, Pink Snow Mold, Pseudomonas and Xanthomonas spp. (such as bacterial angular leaf spot, bacterial leaf spec, black soft rot), Pythium spp., Rhizoctonia spp., Rusts, Scabs, Scum, Slime Molds, Smut, Summer Patch, Stripe Smut, Take-all Patch, and Thielaviopsis. To improve uniform coverage and penetration, use a nonionic surfactant.

Cleaning Poultry, Swine, Livestock Watering Operating Systems (When Animals Are Present): After water lines have been cleaned, use OXYSAN 1522 at 0.3-0.45 fl. oz. per 100 gallons of water to control mineral build up in watering lines. This produces 6 ppm peracetic acid. Never use OXYSAN 1522 more than 5 consecutive days to clean the operating system. Never mix OXYSAN 1522 with any other product. If cleaning the operating system, stop the use of OXYSAN 1522 twenty-four (24) hours prior to vaccination or medication via the water line.

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 (RO), Ultra Filtration (UF) and Other Membrane Cleaning

This product may be used on ultra-filtration (UF) and reverse osmosis (RO) membranes and their associated piping systems. This product is not for use in kidney dialysis equipment. Do not use the intermittent dosing methods for nano or ultra-filtration food or drinking water applications. 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 0.42% of this product by volume. This will equal 680 ppm peracetic acid and 1000 ppm hydrogen peroxide. Recirculate solution through the piping and membrane system at 20º 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. Rinse the system with RO permeate or potable water until residual peroxygen concentration is below 1 ppm.

Continuous or Intermittent Addition: For continuous addition (dosing) for RO systems, use 1.5- 3.5 fl. oz per 1000 gallons of water. This produces 4 ppm peracetic acid and 6 ppm hydrogen peroxide. For intermittent feed, do not exceed 93 ppm active peracetic acid, which equals 0.64 fl. oz. of this product per 10 gallons of feed water. Intermittent dosing of this product is not allowed for use in NF or UF systems for on-line food or drinking water applications.

Note: May cause bleaching of treated surfaces

Note: Before using OXYSAN 1522 Acid Sanitizer to sanitize metal surfaces, it is recommended that the diluted solution be tested on a small area to determine compatibility.

In all applications always prepare new solution daily to ensure effectiveness. Do not re-use solutions. Dispose of un-used solutions responsibly.

UN 3109, Organic Peroxide Type F, Liquid (Peroxyacetic Acid) 5.2 (8), PG II

Storage and Disposal

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

Pesticide Storage

NEVER RETURN OXYSAN ACID SANITIZER 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 greater than or equal to five gallons.

Nonrefillable container. Do not reuse or refill this container. Offer for recycling. If available. 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.

Manufactured by: BIOSAN LLC, 26 Freedom Way, Saratoga Springs, NY 12866, (518) 886-9827

CHEMTREC EMERGENCY 800-424-9300 (CCN205494)