

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

March 9, 2016

Donna Bishel Director of Regulatory Affairs BioSafe Systems, LLC 22 Meadow Street East Hartford, CT 06108

Subject: Label Amendment – Label Update

Product Name: SaniDate Disinfectant EPA Registration Number: 70299-7 Application Date: February 4, 2016

Decision Number: 514244

Dear Ms. Bishel:

The amended label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, is acceptable. This approval does not affect any conditions that were previously imposed on this registration. You continue to be subject to existing conditions on your registration and any deadlines connected with them.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

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.

Your release for shipment of the product constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance

Page 2 of 2 EPA Reg. No. 70299-7 Decision No. 514244

with FIFRA section 6. If you have any questions, please contact Seiichi Murasaki at (703) 347-0163 or via email at <a href="mailto:murasaki.seiichi@epa.gov">murasaki.seiichi@epa.gov</a>.

Sincerely,

Julie Chao, Product Manager 33 Regulatory Management Branch 1 Antimicrobials Division (7510P) Office of Pesticide Programs

Enclosure: Accepted Label

# **SANIDATE®**

# Disinfectant

(Alternate Brand Name: SaniDate Disinfectant/Sanitizer, StorOx 2.0, SD Disinfectant, StorOx Fruit and Vegetable Wash)

# FOR COMMERCIAL USE

#### **ACTIVE INGREDIENTS:**

Hydrogen Peroxide	27.0%
Peroxyacetic Acid	
OTHER INGREDIENTS:	
TOTAL:	100.0%

# ACCEPTED

Mar 09, 2016

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 70299-7

# KEEP OUT OF REACH OF CHILDREN DANGER - PELIGRO

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

	FIRST AID		
If in eyes	Hold eye open and rinse slowly and gently with water for 15 – 20 minutes.		
	Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.		
	Call a poison control center or doctor for treatment advice.		
If on skin or	Take off contaminated clothing.		
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 poison control center or doctor immediately for treatment advice.		
	Have person sip a glass of water if able to swallow.		
	Do not induce vomiting unless told to do so by the poison control center.		
	Do not give anything by mouth 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 poison control center or doctor for treatment advice.		
Have the product container or label with you when calling a poison control center or doctor, or going for			
treatment. You may also contact 1-800-222-1222 for emergency medical treatment information.			
NOTE TO PHYSICIAN			
Probable mucosal damage may contraindicate the use of gastric lavage.			

Sold by: BioSafe Systems, LLC, 22 Meadow Street, East Hartford, CT 06108; (888) 273-3088

**EPA Registration No.:** 70299-7

EPA Establishment No.: 067441-IL-001; 089546-NV-001: 082521-GA-001

Net Contents: 2.5, 5, 30, 55, 275 gallon

# PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**CORROSIVE:** Causes irreversible eye damage and skin burns. May be fatal if inhaled or absorbed through the skin. Harmful if swallowed. Do not get in eyes, on skin or on clothing. Do not breathe vapor or spray mist. Wear protective eyewear (goggles, face shield, or safety glasses), protective clothing and rubber gloves. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove contaminated clothing and wash clothing before reuse. When spraying or fogging, wear a mask or pesticide respirator jointly approved by the Mine Safety and Health Administration and National Institute for Occupational Safety and Health.

#### 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 dilute 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.

# **ENGINEERING CONTROLS**

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides (40 CFR 170.240(d)(4-6)), the handler PPE requirements may be reduced or modified as specified in the WPS.

**IMPORTANT:** When reduced PPE is worn because a closed system is being used, handlers must provide all PPE specified above for "applicators and other handlers" and have such PPE immediately available for use in an emergency, such as a spill or equipment breakdown.

#### **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.

#### **ENVIRONMENTAL HAZARDS**

This product is highly toxic to bees and other beneficial insects exposed to direct contact on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds while bees are actively visiting the treatment area. Do not apply this product or allow it to drift to crops where beneficials are part of an Integrated Pest Management strategy.

This pesticide is toxic to birds who eat treated seed exposed on soil surface. Do not apply directly to treated, finished drinking water reservoirs or drinking water receptacles when the water is intended for human consumption. Do not contaminate water when disposing of equipment washwaters or rinsate.

#### PHYSICAL AND CHEMICAL HAZARDS

**Corrosive.** Strong oxidizing agent. Do not use in undiluted form. Mix only with water in accordance with label instructions. Never bring undiluted product in contact with other pesticides, cleaners or oxidative agents.

#### **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 indirectly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the State or Tribal agency responsible for pesticide regulation.

#### 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.

EXCEPTION: If the product is soil incorporated or soil injected, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

#### **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.

SaniDate Disinfectant works best when diluted with water with minimal levels of organic or inorganic materials, and with water having a neutral pH. Thoroughly rinse out tank with water before mixing concentrate. SaniDate Disinfectant will readily mix with clean, neutral water and does not require agitation.

SaniDate Disinfectant concentrate should not be combined or mixed with any other pesticide concentrates.

#### **APPLICATION DIRECTIONS:**

#### **GENERAL DISINFECTION**

SaniDate Disinfectant disinfects as it cleans in one operation. SaniDate Disinfectant can be used to disinfect floors, walls and other hard, non-porous surfaces such as tables, chairs, countertops, bathroom fixtures, sinks, shelves, racks, carts, refrigerators, coolers, glazed tile, and use sites listed on this label made of linoleum, vinyl, glazed porcelain, plastic, polyethylene, stainless steel, or glass. For heavily soiled areas, a pre-cleaning step is required. Prepare a fresh solution for each use.

#### **SURFACE DISINFECTION**

SaniDate Disinfectant is an effective disinfectant against gram positive and negative bacteria (vegetative

Escherichia coli Lactobacillus malefermentans

Pseudomonas aeruginosa

Salmonella enterica

Salmonella enteriditis

Salmonella typhimurium

Finterobacter aerogenes

Staphylococcus aureus

Streptococcus pyogenes

Pediococcus damnosus

Listeria monocytogenes

Klebsiella pneumoniae

Enterobacter aerogenes

Staphylococcus aureus

Clavibacter michiganense

When used at the disinfectant rate, SaniDate Disinfectant is effective against the following fungi:

Trichophyton mentagrophytes Byssochlamys nivea Saccharomyces cerevisiae

Aspergillus versicolor

This product may be used in general commercial environments to clean, disinfect and deodorize inanimate hard surfaces:

- Floors, walls, and other non-porous surfaces such as tables, chairs, counter tops, garbage cans/bins, bathroom fixtures, sinks, bed frames, shelves, racks, carts, refrigerators, coolers, and use sites listed on this label made of linoleum, vinyl, glazed porcelain, plastic (such as polyethylene), stainless steel, or glass.
- Packinghouses
- Schools, colleges, industrial facilities, dietary areas, office buildings, recreational facilities, retail and wholesale establishment.
- Animal hospitals, veterinary clinics, animal life science laboratories, kennels, kennel runs, cages, feeding and watering equipment, pet shops, zoos, pet animal quarters, poultry premises, trucks, hatcheries and live stock quarters.

