

# SaniDate<sup>®</sup>5.0

SANITIZER / DISINFECTANT

## SPECIMEN LABEL

For the sanitization and disinfection of hard, non-porous surfaces.

For use in commercial, agricultural, and horticultural water treatment applications.

For the treatment of water for industrial and commercial water treatment systems.

### FOR COMMERCIAL USE ONLY

ACTIVE	INGREDIENT:
Hydrogen Peroxide	.....23.00%
Peroxyacetic Acid	.....5.30%
INERT INGREDIENTS	.....71.70%
TOTAL	.....100.00%

### KEEP OUT OF REACH OF CHILDREN DANGER-PELIGRO

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand 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 clothing

- Take off contaminated clothing.
- Rinse skin immediately with plenty of water for 15 – 20 minutes.
- Call a poison control center or doctor for treatment advice.

#### If swallowed

- Call 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 a 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  
1-888-273-3088 (toll-free)  
www.biosafesystems.com  
EPA Registration No. 70299-11  
EPA Establishment No. 60156-IL-001

### PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS DANGER: CORROSIVE.

Causes irreversible eye damage. Causes skin burns. Do not get in eyes, on skin, or clothing. May be fatal if swallowed or inhaled. Do not breathe vapor or spray mist. Wear a respirator with an organic vapor removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approved prefix TC-23C), or a canister approved for pesticides (MSHA/NIOSH approval prefix TC-14G), or a NIOSH approved respirator with an organic vapor (OV) cartridge or canister with any N,R,P, or HE prefilter. Consult the MSDS for information about respirators and cartridges that have been tested and shown to be effective in removing hydrogen peroxide and peracetic acid from air. Wear chemical goggles, rubber gloves, and protective clothing when handling this product. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco. Remove contaminated clothing and wash before reuse.

### 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, 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 directly 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.

SaniDate 5.0 Sanitizer/Disinfectant works best when diluted with water containing minimal levels of organic or inorganic materials, and with water having a neutral pH. Thoroughly rinse out tank with water before mixing concentrate. This product will readily mix with clean, neutral water and does not require agitation.

SaniDate 5.0 Sanitizer/Disinfectant concentrate should not be combined or mixed with any other pesticide concentrates.

This product is not for use on medical device surfaces.

Before use in federally inspected meat and poultry food processing plants and dairies, food products and packaging materials must be removed from room or carefully protected. A potable water rinse is not allowed (Do not rinse) following use of the product as a sanitizer on previously cleaned hard surfaces provided that the surfaces are adequately drained before contact with food so that little or no residue remains.

### MOLD AND MILDEW CONTROL

SaniDate 5.0 Sanitizer/Disinfectant may be used to effectively inhibit the growth of mold and mildew and odors caused by them at a rate of 0.5 fl. oz. in 1 gallon of water in general commercial environments such as:

- Schools, colleges, industrial facilities, dietary areas, office buildings, recreational facilities, retail and wholesale establishments.
- Animal hospitals, veterinary clinics, animal life science laboratories, farms, kennels, kennel runs, catteries, cages, feeding and watering equipment, pet shops, zoos, pet animal quarters, poultry premises, trucks, hatcheries, live stock quarters, stables, stalls, and pens.
- Packinghouses, food processing, and rendering plants
- Healthcare facilities
- Commercial floral shops
- Hairdressing salons/barber shops
- Pharmaceutical/cosmetic facilities

SaniDate 5.0 Sanitizer/Disinfectant effectively inhibits the growth of mold and mildew and odors caused by them when applied to hard non-porous surfaces (non-food contact surfaces), such as floors, walkways, walls, tables, chairs, benches, countertops, cabinets, bathroom fixtures, sinks, shelves, racks, crates, carts, trailers, vehicles, conveyors, refrigerators (exterior), fan blades, drains, piping, commercial, municipal, and process water transfer and handling systems, filter housings, vats, tanks, pumps, valves, and systems.

