



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

November 10, 2015

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

Subject: Label and CSF Notification per PRN 98-10 – Label Revised Establishment  
and Registration Number; Updated Basic CSF  
Product Name: SaniDate® 15.0  
EPA Registration Number: 70299-26  
Application Date: October 20, 2015  
Decision Number: 510696 and 510697

Dear Ms. Bishel:

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10. The Antimicrobials Division (AD) has conducted a review of this request for its applicability under PRN 98-10 and finds that the actions requested fall within the scope of PRN 98-10.

The label submitted with the application has been stamped “Notification” and will be placed in our records.

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.

The CSFs submitted with your application have been stamped “Notification” and placed in our files.

Please note that the record for this product currently contains the following CSFs:

- Basic CSF dated October 20, 2015

Any CSFs other than those listed above are superseded/no longer valid.

If you have any questions, please contact Terria Northern at 703-347-0265 or by email at [northern.terria@epa.gov](mailto:northern.terria@epa.gov).

Sincerely,

A handwritten signature in black ink, appearing to be 'J. Chao', written in a cursive style.

for

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

# SaniDate® 15.0

FOR COMMERCIAL USE

## ACTIVE INGREDIENTS:

Hydrogen Peroxide..... 10.0%

Peroxyacetic Acid..... 15.0%

**OTHER INGREDIENTS:**..... 75.0%

**Total:**..... 100.00

## NOTIFICATION

70299-26

The applicant has certified that no changes, other than those reported to the Agency have been made to the labeling. The Agency acknowledges this notification by letter dated:

11/10/2015

**KEEP OUT OF REACH OF CHILDREN**

**STRONG OXIDIZING AGENT  
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	
<b>If in eyes</b>	<ul style="list-style-type: none"><li>• Hold eye open and rinse slowly and gently with water for 15 – 20 minutes.</li><li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
<b>If on skin or clothing</b>	<ul style="list-style-type: none"><li>• Take off contaminated clothing.</li><li>• Rinse skin immediately with plenty of water for 15 – 20 minutes.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
<b>If inhaled</b>	<ul style="list-style-type: none"><li>• Move person to fresh air.</li><li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.</li><li>• Call poison control center or doctor for treatment advice.</li></ul>
<b>If swallowed</b>	<ul style="list-style-type: none"><li>• Call poison control center or doctor immediately for treatment advice.</li><li>• Have person sip a glass of water if able to swallow.</li><li>• Do not induce vomiting unless told to do so by the poison control center.</li><li>• Do not give anything by mouth to an unconscious person.</li></ul>
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.	
<b>NOTE TO PHYSICIAN</b> - Probable mucosal damage may contraindicate the use of gastric lavage.	

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

**EPA Registration No.:** 70299-26      **Batch Code** \_\_\_\_\_  
**EPA Establishment No.:** 067441-IL-001, 089546-NV-001, 082521-GA-001  
**Net Contents:** (2.5, 5, 30, 55, 275, 330 gallons)

**PRECAUTIONARY STATEMENTS**  
**HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

**DANGER: CORROSIVE.** Causes irreversible eye damage and skin burns. May be fatal if inhaled or absorbed through skin. Do not get in eyes, on skin, or on clothing. Harmful if swallowed. Do not breathe vapors or spray mist. Wear a NIOSH approved respirator with an organic vapor (OV) cartridge with a combination N, R or P filter with NIOSH approval number prefix TC-84A; or a NIOSH approved gas mask with a canister with NIOSH approval number prefix TC-140; or powered air purifying respirator with organic vapor (OV) cartridge and combination HE filter with NIOSH approval number prefix TC-23C. Wear goggles or face shield, rubber gloves, and protective clothing when handling. 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 before reuse. Do not enter an enclosed area without proper respiratory protection.