# (UNCLEANED SURFACES – SURFACE DISINFECTION) (Not Approved For Use in California)

Prepare SaniDate Disinfectant solution by adding 2.5 fl. oz. of the product to 1 gallon of potable water (430 ppm of active peracetic acid). Remove gross filth from surfaces to be disinfected by cleaning with SaniDate Disinfectant solution by wiping, mopping, or as a coarse spray. Applications involving treatment of food contact surfaces require a sterile or potable water rinse following disinfection.

# **COMBINATION DISINFECTION AND CLEANING**

Use a rate of 1.3 fl. oz. per gallon of potable water (223 ppm of active peracetic acid) for hard non-porous surfaces that are lightly soiled or have been pre-rinsed to remove gross contamination. Apply solution with mop, cloth, sponge, brush, scrubber, or coarse spray device or by soaking so as to wet all surfaces thoroughly. Allow to remain wet for 10 minutes then remove solution and entrapped soil with a clean wet mop, cloth, or wet vacuum pickup. Prepare a fresh solution daily or when it becomes soiled or diluted.

For treating sewer backups and for flooding remediation, prepare disinfecting solution of SaniDate by adding (1.3 fl. oz.) 2.5 fl. oz. of the product to 1 gallon of potable water. Remove gross filth from surfaces by cleaning with SaniDate Disinfectant (apply) solution by wiping, mopping, or as a coarse spray. Applications involving treatment of food contact surfaces require a sterile or potable water rinse following cleaning. (Not Approved For Use in California).

# DISINFECTING PHARMACEUTICAL AND COSMETIC SURFACES

SaniDate Disinfectant is recommended for use on hard, non-porous, environmental surfaces such as floors, walls and processing equipment in pharmaceutical and cosmetic processing facilities. This product is effective at 1.3 fl. oz. per 1 gallon of potable water (223 ppm of active peracetic acid) for prewashed or lightly soiled surfaces to disinfect. Rinse all surfaces thoroughly with the disinfecting solution and maintain a contact time of at least 10 minutes. Product contact surfaces must be rinsed with sterile water.

For heavily soiled or surfaces that have not been pre-cleaned, use a rate of 2.6 fl. oz. per gallon of potable water (430 ppm of active peracetic acid) (Not Approved For Use in California). Rinse all surfaces thoroughly with the disinfecting solution and maintain a contact time of at least 10 minutes. Product contact surfaces must be rinsed with sterile water.

#### ANIMAL HEALTH

SaniDate Disinfectant is designed for use in animal hospitals, animal laboratories, kennels, pet shops, zoos, pet animal quarters, poultry premises, poultry hatcheries, and livestock quarters. When used as directed, SaniDate Disinfectant is specifically designed to disinfect, deodorize and clean inanimate, hard surfaces such as walls, floors, sink tops, furniture, operation tables, kennel runs, cages, and feeding and watering equipment. In addition SaniDate Disinfectant will disinfect bins and cans, and any other areas that are prone to odors caused by microorganisms.

All treated equipment that will contact feed or drinking water must be rinsed with potable water before reuse.

For heavily soiled areas, a pre-cleaning step is required. Prepare a fresh solution for each use.

# DISINFECTION OF POULTRY, BEEF AND SWINE HOUSES, TRUCKS, COOPS, AND CRATES

- 1. Remove animals, feed and gross soils.
- 2. Remove all litter, feces and droppings from floors, walls and surfaces of facilities occupied or traversed by poultry.
- 3. Empty all troughs, racks and other feeding and watering appliances.
- 4. Thoroughly clean all surfaces with soap or detergent and rinse with potable water.
- 5. Saturate all surfaces with a solution of 1.3 fl. oz. per 1 gallon of water for a period of 10 minutes (223 ppm of active peracetic acid).
- 6. Immerse all types of equipment used in handling and restraining poultry or livestock, as well as forks, shovels and scrapers used for removing litter and manure.
- 7. Ventilate buildings, coops and other closed spaces. Do not house poultry, livestock or employ equipment until treatment has been absorbed, set or dried.
- 8. Thoroughly scrub all treated feed racks, mangers, troughs, automatic feeders, fountains and waterers with soap or detergent, and rinse with potable water before reuse.

#### POULTRY HATCHERY DISINFECTION

- 1. Clean out any remaining eggs and chicks. Remove all poultry and feed from premises, trucks, coops and crates.
- 2. Remove gross soils, such as litter, droppings, down shell fragments or other hatching related debris from floors, walls and surfaces of facilities occupied or traversed by poultry.
- 3. Empty all troughs, racks and other feeding and watering appliances and equipment.
- 4. Thoroughly clean all surfaces with soap or detergent and rinse thoroughly with water.
- 5. Saturate all surfaces with a solution of 1.3 fl. oz. per 1 gallon of potable water (223 ppm of active peracetic acid) for a period of 10 minutes.
- 6. Ventilate buildings, coops, and other closed spaces. Allow to dry before reintroducing eggs or poultry.
- 7. Thoroughly scrub all treated feed racks, mangers, troughs, automatic feeders, fountains and waterers with soap or detergent, and rinse with potable water before reuse.

# <u>DISINFECTION AND DEODORIZING OF ANIMAL HOUSING FACILITIES (BARNS, KENNELS, HUTCHES)</u>

- 1. Remove all animals and feed from premises, vehicles and enclosures.
- 2. Remove all litter and manure from floors, walls and surfaces of barns, pens, stalls, chutes, and other facilities occupied or traversed by animals.

Page 5 of 22

- 3. Empty all troughs, racks and other feeding and watering appliances.
- 4. Thoroughly clean all surfaces with soap or detergent and rinse with water.
- 5. Saturate all surfaces with a solution of 1.3 fl. oz. per 1 gallon of potable water for a period of 10 minutes.
- 6. Immerse all halters, ropes, and other types of equipment used in handling and restraining animals, as well as forks, shovels and scrapers used for removing litter and manure.
- 7. Ventilate buildings and other closed spaces. Do not house livestock or employ equipment until treatment has been absorbed, set or dried.
- 8. Thoroughly scrub all treated feed racks, mangers, troughs, automatic feeders, fountains and waterers with soap or detergent, and rinse with potable water before reuse.

# Foot Bath Mats, Pads, Walk Through Trays

Place foot bath mats, pads or trays at the entrances of all rooms and buildings to prevent cross contamination from area to area in animal containment areas, livestock and dairy quarters, and poultry premises.

- 1. Prior to use of this product, rinse or brush footwear surfaces to remove gross filth.
- 2. Make a solution using 1.3 2.6 fl. oz. (223-430 ppm of active peracetic acid) of SaniDate Disinfectant per gallon of potable water and add to foot bath mat, pad or tray, filling to capacity. Use the higher rate for heavy soil load.
- 3. Place boots and shoes in the foot bath mat, pad or tray containing the recommended solution of SaniDate Disinfectant. Allow surface to remain wet for ten (10) minutes prior to entering next area. Change solution daily or as needed.

For Foaming applications, add 2 - 4 fl. oz. per gallon of potable water mixed with a foaming agent. Follow foaming directions as specified by the manufacturer of the foam generator/aerator. (Not Approved For Use in California).