#### **MOLD AND MILDEW CONTROL ON HARD, NON-POROUS SURFACES**

Use a rate of 0.5 fl. oz. per gallon for hard, non-porous surfaces, (non-food contact surfaces), that are lightly soiled or have been pre-rinsed to remove gross contamination. For heavily soiled hard non-porous surfaces use a rate of 1 fl. oz per 1 gallon of water. Apply solution with mop, cloth, sponge, brush, scrubber, or coarse spray device or by soaking so as to wet all surfaces thoroughly. Allow surface 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. Repeat treatment every seven days, or more often if new growth appears.

#### **REMEDICATION AND RESTORATION SITES**

SaniDate 5.0 Sanitizer/Disinfectant is recommended for use on hard, non-porous, environmental surfaces such as walls and other hard, non-porous surfaces such as floors, walls, tables, chairs, countertops, garbage bins/cans, bathroom fixtures, sinks, bed frames, shelves, racks, carts, refrigerators (exterior), glazed tile, and use sites listed on this label made of linoleum, vinyl, glazed porcelain, plastic polyethylene, stainless steel, or glass.

#### **Preventative Treatment**

To inhibit surface mold and mildew growth on hard, non-porous surfaces in new or renovated building construction, mix SaniDate 5.0 Sanitizer/Disinfectant at a rate of 0.5 fl. oz. in 1 gallon of water and apply evenly by paintbrush, airless sprayer, low pressure hand wand, or backpack sprayer. Assure uniform coverage of surfaces to be protected. Surfaces should be evenly wet without runoff or pooling. Permit treated surfaces to be thoroughly dry before painting or affixing overlayment materials such as siding, wallboard, or flooring. Repeat the application of this product as necessary if mold growth appears, following directions provided below for remedial treatment. Normally, infrequent application will provide effective control. If regrowth occurs, investigate to determine the causes and correct the problem prior to reapplication of SaniDate 5.0 Sanitizer/Disinfectant. Mold may recur in conditions of persistently

high humidity, standing water, or hidden water leaks.

#### **Remedial Treatment**

SaniDate 5.0 Sanitizer/Disinfectant must be used as part of a comprehensive mold remediation or water damage restoration program, including:

- Periodic monitoring and inspection of conditions favorable to mold growth such as moisture ingress and high relative humidity
- Effective repairs as necessary to eliminate conditions favorable to mold growth
- Drying affected areas to below 20% moisture content

Mix SaniDate 5.0 Sanitizer/Disinfectant at a rate of 0.5 fl. oz. in 1 gallon of water and apply evenly by paintbrush, airless sprayer, low-pressure hand wand, or backpack sprayer. Assure uniform coverage of surfaces to be protected. Surfaces should be evenly wet without runoff or pooling. Permit treated surfaces to be thoroughly dry before painting or affixing overlayment materials such as siding, wallboard, or flooring.

The following associations and internet sites should be consulted for information on standards and guidelines for remedial treatment of mold and mildew:

- IAQA-Indoor Air Quality Association ([www.iaqa.org](http://www.iaqa.org))
- EPA-Environmental Protection Agency ([www.epa.gov](http://www.epa.gov))
- DOH-New York City Department of Health ([www.ci.nyc.ny.us/html/doh/html/epi/moldrpt1.html](http://www.ci.nyc.ny.us/html/doh/html/epi/moldrpt1.html))
- IICRC-Institute of Inspection, Cleaning and Restoration Certification (<http://www.iicrc.org/>)

#### **Small Areas: Total Surface Area Affected Less Than 10 Square Feet - Cleanup Methods\***

Prior to applying SaniDate 5.0 Sanitizer/Disinfectant, clean the affected area using one of the following or another preferred professional method.

**Method 1:** Wet vacuum (in the case of porous materials, some mold spores/fragments will remain in the material but will not grow if the material is completely dried).

**Method 2:** Damp-wipe surfaces with plain water or use a wood floor cleaner; scrub as needed.

**Method 3:** High-efficiency particulate air (HEPA) vacuum after the material has been thoroughly dried. Dispose of the contents of the HEPA vacuum in well-sealed plastic bags.