**PHYSICAL AND CHEMICAL HAZARDS**

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

**ENVIRONMENTAL HAZARDS**

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

**DIRECTIONS FOR USE**

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

**FOR TREATMENT OF RAW POST-HARVEST FRUIT, VEGETABLE, AND NUT PROCESSING WATERS TO CONTROL THE GROWTH OF NON-PUBLIC HEALTH MICROORGANISMS THAT CAN CAUSE SPOILAGE**

1. Ensure that the water is recirculating or mixing in the processing tank or water line.
2. Prepare solution by diluting 1.5 -1.9 fl. oz. per 25 gallons of water. Ensure that the solution is thoroughly mixed. This provides 85-100 ppm of peroxyacetic acid and 57-67 ppm of 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 85-100 ppm of peroxyacetic acid by adding SaniDate 15.0 to processing water.
4. Allow a minimum contact time of 60 seconds.
5. Do not rinse.
6. Prepare a new solution daily to ensure effectiveness.
7. Contact your BioSafe Systems technical representative for specific fruit and vegetable applications.

**FOR TREATMENT OF RAW, UNPROCESSED FRUIT AND VEGETABLE SURFACES**

Apply SaniDate 15.0 as a dip or spray 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 washing process. SaniDate 15.0 can be applied during physical cleaning processes, including at the roller spreader, washer manifold, and dip tank, on the brushes or elsewhere in the washing process prior to, simultaneously with or as a final rinse prior to packaging.

1. Prepare solution by diluting 1.5 -1.9 fl. oz. per 25 gallons of water. Ensure that the solution is thoroughly mixed. This provides 85-100 ppm of peroxyacetic acid and 57-67 ppm of hydrogen peroxide.

2. Apply the diluted sanitizing solution using a coarse spray or fog directed at the fruits or vegetables, or by submerging the fruits or vegetables in the prepared solution.
3. Allow a minimum contact time of 45 seconds.
4. Do not rinse.
5. Contact your BioSafe Systems technical representative for specific fruit and vegetable applications.

**Fogging Instructions:**

Apply SaniDate 15.0 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 dilutions rates 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% SaniDate 15.0 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.
5. Contact your BioSafe Systems technical representative for specific fruit and vegetable applications.

**TREATMENT OF FRESH CUT AND PROCESSED FRUIT AND VEGETABLE SURFACES TO CONTROL GROWTH OF NON-PUBLIC HEALTH MICROORGANISMS THAT CAN CAUSE SPOILAGE**

1. Add SaniDate 15.0 at a dilution of 1.5 fl. oz. per 25 gallons of water. Ensure that the solution is thoroughly mixed. This provides 80 ppm of peroxyacetic acid and 50 ppm of hydrogen peroxide.
2. Apply solution as a spray or dip. Allow a minimum contact time of 45 seconds. This use complies with the requirements of 21 CFR 173.315(a)(5).
3. A potable water rinse is not required after application of the diluted solution.

**SANITIZATION OF HARD, NON-POROUS FOOD CONTACT SURFACES**

Use SaniDate 15.0 as a hard surface sanitizer in federally inspected meat, seafood and poultry facilities, pet food plants, fruit and vegetable further processing plants, dairies, wineries, breweries, beverage plants, and raw/unprocessed fruit, nut and vegetable packing houses.

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

- Raw Fruit, Vegetable and Nut Packing Facilities
- Processed Fruit, Vegetable and Nut Processing Facilities
- Meat, Poultry, Seafood Processing/Packaging Plants
- Pet Food Plants
- Wineries, Breweries, Dairy, Beverage Plants
- Milk and Dairy Product Processing/Packing Plants
- Food Processing/Packing Plants
- Final Sanitizing Bottle Rinse
- Egg Processing Plants/Packing Equipment Surfaces

Sanitize using a solution of 0.41-0.94 fl. oz. to 5 gallons of potable water. Use immersion, coarse spray or circulation techniques as appropriate to the equipment. All surfaces should be exposed to the sanitizing solution for a period of at least one (1) minute. Drain thoroughly and allow to air dry. Do not rinse.

Before use in federally inspected meat and poultry food processing plants and dairies, food products must be removed from the room or covered to prevent contact with the sanitizing solution.