# DISINFECTION OF NON-FOOD CONTACT PACKAGING EQUIPMENT

Prior to use of this product, remove gross soil particles from surfaces. Wash with a recommended detergent solution, rinse thoroughly with potable water. For disinfection against beverage spoilage organisms that include *Pediococcus damnosus*, *Lactobacillus malefermentans*, and *Saccharomyces cerevisiae* apply 1.3 fl. oz. (223 ppm of active peracetic acid) of SaniDate Disinfectant per gallon of potable water to surfaces at a temperature of 25 to 45 deg C and allow to remain wet for ten (10) minutes. Do not rinse. Allow surfaces to drain thoroughly before operations are resumed.

# <u>DISINFECTION OF WATER FILTER MEDIA, MEMBRANES AND RELATED COMPONENTS AND SYSTEMS</u> (Not Approved For Use in California)

SaniDate Disinfectant is an effective disinfectant used for the reduction and removal of bio-organisms on the surfaces of the filter and membrane media, media housings, and related devices and equipment. SaniDate Disinfectant may be used for filter media or related system components or in Clean in Place (CIP) systems.

Disinfection and/or treatment of filter media and membrane in potable water systems should be performed when system is **NOT** in use or online.

SaniDate Disinfectant has been tested for compatibility with a wide range of materials of construction. SaniDate Disinfectant is suitable for use with most nonmetallic and metallic piping, valves, pumps and tanks. Long term exposure to concentrate may accelerate corrosion of galvanized steel, bronze, brass or copper. Dirty or moderate to heavy soiled filters and or membranes should be cleaned in accordance with the manufacturer's guidelines to remove contaminants from the membrane surface.

SaniDate Disinfectant contains a minimum amount of surfactant; additional surfactant can be added to the treatment solution. Contact the BioSafe Systems and/or authorized distributor for clarification or additional surfactant compatibility information.

#### For Curative Treatments:

For filters and or filtration media, use a rate of 0.25 to 2.5 fl. oz. per gallon (or a rate range of 1:50 – 1:500). Immerse the filter and allow to soak for a minimum of ten (10) minutes. Drain filter media and then rinse with clean water. Prior to placing filter back on line, test a sample of the filtrate using BioSafe Test Strips to determine remaining active ingredient levels.

For clean in place (CIP) filters use a rate of 6.4 to 25 fl. oz. per 100 gallons (or a rate range of 1:500 – 1:2000). Re-circulate treatment solution through the filter for a minimum of 10 minutes. Upon completion of treatment cycle, flush filter housings and or assemblies with clean water. Test sample of water being used to flush filter media with BioSafe Systems test strips to determine remaining active ingredient levels.

For treatment of membranes use a rate of 0.25 fl. oz. per gallon, with a pH range of 3-7 and maximum water temperature of 80 degrees F. Allow the membranes to soak for a minimum of 10 minutes. Flush or rinse membranes with clean water after treatment. Test flush water with BioSafe Systems test strips to determine remaining active ingredient levels.

For treatment membranes in CIP systems use a rate 6.4 to 25 fl. oz. per 100 gallons (or a rate range of 1:500 – 1:2000), with a pH of 3-7 and a maximum water temperature of 80 degrees F. After thorough draining of the solution, rinse the membrane thoroughly with clean water for a minimum of 10 minutes. Test sample of flush water with BioSafe Systems test strips to determine remaining active ingredient levels.

To calculate amount of product to be used for CIP systems, identify total volume of all tanks, vessels and piping. Prepare dilution based on sum of all identified tank, vessel and piping volumes.

#### For Preventative Treatments:

For preventative applications add or inject SaniDate Disinfectant to water through calibrated metering pump or injector at rates of 1:2000 to 1:10,000. To monitor and maintain the active ingredient level install a ORP sensor and interface with proportioning controller or take random grab samples and check using BioSafe systems test strips.

# **PACKINGHOUSE DISINFECTION**

(For Pre-Cleaned Surfaces:) Use a rate of 1.3 fl. oz per gallon of potable water (223 ppm of active peracetic acid) for hard non-porous surfaces that are lightly soiled or have been pre-rinsed to remove gross contamination. Apply solution with mop, cloth, sponge, brush, scrubber, or coarse spray device or by soaking so as to wet all surfaces thoroughly. Allow to remain wet for 10 minutes, and then remove solution and entrapped soil with a clean wet mop, cloth, or wet vacuum pickup. Prepare a fresh solution daily or when it becomes soiled or diluted.

# PACKINGHOUSE DISINFECTION (AGAINST CITRUS CANKER)

SaniDate Disinfectant is effective against *Xanthomonas campestris* (axonopodis) pathovars citrumelo (citrus canker surrogate).

- Remove gross contamination with a cleaner or other suitable detergent and rinse with potable water.
- 2. Use SaniDate Disinfectant at a dilution rate of 1:400 1:800 as a general coarse spray to reduce bacterial and fungi contamination of walls, floors, conveyors and harvesting containers.
- Allow to contact surface for ten (10) minutes. Allow to air dry, do not rinse.

#### Foot Bath Mats, Pads, Walk Through Trays

Place foot bath mats, pads or trays at the entrances of all rooms and buildings to prevent cross contamination from area to area in packinghouses, food processing and rendering plants.

- 1. Prior to use of this product, rinse or brush footwear surfaces to remove gross filth.
- 2. Make a solution using 1.3 2.6 fl. oz. (223-430 ppm of active peracetic acid) of SaniDate Disinfectant per gallon of potable water and add to foot bath mat, pad or tray, filling to capacity. Use the higher rate for heavy soil load.
- 3. Place boots and shoes in the foot bath mat, pad or tray containing the recommended solution of SaniDate Disinfectant. Allow surface to remain wet for ten (10) minutes prior to entering next area. Change solution daily or as needed.

For foaming applications, add 2 - 4 fl. oz. per gallon of water mixed with a foaming agent. Follow foaming directions as specified by the manufacturer of the foam generator/aerator. (Not Approved For Use in California).

# FIELD EQUIPMENT DISINFECTION (AGAINST CITRUS CANKER)

SaniDate Disinfectant may be used to disinfect harvest equipment such as pickers, trailers, trucks (including truck body parts and tires), bins, packing crates, ladders, power tools, hand tools, gloves, rubber boots, pruning shears or other equipment that may transfer *Xanthomonas campestris* (axonopodis) pathovars citrumelo (citrus canker surrogate). This product can also be used to disinfect surfaces contaminated with *P. aeruginosa*, *S. enterica* and *S. aureus*.

- 1. Remove gross contamination with a cleaner or other suitable detergent and rinse with water.
- 2. For *Xanthomonas campestris (axonopodis)* pathovars *citrumelo* (citrus canker surrogate), use SaniDate Disinfectant at a dilution rate of 1:400 1:800 as a general coarse spray. For *P. aeruginosa, S. enterica* and *S. aureus*, use SaniDate Disinfectant at a dilution rate of 1:100 (1.3 fl. oz./gal) as a general coarse spray.
- 3. Allow SaniDate Disinfectant to contact surface for ten (10) minutes.
- 4. Allow to air dry, do not rinse.