\* Minimum personal protective equipment to be worn during clean up includes gloves, N-95 respirator, and goggles/eye protection.

#### **Other Construction Materials: Concrete, or Cinder Block**

**Method 1:** Wet vacuum (in the case of porous materials, some mold spores/fragments will remain in the material but will not grow if the material is completely dried).

**Method 2:** High-efficiency air (HEPA) vacuum after the material has been thoroughly dried. Dispose of the contents of the HEPA vacuum in well-sealed plastic bags.

Special procedures and training are required for remediation of moldy areas larger than 10 square feet. Consult guidelines for remediation of large areas established by the Indoor Air Quality Association ([www.iaqa.org](http://www.iaqa.org)) and the US Environmental Protection Agency ([www.epa.gov](http://www.epa.gov)). An excellent reference is the New York City Department of Health publication, "Guidelines on Assessment and Remediation of Fungi in Indoor Environments." An excellent guide for professional mold remediation is available from the Institute of Inspection, Cleaning And Restoration Certification (IICRC). Standard S520 is based upon reliable remediation and restoration techniques, and combines academic principles with practical elements of water damage restoration. Where structural members and/or contents have been exposed to water in excess of 24 hours, there is a possibility of extensive microbial growth that may be hidden. In such a case a complete assessment and remediation plan must be prepared that provides for user and occupant safety and documentation and monitoring of the remediation process. IICRC S520 contains excellent guidance for such a plan. In the context of such a plan, SaniDate 5.0 Sanitizer/Disinfectant can be used on materials to be removed and disposed of and in other applications where mold inhibition is indicated. The Standard must be followed exactly and all growth and contaminated organic material removed prior to using SaniDate 5.0 Sanitizer/Disinfectant. Before using SaniDate 5.0 Sanitizer/Disinfectant in mitigation of large projects, you should be knowledgeable of these guidelines and follow their recommendations. In the absence of access to the guidance and standards identified, the user should refer to the following information taken from U.S. EPA's guide: Mold Remediation in Schools and Commercial Buildings (March 2001). These guidelines are based on the area and type of material affected by water damage and/or mold growth. Please note that these are guidelines; some professionals may prefer other cleaning methods. Use the appropriate remediation steps prior to application of SaniDate 5.0 Sanitizer/Disinfectant.

**Medium Areas: Total Surface Area Affected Between 10 and 100 Square Feet  
Cleanup Methods\***

**Method 1:** Wet vacuum (in the case of porous materials, some mold spores/fragments will remain in the material but will not grow if the material is completely dried.

**Method 2:** Damp-wipe surfaces with plain water or with wood floor cleaner; scrub as needed.

**Method 3:** High-efficiency particulate (HEPA) vacuum after the material has been thoroughly dried. Dispose of the contents of the HEPA vacuum in well-sealed plastic bags.

**Other Construction Materials:  
Concrete, or Cinder Block**

**Method 1:** Wet vacuum (in the case of porous materials, some mold spores/fragments will remain in the material but will not grow if the material is completely dried.

**Method 2:** High-efficiency particulate (HEPA) vacuum after the material has been thoroughly dried. Dispose of the contents of the HEPA vacuum in well-sealed plastic bags.

\* Limited or Full personal protective equipment is recommended during cleanup. Limited personal protective equipment includes gloves, N-95 respirator or half-face respirator with HEPA filter, disposable overalls, goggles/eye protection. Full personal protective equipment includes gloves, disposable full body clothing, headgear, foot coverings, full-face respirator with HEPA filter.

Use professional judgment, consider potential for remediator exposure and size of contaminated area.

**Large areas: Total Surface Area Affected Greater Than 100 Square Feet or Potential for Increase Occupant or Remediator Exposure During Remediation Estimated to be Significant - Cleanup Methods\***

**Method 1:** Wet vacuum (in the case of porous materials, some mold spores/fragments will remain in the material but will not grow if the material is completely dried.