### **Pathogenic Organisms**

SaniDate 15.0 is an effective sanitizer against the following pathogenic organisms: *Escherichia coli* (ATCC 11229), *Staphylococcus aureus* (ATCC 6538), *Listeria monocytogenes* (ATCC 19112), *Salmonella enterica* (ATCC 10708), *Escherichia coli O157:H7* (ATCC 35150), and *Campylobacter jejuni* (ATCC 29428) on hard, non-porous food contact surfaces.

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 SaniDate 15.0 solution by adding 0.41-0.94 fl. oz. to 5 gallons of potable water. This provides 109-250 ppm peroxyacetic acid and 73-167 ppm of hydrogen peroxide.
5. Fill closed systems with diluted sanitizer solution for a contact time of one (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 for a contact time of at least one (1) minute. Allow surfaces to drain thoroughly before resuming operation.

### **Non-Pathogenic Spoilage Organisms**

SaniDate 15.0 is effective against non-pathogenic spoilage organisms, and yeasts.

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 SaniDate 15.0 solution by adding 0.41-0.94 fl. oz. to 5 gallons of potable water. This provides 109-250 ppm peroxyacetic acid and 73-167 ppm of hydrogen peroxide.
5. Fill closed systems with diluted sanitizer solution for a contact time of one (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 for a contact time of at least one (1) minute. Allow surfaces to drain thoroughly before resuming operation.

### **SANITIZATION OF CONVEYORS, PEELERS, SLICERS, AND SAWS FOR MEAT, POULTRY, SEAFOOD, FRUITS, AND VEGETABLES**

SaniDate 15.0 is an effective sanitizer against *Escherichia coli*, *Staphylococcus aureus*, *Listeria monocytogenes*, *Salmonella enterica*, *Escherichia coli O157:H7* and *Campylobacter jejuni*.

Use SaniDate 15.0 in the washing, rinsing and sanitizing of conveyor equipment, peelers, slicers, saws, corers, de-boners, dicers, knives, metal detectors, pasteurizers, peelers, scales, scrapers, collators, slicers, non-wooden cutting boards, tabletops, trays, pans, racks, platters, cans.

1. Remove edible products from equipment unless treating only the return portion of a conveyor.
2. Prepare SaniDate 15.0 solution by adding 0.41-0.94 fl. oz. to 5 gallons of potable water. This provides 109-250 ppm peroxyacetic acid and 73-167 ppm of hydrogen peroxide.
3. Apply sanitizer solution to the return portion of the conveyor or to the equipment using a coarse spray or other means of wetting the surfaces. Control the volume of solution so as to permit maximum drainage and to prevent puddles. The conveyor surface may still be damp when food contact occurs.
4. Allow equipment to drain adequately before reusing; a dry surface is not required.

SaniDate 15.0 may be applied by flood applications, coarse spray, immersion, or circulation.

### **FINAL SANITIZING BOTTLE RINSE**

Use SaniDate 15.0 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. Rinse bottles/cans with a solution prepared by mixing 0.41-0.94 fl. oz. to 5 gallons of potable water. This provides 109-250 ppm peroxyacetic acid and 73-167 ppm of hydrogen peroxide. Allow to drain dry.

### **SANITIZING MILKING EQUIPMENT BY CLUSTER DIPPING**

1. Clean the external surfaces of the milking systems after each use.
2. Manually, or automatically rinse and sanitize all system components using a SaniDate 15.0 sanitizing solution prepared by mixing 0.41-0.94 fl. oz. to 5 gallons of potable water. Ensure solution fills clusters.
3. Allow surfaces to remain wet for at least one (1) minute. Shake off well after dipping and allow to air dry. Do not rinse.

### **FOR SANITIZING OF CASING OR SHELL EGGS**

1. To sanitize clean shell eggs intended for food or food products, spray with a solution of 0.41-0.94 fl. oz. to 5 gallons of potable water. This provides 109-250 ppm peroxyacetic acid and 73-167 ppm of hydrogen peroxide. 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. Wet eggs thoroughly and allow to drain.
3. Eggs that have been sanitized with SaniDate 15.0 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.
5. The sanitizing solution must not be reused for sanitizing eggs.