#### **GENERAL SANITIZATION**

SaniDate Disinfectant is an effective inanimate, non-food contact, hard surface sanitizer against bacteria, fungus, and mold. Use as a sanitizer on surfaces such as floors, walkways, walls, tables, chairs, benches, countertops, cabinets, bathroom fixtures, sinks, shelves, racks, crates, carts, trailers, vehicles, conveyors, refrigerators, coolers, fan blades, ductwork, drain, piping, dehumidifiers, industrial and commercial air handling systems, commercial, municipal and process water transfer, and handling systems, filter housings, vats, tanks, pumps, valves and systems.

SaniDate Disinfectant is an effective inanimate surface and material sanitizer for personal equipment such as boots, gloves, hard hats, raingear and similar outer garments, tools and equipment including but not exclusive to buckets, pails, scrapers, squeegees, brooms, mops, shovels, rakes, hooks, wrenches, screwdrivers.

SaniDate Disinfectant is effective on the use sites listed which are manufactured from the following materials; linoleum, formica, vinyl, glazed porcelain, plastic, sealed fiberglass, polyethylene, CPVC, PVC, nylon, aluminum, steel, stainless steel, sealed wood, glazed tile, and glass. For use on other materials contact the factory for information on material compatibility.

#### NON-FOOD CONTACT SURFACE SANITIZATION

SaniDate Disinfectant is an effective sanitizer against *Staphylococcus aureus* and *Klebsiella pneumoniae*. SaniDate Disinfectant may be used in general commercial environments to clean, disinfect, sanitize, and deodorize inanimate surfaces, such as:

• Floors, walls, and other non-porous surfaces such as tables, chairs, counter tops, garbage cans/bins, bathroom fixtures, sinks, bed frames, shelves, racks, carts, refrigerators, coolers, glazed tile, and use sites listed on this label made of linoleum, vinyl, glazed porcelain, plastic (such as polyethylene), stainless steel, or glass.

- Packinghouses, food processing, fresh cut, food distribution and storage, beverage processing facilities, groceries, and food retail and wholesale stores. Milking parlors, dairy production and transfer facilities and equipment.
- Schools, colleges, industrial facilities, dietary areas, office buildings, recreational facilities, retail
  and wholesale establishment.
- Animal hospitals, veterinary clinics, animal life science laboratories, kennels, kennel runs, cages, feeding and watering equipment, pet shops, zoos, pet animal quarters, poultry premises, trucks, hatcheries and live stock quarters and pens.

#### Pre-Cleaned Surfaces:

- 1. Remove gross filth with a cleaner or other suitable detergent.
- 2. Add 0.5 fl. oz. (1:256) (86 ppm of active peracetic acid) of SaniDate Disinfectant to 1 gallon of potable water.
- 3. Soak items in/with diluted solution using mop/wipe, coarse spray or flood techniques and allow contact for at least five (5) minutes.
- 4. Do not rinse. Allow items and/or surfaces to drain adequately or air dry.

# FIELD EQUIPMENT SANITIZATION

SaniDate Disinfectant may be used to sanitize harvest equipment such as harvesters, pickers, trailers, trucks (including truck body parts and tires), bins, packing crates, ladders, power tools, hand tools, gloves, rubber boots, pruning shears or other equipment that may transfer *Xanthomonas campestris* (axonopodis) pathovars citrumelo (citrus canker surrogate). This product can also be used to sanitize surfaces contaminated with *P. aeruginosa*, *S. enterica* and *S. aureus*.

- 1. Remove gross contamination with a cleaner or other suitable detergent and rinse with water.
- 2. Use SaniDate Disinfectant at a dilution rate of 1:50 (1.25 fl oz per gallon of potable water) as a general sanitizing coarse spray.
- 3. Allow sanitizer to contact surface for at least one (1) minute.
- 4. Allow to air dry. Do not rinse.

#### FOOD CONTACT SURFACE SANITIZATION

SaniDate Disinfectant is an effective sanitizer for food contact surfaces. This product is an effective sanitizer against *Staphylococcus aureus*, *Salmonella enterica* and *Escherichia coli*. Surfaces to be sanitized include but are not exclusive to non-wooden cutting boards, tabletops, trays, pans, racks, platters, cans, vats, tanks.

#### Pre-cleaned Surfaces:

- 1. Prior to sanitizing food contact surfaces, pre-clean by removing gross food particles.
- 2. Wash with a detergent solution, followed by a potable water rinse.
- 3. Prepare a solution of SaniDate Disinfectant by adding 0.5 fl. oz. per gallon of potable water (86 ppm of active peracetic acid).
- 4. Apply the solution to the surface by wiping, mopping with solution or by a coarse spray.
- 5. Do not rinse. Allow to remain on surface for 1 minute, allow to air dry.

#### SANITIZING FOOD PROCESSING EQUIPMENT

SaniDate Disinfectant is recommended for use on pre-cleaned surfaces such as equipment, pipelines, tanks, vats, fillers, evaporators, pasteurizers and aseptic equipment in dairies, breweries, wineries, beverage and food processing plants. SaniDate Disinfectant is an effective sanitizer for use in the washing, rinsing and sanitizing of conveyor, boxing or packing equipment, peelers, corers, de-boners, scrapers, collators, slicers, dicers, knives, and saws.

- 1. Remove all products from equipment unless treating only the return portion of a conveyor.
- 2. Prepare SaniDate Disinfectant solution by adding 0.5 2.5 fl oz ounces to 1 gallon of potable water (86-430 ppm of peracetic acid).

- 3. Apply sanitizer solution to the return portion of the conveyor or to equipment using a coarse spray or other means of wetting the surfaces, (treat for at least one (1) minute). Control the volume of solution so as to permit maximum drainage and prevent puddles. The conveyor may still be damp when food contact occurs.
- 4. Allow equipment to drain adequately before reusing; a dry surface is not required.

#### FOR SANITIZING OF CASING OR SHELL EGGS

- 1. To sanitize clean shell eggs intended for food or food products, spray with a solution of 0.5 fl. oz. of this product with 1 gallon of potable water (86 ppm of active peroxyacetic acid). The solution must be equal to or warmer than the eggs, but not to exceed 130° F.
- 2. Apply dilute solution as eggs are gathered as a coarse spray or flood. Wet eggs thoroughly and allow to drain.
- 3. Eggs that have been sanitized with this product may be broken for use in the manufacture of egg products without a prior potable water rinse.
- 4. Eggs must be reasonably dry before casing or breaking. The sanitizing solution must not be reused for sanitizing eggs.

This product can be used in Federally Inspected Meat and Poultry facilities as a sanitizer.

# SANITIZING EATING, DRINKING, AND FOOD PREP UTENSILS

- 1. Remove gross food particles by a prescrape, preflush and when necessary, a pre-soak treatment.
- 2. Wash with a recommended detergent.
- 3. Rinse with clean water.
- 4. Sanitize in a solution of 0.5-1.25 fl oz SaniDate Disinfectant to 1 gallon of potable water. Immerse all utensils for at least 1 minute or contact time specified by governing sanitary code.
- 5. Do not rinse. Drain and air dry.

#### SANITIZING TABLEWARE

For sanitizing tableware in low to ambient temperature ware washing machines, inject SaniDate Disinfectant into the final rinse water using 2.5 fl oz. of concentrate per gallon of water. Solution must contact tableware for a minimum of 5 minutes. To insure that the SaniDate Disinfectant concentration dose not fall below 0.1%, periodically test the rinse solution with a suitable test kit and adjust the dispensing rate accordingly.