### **SANITIZING HATCHERY ROOMS, POULTRY HOUSES, AND LIVESTOCK BUILDINGS**

1. Remove all animals and feed from premises, coops, crates and enclosures.
2. Remove all litter, droppings and manure from floors, walls and surfaces of barns, pens, stalls, chutes, and other facilities occupied or traversed by animals.
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 SaniDate 15.0 by adding 0.41-0.94 fl. oz to 5 gallons of potable water. This provides 109-250 ppm peroxyacetic acid and 73-167 ppm of hydrogen peroxide.
6. Allow a contact time of 1 minute.
7. Immerse all types of equipment used in handling and restraining animals, as well as forks, shovels and scrapers used for removing litter and manure.
8. Ventilate buildings, coops and other closed spaces. Do not house poultry, livestock or employ equipment until treatment has been absorbed, set or dried.

### **PACKINGHOUSE SANITIZATION**

SaniDate 15.0 is an effective sanitizer against the following microorganisms: *Xanthomonas campestris* (*axonopodis*) pv. *citrumelo* (citrus canker surrogate) (ATCC 49118), as well as *Escherichia coli*, *Staphylococcus aureus*, *Listeria monocytogenes*, *Salmonella enterica*, *Escherichia coli* O157:H7 and *Campylobacter jejuni*.

1. Remove gross contamination with a cleaner or other suitable detergent and rinse with potable water.
2. Prepare SaniDate 15.0 solution by adding 0.41-0.94 fl. oz. to 5 gallons potable of water. This provides 109-250 ppm peroxyacetic acid and 73-167 ppm of hydrogen peroxide.
3. Use as a general sanitizing coarse spray to reduce bacterial contamination of walls, floors, conveyers and harvesting containers.
4. Allow sanitizer to contact surfaces for at least one (1) minute.

5. Allow to air dry, do not rinse.

### **HARVESTING AND FIELD EQUIPMENT AND TRANSPORTATION VEHICLE SANITIZATION**

Use SaniDate 15.0 to sanitize 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) pv. citrumelo* (citrus canker surrogate). This product can also be used to sanitize surfaces contaminated with *Escherichia coli*, *Staphylococcus aureus*, *Listeria monocytogenes*, *Salmonella enterica*, *Escherichia coli O157:H7* and *Campylobacter jejuni*.

1. Remove gross contamination with a cleaner or other suitable detergent and rinse with water.
2. Prepare SaniDate 15.0 solution by adding 0.41-0.94 fl. oz. to 5 gallons of potable water. This provides 109-250 ppm peroxyacetic acid and 73-167 ppm of hydrogen peroxide.
3. Apply as a general sanitizing coarse spray.
4. Allow sanitizer to contact surfaces for at least one (1) minute.
5. Allow to air dry, do not rinse.

### **SURFACES TREATED TO CONTROL THE SPREAD OF CITRUS CANKER**

Use SaniDate 15.0 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.

### **SANITIZATION OF HARD, NON-POROUS, NON-FOOD CONTACT SURFACES**

SaniDate 15.0 is an effective hard, non-food contact surface sanitizer against *Staphylococcus aureus* (ATCC 6538), and *Klebsiella pneumoniae* (ATCC 4352). SaniDate 15.0 may be applied by flood applications, coarse spray, immersion, or circulation. Sanitize surfaces including ceilings, drain grates, floors, and walls.

1. Remove gross contamination with a cleaner or other suitable detergent and rinse with potable water.
2. Prepare SaniDate 15.0 solution by adding 0.41-0.94 fl. oz. to 5 gallons of potable water. This provides 109-250 ppm peroxyacetic acid and 73-167 ppm of hydrogen peroxide.
3. Apply by wiping, mopping, coarse spray, or flood.
4. Allow a contact time of five (5) minutes.
5. Allow items and/or surfaces to air dry before resuming operation.
6. Do not rinse.

### **FOGGING FOR REGULAR CLEANING**

SaniDate 15.0 may be used for thermal fogging or wet misting to prevent/control non-public health organisms following regular cleaning procedures in hard room surfaces. Prior to fogging, remove or cover any food or packaging material with waterproof coverings. Thoroughly clean all surfaces. Fog the desired area at 32 - 64 fl. oz. of use dilution per 1,000 cubic feet using equipment with an automated timer. Do not remain in treated areas; 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. Do not reenter the area until hydrogen peroxide is measured below 1.0 ppm. Reentry times may vary.

### **CLEANING POULTRY, SWINE, LIVESTOCK WATER SYSTEMS WHEN THE SYSTEM IS NOT IN USE**

To remove scale, calcium, iron, magnesium, heavy soils, polysaccharides and deposits from vitamins and medications from livestock watering systems use SaniDate 15.0 at 0.15-0.30 fl. oz. per gallon of water. When used as directed, SaniDate 15.0 will remove organic and inorganic deposits that reduce water flow and clog nipples. Allow system to run for 6 - 24 hours depending on the conditions. Following the cleaning process, rinse with potable water to remove the cleaning solution from the watering line, nipples and cups. Never mix SaniDate 15.0 with any other product.

### **CLEANING POULTRY, SWINE, LIVESTOCK WATERING OPERATING SYSTEMS (WHEN ANIMALS ARE PRESENT)**

After water lines have been cleaned, use SaniDate 15.0 at 0.3-0.45 fl. oz. per 100 gallons of water to control mineral build up in watering lines. Never use SaniDate 15.0 more than 5 consecutive days to clean the operating system. Never mix SaniDate 15.0 with any other product. If



cleaning the operating system, stop the use of SaniDate 15.0 twenty-four (24) hours prior to vaccination or medication via the water line.

### **CONTROL OF NON-PUBLIC HEALTH SLIME-FORMING BACTERIA AND BIOFOULING IN COOLING WATER SYSTEMS (COOLING TOWERS, EVAPORATIVE CONDENSERS, AIR WASHERS) AND ORNAMENTAL WATER FEATURES**

1. Severely fouled systems should be cleaned before adding the SaniDate 15.0 solution. SaniDate 15.0 should be added in the water system directly, and not mixed with any other chemicals or additives. Never add SaniDate 15.0 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 SaniDate 15.0. Contamination with other chemicals could result in product decomposition.
2. Add SaniDate 15.0 only to water at a point in the system where uniform mixing and even distribution will occur.
3. For shock (slug) treatment for moderately to severely fouled systems: Add 5-20 fl. oz. of this product per 1,000 gallons of process water (7-27 ppm peroxyacetic acid). Repeat as necessary until microbiological control is evident. Thereafter, to maintain control use 1.5-7.5 fl. oz. of SaniDate 15.0 per 1,000 gallons of process water (2-10 ppm of peroxyacetic acid) as a continuous treatment method.
4. Continuous dosing methods usually require 1.5-5 fl. oz. per 1,000 gallons of water (2-7 ppm peroxyacetic acid) to achieve adequate results.
5. Intermittent dosing treatments usually require dose cycles of a minimum once per day, up to 6 times per 24 hours. Recommended rates for intermittent dose cycles are 5-10 fl. oz. of SaniDate 15.0 per 1,000 gallons of process water (7-14 ppm peroxyacetic acid).

**Air Washers:** SaniDate 15.0 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.

### **FOR ANTIMICROBIAL USE WITH AQUEOUS TREATMENT FLUIDS IN SUBTERRANEAN OIL FIELD AND GAS-FIELD WELL OPERATIONS SUCH AS WELL DRILLING, FORMATION FRACTURING, PRODUCTIVITY ENHANCEMENT AND SECONDARY RECOVERY** *(Not Approved for Use in California)*

Use SaniDate 15.0 for control of non-public health slime-forming, spoilage bacteria and anaerobic sulfate reducing bacteria, *Desulfovibrio vulgaris*, which leads to reservoir souring and metal corrosion.