NOTE: FOR MECHANICAL OPERATIONS prepared use solution may not be reused for sanitizing but may be reused for other purposes such as cleaning. FOR MANUAL OPERATIONS fresh sanitizing solutions should be prepared at least daily or more often if the solution becomes diluted or soiled.

#### PACKINGHOUSE SANITATION

SaniDate Disinfectant is effective against *Xanthomonas campestris (axonopodis)* pathovars *citrumelo* (citrus canker surrogate) and *Staphylococcus aureus*.

- 1. Remove gross contamination with a cleaner or other suitable detergent and rinse with potable water.
- 2. Use SaniDate Disinfectant at a dilution of 1:600 or 0.2 fl. oz of concentrate per gallon of water as a general sanitizing coarse spray to reduce bacterial and fungi contamination of walls, floors, conveyors and harvesting containers.
- 3. Allow sanitizer to contact surface for at least one (1) minute.
- 4. Allow to air dry. Do not rinse.

For direct injection into spray waters used in packinghouse process lines and humidification systems, treat water to control *Staphylococcus aureus*, *S. enterica*, and *P. aeruginosa* by injecting SaniDate Disinfectant directly into spray system water with 1.25 fl oz. for every gallon of water. Applicable for use on all types of post harvest commodities.

Page 10 of 22

# **POST HARVEST APPLICATIONS**

Use SaniDate Disinfectant to treat bacterial and fungal diseases in post-harvest waters, systems, equipment, structures and on agricultural commodities.

# TREATMENT FOR NON-POTABLE WATER SYSTEMS (wash tanks, dip tanks, drench tanks, evaporators, humidification systems and/or storage tanks)

Treat water containing plant pathogens with 1.5 to 5.4 fl. oz. of SaniDate Disinfectant for every 10 gallons of water or use a dilution rate of 1:237 to 1:853. This will provide 1290 to 4641 ppm of SaniDate Disinfectant, or 26 to 93 ppm 100% peracetic acid in the use solution. The fruits and vegetables can be sprayed or submerged in the resulting solution for a minimum contact time of 45 seconds, followed by adequate draining.

#### POST HARVEST SPRAY TREATMENTS ON PROCESS AND PACKING LINES

Inject SaniDate Disinfectant directly into spray, misting, humidification, fogging and spray bar system make up water on process and packing lines to prevent bacterial and fungal diseases on post-harvest fruits and vegetables. Inject SaniDate Disinfectant at a 1:220 – 1:1000 dilution rate to potable water (100-22 ppm of active peracetic acid). For best results, where dump tanks are used, make post harvest spray treatment as fruit is leaving dump tanks. For Fog Tunnel and fogging applications, inject SaniDate Disinfectant directly into the system at a rate of 1:220 (100 ppm of active peracetic acid). Allow a contact time of 20-30 seconds with the fog. For best results, distribute produce in a single layer on the conveyor and ensure uniform distribution of fog across produce surface by either rolling the produce as it passes on the conveyor or by even distribution of the fog nozzles in the treated area. Do not rinse. Applicable for use on all types of post-harvest commodities. See specific directions for treatment of post-harvest potatoes.

# FOR DIRECT INJECTION INTO FRUIT AND VEGETABLE PROCESSING WATER INCLUDING DUMP TANKS, HYDRO COOLERS, AND SPRAY SYSTEMS-

Inject SaniDate Disinfectant into processing water to prevent bacterial and fungal diseases on post-harvest fruits and vegetables. Maintain a predetermined residual level by using metering equipment. Applicable for use on all types of post harvest fruits and vegetables to control the growth of non-public health organisms that cause spoilage and/or decay.

- 1. Determine biological organic loading prior to treatment if possible.
- 2. Inject SaniDate Disinfectant at 1.28 fl. oz. of SaniDate Disinfectant for every 100 gallons of potable water or a dilution rate of 1:10,000 to prevent the formation of algae, bacteria and fungi.
- 3. For waters that contain biological and organic loading, inject SaniDate Disinfectant at 25 fl. oz. 12.8 fl. oz. of SaniDate Disinfectant for every 100 gallons of water or at a dilution rate of 1:512 1:1,000 (43-22 ppm of active peracetic acid).
- 4. Do not rinse.

**Note:** For post harvest applications, only use SaniDate Disinfectant at labeled dilution rates. Solutions more concentrated than prescribed on this label may result in damage to the commodity (i.e., do not use dilutions less than 1:220 for treatments). The safety of SaniDate Disinfectant has not been determined on all crops. SaniDate Disinfectant has been used and tested on many commodities; however, certain commodities may be sensitive to high concentrations of SaniDate Disinfectant. Determine if SaniDate Disinfectant can be safely used prior to application. Before treating a large number of commodities, test a small group using SaniDate Disinfectant at labeled rates and observe for symptoms of sensitivity prior to use.

In dump tanks that contain commodities with sensitive skin, use a rate of 1:2000 per 100 gallons of water to prevent oxidation of abrasions that may turn brown.

#### POST HARVEST SPRAY TREATMENT

Use SaniDate Disinfectant to prevent bacterial and fungal diseases on post-harvest fruits and vegetables. Mix 0.35-0.58 fl. oz. SaniDate Disinfectant per gallon of clean water. Spray fruit or vegetables to runoff using hydraulic, backpack, air-assisted or other similar sprayer.

#### FOR TREATMENT OF FRUIT AND VEGETABLE SURFACES AND WASH OR PROCESS WATERS

Use SaniDate Disinfectant to control the growth of post-harvest spoilage and decay-causing bacterial and fungal plant pathogens on fruits and vegetables. Product can be added directly to the wash water or spray water used for cleaning of fruits and vegetables.

#### APPLICATION TO WASH WATER USED FOR CLEANING OF FRUITS AND VEGETABLES

Use SaniDate Disinfectant for the treatment of wash waters used for cleaning of fruits and vegetables. Mix SaniDate Disinfectant with water either batch-wise or continuously at a dilution rate of 1.5 to 5.4 fl. oz. for every 10 gallons of water (1:237-1:853). This will provide 26 to 93 ppm of peroxyacetic acid. Adjust dose as needed to maintain peroxyacetic acid concentrations. The fruits and vegetables can be submerged in the resulting solution for a minimum contact time of 30 seconds and up to 3.0 minutes, followed by adequate draining and drying to ensure no residual moisture is present on the surface of the produce prior to packing and/or storage.

#### APPLICATION TO WATER USED FOR SPRAYING OF FRUITS AND VEGETABLES

Mix SaniDate Disinfectant with water used for spray wash water at a dilution rate of 0.35 - 0.58 fl. oz per gallon of water. Spray until even and sufficient distribution is achieved on the produce surface and a contact time of at least 10 seconds with the applied solution. Allow produce surface to air dry to ensure no residual moisture prior to packing and/or storage.

#### SPRAY TREATMENTS FOR SEED POTATOES

For control of seed decay after planting caused by fungi, oomycetes, and bacteria.