**Drilling Muds, Fracturing Fluids, Well Squeezed Fluids:** For the preservation of drilling muds, workover and completion fluids and other products susceptible to contamination, pre-mix with the fluid or add directly at the point of use at 3.75 fl. oz. per 1,000 gallons of water (5 ppm) to 75.5 fl. oz. per 1,000 gallons of water (100 ppm) as required. Depending on the severity of the contamination, initial application may be added up to 755 fl. oz. per 1,000 gallons of water (1,000 ppm).

**Flooding, Injection and Produced Water:** For water flooding operations, add initially at 3.75 fl. oz. per 1,000 gallons of water (5 ppm) to 75.5 fl. oz. per 1,000 gallons of water (100 ppm) and repeat until control is achieved. Subsequent treatment may be continued on a weekly basis or as required.

Injection wells associated with gas storage systems may be treated up to 100 ppm when diluted in the formation water. Any additional top-up water should be treated as required. For hydrostatic systems, apply 3.75 fl. oz. per 1,000 gallons of water (5 ppm) to 75.5 fl. oz. per 1,000 gallons of water (100 ppm) depending on the water quality and the duration of the shut-in.

**Pipeline and Tank Maintenance:** For non-public health microbial control in water-bottoms in crude and refined hydrocarbon storage tanks, piping and transportation systems. Apply 3.75 fl. oz. per 1,000 gallons

of water (5 ppm) to 75.5 fl. oz. per 1,000 gallons of water (100 ppm) 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.

### **BIOFOULING CONTROL IN PULP AND PAPER MILL SYSTEMS** *(Not Approved for Use in California)*

For use in the manufacture of paper and paperboard intended for food and non-food contact.

SaniDate 15.0 can be used to control bacterial and yeast growth in pulp, paper and paperboard mills.

1. Severely fouled systems should be cleaned before initial treatment with SaniDate 15.0. 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 SaniDate 15.0 at a point in the system where it can be mixed uniformly with the pulp, e.g., the beater, hydropulper, fan pump, broke pump etc.
3. Intermittent feed method: Apply 0.5 lb to 1.2 lb (7-16 fl. oz.) of SaniDate 15.0 per ton (dry basis) of pulp or paper produced for 2-3 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 SaniDate 15.0 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 0.2 to 1.2 lb (2.6-16 fl. oz.) of SaniDate 15.0 solution per ton (dry basis) of pulp or paper produced on a continuous basis. This will provide 15-90 ppm of peroxyacetic acid.

### **FOR NON-PUBLIC HEALTH MICROBIAL CONTROL IN SEWAGE AND WASTEWATER EFFLUENTS IN TREATMENT PLANTS** *(Not Approved for Use in California)*

Use SaniDate 15.0 to treat sewage and wastewater effluent related to public and private wastewater treatment plants. SaniDate 15.0 can be applied directly to the effluent or may be used with an appropriate activator such as hydrogen peroxide or other technology. SaniDate 15.0 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 bioloading 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 SaniDate 15.0 to effluent water at a concentration of 0.5 ppm -15 ppm. Allow contact time of approximately 15-60 minutes.
2. The maximum amount of peroxyacetic acid that can be discharged from the treatment facility is 1 ppm. Use an appropriate peroxyacetic acid test kit analyzer to ensure that this level is not exceeded.
3. Contact your BioSafe Systems representative for assistance establishing treatment regimes.

### **WATER DAMAGE RESTORATION**

Use SaniDate 15.0 to control the growth of odor causing bacteria in water damage restoration situations. This product is suitable for use on hard, non-porous surfaces, along with the following porous and semi-porous materials: carpets, carpet cushion, sub floors, drywall, trim, frame lumber, tackless strip and paneling.