Crop	Disease	Application Rate	Directions
Potatoes (Seed)	Fusarium Dry Rot Bacteria Soft Rot Early Blight Late Blight Silver Scurf	As a dip: 1.28-2.56 fl. oz. of SaniDate Disinfectant per gallon of water, or a 1:100-1:50 dilution.	Dip whole or cut tubers in the solution for 1.0-5.0 minutes.
	Bacterial Ring Rot	As a spray: Inject 12.8-25.6 fl. oz. of SaniDate Disinfectant per 10 gallons of water, or a 1:100-1:50 dilution.	Inject SaniDate Disinfectant directly into the spray bar water supply.  Spray solution on tubers to achieve full and even coverage (0.25-1.0 gallon of spray solution per ton of potatoes).

#### SPRAY TREATMENTS FOR NEWLY HARVESTED POTATOES BEFORE STORAGE

For control of storage diseases caused by fungi, oomycetes, and bacteria.

Crop	Disease	Application Rate	Directions
Potatoes (Processing, Seed and Table Stock)	Bacteria Soft Rot Early Blight Fusarium Dry Rot Late Blight Silver Scurf Bacterial Ring Rot	1.28-2.56 fl. oz. of SaniDate Disinfectant per ton of potatoes.	Spray diluted solution on tubers to achieve full and even coverage. The use of additional surfactant is acceptable to aid in sticking. Use ½ to 2 gallons of water per ton of potatoes.

# DIRECT INJECTION INTO HUMIDIFICATION WATER FOR POST-HARVEST POTATOES IN STORAGE

For control of storage diseases caused by fungi, oomycetes, and bacteria.

Crop	Disease	Application Rate	Directions
Potatoes (Processing, Seed and Table Stock)	Bacteria Soft Rot Early Blight Fusarium Dry Rot Late Blight Silver Scurf Bacterial Ring Rot	1.28-2.56 fl. oz. of SaniDate Disinfectant per gallon of water.	Inject concentrate into makeup water used in humidification of post-harvest potatoes in storage.

# FOGGING OF POTATOES IN STORAGE (Not Approved For Use in California)

For potatoes in storage apply SaniDate Disinfectant by fogging to prevent/control the growth of non-public health organisms that cause spoilage and/or decay of potatoes, using any type of fogging equipment such as thermofoggers and cold foggers.

- 1. Prior to fogging, cover any metal equipment or controls inside the storage or plenum chamber that might be sensitive to hydrogen peroxide and/or peracetic acid.
- 2. Vacate the area of all personnel prior to, during and after fogging until the hydrogen peroxide concentration is below 0.5ppm.
- 3. Use 0.64-1.28 fl. oz. per ton of potatoes (13.3-26.6 fl. oz. per 1000 cu. ft. of potatoes or 2.5-5.0 gallons per 10,000 CWT of potatoes).
- 4. Mix the product concentrate with water at 1:1-1:5 ratio and apply it as a fog directly into the plenum while running the fan(s) at low speed. To improve fog distribution, a carrier solution that is compatible with SaniDate Disinfectant solution and approved for use on potatoes may be added as per recommendations of fogging equipment manufacturer.
- 5. Make first fog application immediately after potatoes get into storage (within 5-7 days of storage) and repeat applications as necessary once every month while potatoes are in storage.

# FOGGING OF FRUITS AND VEGETABLES IN STORAGE (Not Approved For Use in California)

For fruits and vegetables in storage, apply SaniDate Disinfectant by fogging to prevent/control the growth of non-public health organisms that cause spoilage and/or decay, using any type of fogging equipment such as thermofoggers and cold foggers.

- 1. Prior to fogging, cover any metal equipment or controls inside the storage that might be sensitive to hydrogen peroxide and/or peracetic acid.
- 2. Vacate the area of all personnel prior to, during and after fogging until the hydrogen peroxide concentration is below 0.5ppm.
- 3. Mix the product concentrate with potable water at 1:220-1:275 ratio (0.46-0.58 fl. oz. per gallon of water) and apply it as a fog directly into the storage. Fog until even and sufficient distribution is achieved across all sections of the stored produce. To improve fog distribution, a carrier solution that is compatible with SaniDate Disinfectant solution and approved for use on produce may be added as per recommendations of fogging equipment manufacturer.
- 4. Make first fog application immediately after produce get into storage (within 5-7 days of storage) using highest rate and repeat applications as necessary once every 15 days to a month using lower rate depending on how long the produce will be in storage.

# DISINFECTION OF POTATO, FRUIT AND VEGETABLE STORAGE AREAS AND EQUIPMENT

This product is an effective disinfectant against the following organisms:

Escherichia coli

Pseudomonas aeruginosa

Salmonella enterica

Salmonella enteriditis

Salmonella typhimurium

Pediococcus damnosus

Listeria monocytogenes

Klebsiella pneumoniae

Enterobacter aerogenes

Proteus vulgaris

Staphylococcus aureus

Streptococcus pyogenes

Aspergillus versicolor

**SANIDATE DISINFECTANT**; EPA Reg. No. 70299-7 Amendment 020416

- 1. Remove all potatoes prior to disinfection of potato storage areas and equipment.
- 2. Prior to use of this product, remove gross soil particles from surfaces to be treated. For heavily soiled surfaces, a pre-wash is required.
- 3. Apply 1.3 fl. oz of SaniDate Disinfectant per gallon of water with a mop, cloth, sponge, or hand trigger spray so as to wet all surfaces thoroughly.
- 4. Allow to remain wet with solution for ten (10) minutes.
- 5. Rinse all treated surfaces thoroughly with potable water before operations are resumed.

# FOGGING FOR REGULAR CLEANING OF FRUIT AND VEGETABLE STORAGE SYSTEMS AND POTATO STORAGE AREAS PRIOR TO LOADING WITH POTATOES (Not Approved For Use in California)

This product may be used for fogging (wet misting) to prevent/control the growth of non-public health organisms that cause spoilage and/or decay following cleaning procedures in hard room surfaces using any type of fogging equipment such as thermofoggers and cold foggers.

- 1. Prior to fogging, remove or cover any food or packaging material with waterproof coverings. Thoroughly clean all surfaces. Remove gross soil particles from surfaces to be treated.
- 2. Cover any metal equipment or controls inside the storages that might be sensitive to hydrogen peroxide and/or peracetic acid.
- 3. Ensure proper ventilation in the room.
- 4. Vacate the area of all personnel prior to, during and after fogging until the hydrogen peroxide concentration is below 0.5ppm.
- 5. Fog areas using 1-2 quarts per 1000 cu. ft of storage area with 1.0%-2.0% v/v (1:50-1:100; 1.28-2.56 fl. oz. of SaniDate Disinfectant per gallon of water) solution of SaniDate Disinfectant. Use high rate if surfaces are not pre-cleaned.

# BACTERIOSTATIC (Not Approved for Use in California)

At 1.3 fl. oz. per 1 gallon of water SaniDate Disinfectant is effective at inhibiting the growth of bacteria when used in the presence of 400 ppm hard water and organic soil. SaniDate Disinfectant can be used on floors, walls and other hard nonporous surfaces such as tables, chairs, countertops, bathroom fixtures, sinks, shelves, racks, carts, refrigerators, coolers, tile, and use sites listed on this label made of linoleum, vinyl, glazed porcelain, plastic (such as polypropylene and polyethylene), stainless steel, or glass.

#### STOCK TANKS AND LIVESTOCK WATER

Use SaniDate Disinfectant to suppress / control algae, bacteria and fungi in stock tanks, stock watering ponds, tanks and troughs, and livestock water. Apply 2 fluid ounces of SaniDate Disinfectant per 250 gallons of water for algae control. Product can be simply added to the body of water, as the residual control will allow for even distribution throughout the water column. Where existing algae mats are present at time of treatment, the most effective control will be obtained by breaking up mats and/or evenly dispersing diluted SaniDate Disinfectant over the algae mats. Apply SaniDate Disinfectant as needed to control and prevent algae growth; make applications more often in times of higher water temperatures.

<u>Drip system application for livestock watering tanks:</u> Tanks fed by a continuous flow of spring or well water can be equipped with a chemical drip system designed to meter-in SaniDate Disinfectant based upon water flow rates. Pre-dilute SaniDate Disinfectant at a 100:1 rate or 4-mL/minute water flow rate. Treat continuously or as needed to control and prevent algae regrowth. (Not Approved For Use in California)

# POULTRY, SWINE, LIVESTOCK WATER LINE CLEANER WHEN SYSTEM IS NOT IN USE (Not Approved For Use in California)

To remove scale, mineral build up and heavy soils from livestock watering systems use SaniDate Disinfectant at 1.2-2.3 fl. oz. per gallon of water. Allow system to run for 6 to 24 hours depending on the

SANIDATE DISINFECTANT; EPA Reg. No. 70299-7 Amendment 020416 Clean Copy - MASTER LABEL (Version 27) dated March 8, 2016 conditions. Following the cleaning process, rinse with potable water to remove the cleaning solution from the watering line, nipples and cups.

# POULTRY, SWINE, LIVESTOCK WATERING OPERATING SYSTEMS (Not Approved For Use in California)

After water lines have been cleaned, use SaniDate Disinfectant at 2.2-3.4 fl. oz. per 100 gallons of water to control algae and bacteria in drinking water and to control mineral build up in watering lines.

# SEWAGE WATER TREATMENT (Not Approved for Use in California)

Use SaniDate Disinfectant for the control of bacteria and the malodors caused by hydrogen sulfide gas. Application rates may vary depending on amounts of organic matter (sewage) in lagoons and pits. Pour SaniDate Disinfectant directly from the container into the pit or lagoon at several locations to aid in dispersal. Use one gallon of SaniDate Disinfectant for 60,000 gallons (8,000 cubic feet) of sewage. For best results, disperse SaniDate Disinfectant evenly throughout sewage. Odors should be noticeably reduced in 1-2 weeks. Repeat application when odor reappears. For lagoons, wait 24 hours before adding beneficial bacteria.

#### TREATMENT OF AGRICULTURAL IRRIGATION WATER AND DRAINAGE DITCHES

Use SaniDate Disinfectant to treat water to suppress / control algae, bacteria, fungi and plant pathogenic organisms in agricultural irrigation and drainage water and ditches. For irrigation water, apply 4 to 8 fluid ounces of SaniDate Disinfectant per 1,000 gallons of water. Product can be simply added to the body of water, as the residual control will allow for even distribution throughout the water column. Allow solution to disperse for five (5) minutes before irrigating. Apply SaniDate Disinfectant as needed to control and prevent algae growth; apply more often in times of higher water temperatures.

#### TREATMENT OF AGRICULTURAL IRRIGATION SYSTEMS

Use SaniDate Disinfectant to suppress / control algae, bacteria, fungi and plant pathogenic organisms in drip trickle irrigation systems, center pivot, lateral move, end tow, side wheel roll, traveler, solid set/overhead sprinklers, hand move or flood basin irrigation systems. Treat contaminated water at a dilution of 1:500 -1:5000. For maintenance, treat clean water with a dilution of 1:10,000 to 1:20,000 of SaniDate Disinfectant as needed. Allow solution to disperse for five (5) minutes before irrigating. Refer to Chemigation Directions for Use for specific instructions on using this product through irrigation systems.

# **CHEMIGATION**

General Requirements -

- 1) Apply this product only through a drip system or sprinkler including center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set, hand move, flood (basin), furrow, border or drip (trickle) irrigation systems. Do not apply this product through any other type of irrigation system.
- 2) Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.
- 3) If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.
- 4) Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.
- 5) A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.
- Posting of areas to be chemigated is required when 1) any part of a treated area is within 300 feet of sensitive areas such as residential areas, labor camps, businesses, day care centers, hospitals, in-patient clinics, nursing homes or any public areas such as schools, parks, playgrounds, or other public facilities not including public roads, or 2) when the chemigated area is open to the public such as golf courses or retail greenhouses.

- Posting must conform to the following requirements. Treated areas shall be posted with signs at all usual points of entry and along likely routes of approach from the listed sensitive areas. When there are no usual points of entry, signs must be posted in the corners of the treated areas and in any other location affording maximum visibility to sensitive areas. The printed side of the sign should face away from the treated area towards the sensitive area. The signs shall be printed in English. Signs must be posted prior to application and must remain posted until foliage has dried and soil surface water has disappeared. Signs may remain in place indefinitely as long as they are composed of materials to prevent deterioration and maintain legibility for the duration of the posting period.
- All words shall consist of letters at least 2.5 inches tall, and all letters and the symbol shall be a color which sharply contrasts with their immediate background. At the top of the sign shall be the words KEEP OUT, followed by an octagonal stop sign symbol at least 8 inches in diameter containing the word STOP. Below the symbol shall be the words PESTICIDES IN IRRIGATION WATER.

#### Specific Requirements for Chemigation Systems Connected to Public Water Systems -

- 1) Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.
- 2) Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.
- 3) The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- 4) The pesticide injection pipeline must contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.
- 6) Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
- 7) Do not apply when wind speed favors drift beyond the area intended for treatment.

#### Specific Requirements for Sprinkler Chemigation -

- 1) The system must contain a functional check valve, vacuum relief valve and low-pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
- 2) The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- 4) The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- 5) The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

- Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being filled with a system interlock.
- 7) Do not apply when wind speed favors drift beyond the area intended for treatment.

# Specific Requirements for Flood (Basin), Furrow and Border Chemigation -

- Systems using a gravity flow pesticide dispensing system must meter the pesticide into the water at the head of the field and downstream of a hydraulic discontinuity such as a drop structure or weir box to decrease potential for water source contamination from backflow if water flow stops.
- 2) The systems utilizing a pressurized water and pesticide injection system must meet the following requirements:
  - a. The system must contain a functional check valve, vacuum relief valve and low-pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
  - b. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
  - c. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
  - d. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
  - e. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
  - f. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being filled with a system interlock.

### Specific Requirements for Drip (Trickle) Chemigation -

- 1) The system must contain a functional check valve, vacuum relief valve and low-pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
- 2) The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- 3) The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- 4) The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- 5) The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- 6) Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being filled with a system interlock.