### **SEWER BACKUP AND RIVER FLOODING** *(Not Approved for Use in California)*

During mitigation procedures prepare a solution of SaniDate 15.0 by adding 0.35 fl. oz. of the product to 1 gallon of potable water, allowing for the diluting effect of absorbed water within the saturated materials. Remove heavy soil or gross filth from surfaces by cleaning with the SaniDate 15.0 solution by wiping, mopping, or as a coarse spray. Saturate all affected materials with the solution using a coarse spray before cleaning and extraction. Allow surfaces and materials to remain wet with solution for ten (10) minutes. Follow with a thorough extraction. Dry rapidly and thoroughly. Use proper ventilation.

## 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.

### PESTICIDE DISPOSAL

Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If wastes cannot be disposed of 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  $\frac{1}{4}$  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.

**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  $\frac{1}{4}$  full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution for 30 seconds. Stand the container on its end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. 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.

**Totes:** Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

## WARRANTY

### 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

- Easy to use
- Use for sanitizing hatchery rooms, poultry houses and livestock buildings
- Use for packinghouse sanitization
- Use for sanitizing casing or shell eggs
- Activated Peroxygen chemistry
- Contains no phosphates
- Deodorizes
- Leaves no residue
- Scent free
- Chlorine free
- Sanitizer
- Versatile Sanitizer
- For use as a sanitizer on food contact surfaces, food processing equipment and utensils.
- For use as a dip or spray wash 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.
- For use in process water that contacts raw, post-harvest, fresh-cut and processed fruits and vegetables.
- For sanitizing surfaces such as packinghouse conveyers and harvesting equipment and containers
- For sanitizing of hard, non-porous surfaces and equipment
- Activated Peroxygen treatment
- Controls odor causing bacteria
- Controls non-public health slime-forming bacteria
- Controls spoilage and decay-causing organisms in fruit and vegetable processing waters
- Controls odors
- SaniDate 15.0 will not leave a grit or soap scum.
- When used as directed, this product will deodorize surfaces in places where bacterial growth can cause malodors.
- SaniDate 15.0 inhibits bacterial growth on moist surfaces and deodorizes by killing microorganisms that cause offensive odors.
- SaniDate 15.0 is a concentrate formulation designed for use in commercial, institutional, and industrial operations.
- Use SaniDate 15.0 in cooling water systems
- For control of algal, and non-public health slime-forming bacterial growth
- 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.
- Industrial Waste Treatment
- Oil Field Treatments (*Not approved for use in California*)
- For use in food processing operations
- See packet for full instructions
- Controls the growth of algae, and odor-causing bacteria.
- SaniDate 15.0 is a versatile cleaner and sanitizer, for hard, non-porous surfaces.
- SaniDate 15.0 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, and kennels
- Eliminates odors leaving surfaces smelling clean and fresh.
- SaniDate 15.0 is for use as a sanitizer in bottling and beverage dispensing equipment.

- SaniDate 15.0 is for use as a sanitizer in sanitary filling of bottles and cans.
- SaniDate 15.0 is for use as a sanitizer in wineries for use on holding tanks, floors, and processing equipment.
- SaniDate 15.0 is for use as a sanitizer in dairy clean-in-place systems.
- Use SaniDate 15.0 on the multi-touch surfaces responsible for cross-contamination.
- SaniDate 15.0 is a concentrate formulation designed for use in commercial, institutional, and industrial operations.
- SaniDate 15.0 controls the growth of odor-causing and non-public health slime-forming bacteria.
- SaniDate 15.0 may be applied through automatic washing systems, immersion tanks, low-pressure sprayers and fogging (wet misting) systems.
- Antibacterial
- Activated Peroxygen chemistry
- Controls the growth of odor-causing and non-public health slime-forming bacteria
- Effective over a wide range of pH conditions
- Reduces organic build-up and noxious odors including hydrogen sulfide
- Biodegradable
- Begins working immediately
- Eliminates algae
- Bactericide
- See inside for full instructions
- To inhibit the growth of algae, and bacteria on hard, non-porous surfaces.
- For the control of odor causing bacteria in water damage restoration situations.
- Made in the U.S.A