# **Application Instructions -**

- Remove scale, pesticide residues, and other foreign matter from the chemical supply tank and entire injector system. Flush with clean water. Failure to provide a clean tank, void of scale or residues may cause product to lose effectiveness or strength.
- 2) Determine the treatment rates as indicated in the directions for use and make proper dilutions.
- 3) Prepare a solution in the chemical tank by filling the tank with the required water and then adding product as required. The product will immediately go into solution without any required agitation.

Page 17 of 22

- 4) Do not apply SaniDate Disinfectant in conjunction with any other pesticides or fertilizers.
- 5) Mix SaniDate Disinfectant only with water, and at the recommended rates. Do not mix SaniDate Disinfectant with any other substances.

#### STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

**PESTICIDE STORAGE:** Store in original containers in a cool, well-vented area, away from direct sunlight. Do not allow product to become overheated in storage. This may cause increased degradation of the product, which will decrease product effectiveness. In case of spill, flood area with large quantities of water. Do not store in a manner where cross-contamination with other pesticides or fertilizers could occur. **PESTICIDE DISPOSAL:** Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label directions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

CONTAINER HANDLING: (Containers equal to or less than 5 gallons): Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration. Do not burn, unless allowed by state and local ordinances. Batch Code \_\_\_\_\_\_ CONTAINER HANDLING: (Containers greater than 5 gallons): Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution for 30 seconds. Stand the container on its end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration. Do not burn, unless allowed by state and local ordinances.

# **CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY**

NOTICE: Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product should be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of BIOSAFE SYSTEMS LLC or Seller. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold BIOSAFE SYSTEMS and Seller harmless for any claims relating to such factors.

BIOSAFE SYSTEMS warrants that this product conforms to the *chemical* description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above when used in accordance with directions under normal use conditions. This warranty does not extend to the use of the product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller or BIOSAFE SYSTEMS, and Buyer and User assume the risk of any such use. BIOSAFE SYSTEMS MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE, NOR ANY OTHER EXPRESSED OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

In no event shall BIOSAFE SYSTEMS or Seller be liable for any incidental, consequential or special damages resulting from the use or handling of this product. THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF BIOSAFE SYSTEMS AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF BIOSAFE SYSTEMS OR SELLER, THE REPLACEMENT OF THE PRODUCT.

BIOSAFE SYSTEMS and Seller offer this product, and Buyer and User accept it, subject to the foregoing Conditions of Sale and Limitation of Warranty and Liability, which may not be modified except by written agreement signed by a duly authorized representative of BIOSAFE SYSTEMS.

# Optional Label Claims

- SaniDate Disinfectant is a versatile cleaner, sanitizer, and broad-spectrum disinfectant for hard, non-porous surfaces.
- SaniDate Disinfectant contains no phosphorous.
- SaniDate Disinfectant 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.
- SaniDate Disinfectant is an economical concentrate that can be used with a mop and bucket, trigger spray, sponge, or by soaking.
- SaniDate Disinfectant 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.
- SaniDate Disinfectant inhibits bacterial growth on moist surfaces and deodorizes by killing microorganisms that cause offensive odors. (*Not Approved For Use in California*).
- SaniDate Disinfectant is a versatile disinfectant and sanitizer for veterinarian, animal care, animal laboratory, and agricultural and farm premises applications.
- SaniDate Disinfectant 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 allowed when used as a sanitizer on food contact surfaces.
- SaniDate Disinfectant 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 allowed when used as a sanitizer on food contact surfaces.
- SaniDate Disinfectant is for use as a sanitizer in bottling and beverage dispensing equipment.
- SaniDate Disinfectant is for use as a sanitizer in sanitary filling of bottles and cans.
- SaniDate Disinfectant is for use as a sanitizer in beer fermentation and holding tanks.
- SaniDate Disinfectant is for use as a sanitizer in wineries for use on holding tanks, floors, and processing equipment.
- SaniDate Disinfectant is for use as a sanitizer in dairy clean-in-place systems.
- Use SaniDate Disinfectant on the multi-touch surfaces responsible for cross-contamination.
- SaniDate Disinfectant is a concentrate formulation designed for use in commercial, institutional, and industrial operations.
- SaniDate Disinfectant controls the growth of odor-causing and slime forming bacteria.
- When used as directed, SaniDate Disinfectant will disinfect hard, non-porous surfaces such as walls, floors, garbage pails, and other areas where obnoxious odors may develop.
- SaniDate Disinfectant may be applied through automatic washing systems, immersion tanks, foaming apparatus, low-pressure sprayers and fogging (wet misting) systems. (Fogging and foaming not approved for use in California)
- SaniDate Disinfectant is formulated to effectively eliminate offensive odors caused by mold and mildew.
- Antibacterial
- Hospital Use Disinfectant
- Institutional Use Disinfectant
- Disinfectant
- Sanitizer
- Deodorizer
- Easy to use
- For sanitizing of hard, non-porous surfaces, structures & equipment
- Ready to use Activated Peroxide Disinfectant
- Contains no phosphates
- Sanitizes and deodorizes

- Leaves no residue
- Scent free
- Chlorine free
- Versatile Sanitizer
- 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
- Easy to use
- Effective over a wide range of pH conditions
- Reduces organic build-up and noxious odors including hydrogen sulfide
- Controls algae blooms
- Controls odors
- Algaecide
- Kills algae
- Non harmful to fish or aquatic life
- May be used in water features containing fish and plants
- Keeps water clean
- Rids water of algae
- Removes algae on contact
- Treats, controls, and prevents algae
- Use on water gardens, ornamental ponds, waterfalls, fountains, or stone water features
- Alternative to copper-based products
- Liquid algaecide for treating waterscapes
- Enhance water's appearance
- Kills stubborn algae quickly
- Removes algae from your water
- Fact-acting algae control
- Pond algaecide
- Kills stubborn algae
- Reduces algae growth
- · Inhibits growth of many types of algae
- Biodegradable
- Will not harm plants
- Contains no metals
- For water with fish
- For pristine water
- For algae-free water
- Begins working immediately
- Eliminates algae
- Algaecide
- Fungicide
- Bactericide
- Broad Spectrum
- Broad Spectrum Algaecide/Bactericide
- Broad Spectrum Bactericide/Fungicide
- Broad Spectrum Algaecide/Fungicide
- Broad Spectrum Algaecide/Bactericide/Fungicide
- Preventative treatment for seeds, growing plants, fruits, nuts and vegetables.

- A treatment for the prevention and control of plant pathogenic diseases in field grown crops, greenhouses, and storage sites.
- A post harvest treatment for the prevention and control of plant pathogenic diseases on 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.
- For use in fruits and vegetable wash waters to control and prevent spoilage
- Helps keeps fruits and vegetables fresher longer
- Cleans fruits and vegetables
- For the disinfection of hard, non-porous surfaces, structures and equipment.
- For the disinfection and sanitation of environmental hard surfaces, structures and equipment.
- For the disinfection and sanitation of non-porous food contact and non-food contact surfaces, equipment and systems.
- For use in post harvest water treatment applications.
- For the disinfection of separation and filtration media, equipment and systems.
- Disinfectant and sanitizer.
- For fogging use after cleaning fruit, vegetable and potato storage areas. (Not Approved For Use in California).

Page 22 of 22