**Method 2:** Damp-wipe surfaces with plain water or with a wood floor cleaner; scrub as needed

**Method 3:** High-efficiency particulate (HEPA) vacuum after the material has been thoroughly dried. Dispose of the contents of the HEPA vacuum in well-sealed plastic bags.

**Method 4:** Discard/remove water-damaged materials and seal in plastic bags while inside of containment, if present. Dispose of as normal waste. HEPA vacuum area after it is dried.

**Other Construction Materials: Concrete, or Cinder Block - Cleanup Methods\***

**Method 1:** Wet vacuum (in the case of porous materials, some mold spores/fragments will remain in the material but will not grow if the material is completely dried.

**Method 2:** High-efficiency particulate (HEPA) vacuum after the material has been thoroughly dried. Dispose of the contents of the HEPA vacuum in well-sealed plastic bags.

\* Gloves, disposable full body clothing, headgear, foot coverings, full-face respirator with HEPA filter are the recommended personal protective equipment.

\* Select method most appropriate to situation. Since molds gradually destroy the things they grow on, if mold growth is not addressed promptly, some items may be damaged such that cleaning will not restore their original appearance. If mold growth is heavy and items are valuable or important, you may wish to consult a restoration/water damage/remediation expert. Please note that these are guidelines; other cleaning methods may be preferred by some professionals.

\* Use professional judgment to determine prudent levels of Personal Protective Equipment and containment for each situation, particularly as the remediation site size increases and the potential for exposure and health effects rises. Assess the need for increased Personal Protective Equipment if, during the remediation, more extensive contamination is encountered than was expected. These guidelines are for damage caused by clean water. If you know or suspect that the water source is contaminated with sewage, or chemical or biological pollutants, then the Occupational Safety and Health Administration (OSHA) requires PPE and containment. An experienced professional should be consulted if you and/or your remediators do not have expertise in remediating contaminated water situations.

**Containment of Affected Materials: Total Surface Area Affected Between 10 and 100 Square Feet (All Surfaces)**

Use polyethylene sheeting ceiling to floor around affected area with a slit entry and covering flap; maintain area under negative pressure with HEPA filtered fan unit. Block supply and return air vents within containment area.

**Total Surface Area Affected Greater Than 100 Square Feet or Potential for Increased Occupant or Remediator Exposure During Remediation Estimated to be Significant**

Use two layers of fire-retardant polyethylene sheeting with one airlock chamber. Maintain area under negative pressure with HEPA filtered fan exhausted outside of building. Block supply and return air vents within containment area.

**SANITIZATION**

SaniDate 5.0 Sanitizer/Disinfectant is for use in circulation cleaning and institutional/industrial sanitizing of pre-cleaned, hard, non-porous, food contact surfaces and equipment such as tanks, pipelines, beverage dispensing equipment, evaporators, filters, pasteurizers, and aseptic systems. The main areas of use include:

- Dairies, wineries, breweries, and beverage plants
- Meat and meat product processing, packing, and rendering plants
- Milk and dairy processing/packing plants
- Egg processing/packing plants
- Seafood and poultry processing/packing plants
- Fruit and vegetable processing/packing plants
- Eating establishments
- Animal hospitals, laboratories, and housing facilities
- Schools, colleges, office buildings, industrial facilities
- Farms, farm equipment, and harvesting equipment
- Hairdressing salons/barber shops

SaniDate 5.0 Sanitizer/Disinfectant is an effective inanimate, hard surface sanitizer against fungus, mold, and bacteria such as *Escherichia coli* and *Staphylococcus aureus*. Use as a sanitizer on hard, non-porous 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, drains, piping, commercial, municipal, and process water transfer and handling systems, filter housings, vats, tanks, pumps, valves and systems.

SaniDate 5.0 Sanitizer/Disinfectant is an effective sanitizer for hard, non-porous personal equipment such as boots, gloves, hard hats, raingear, tools and equipment including but not exclusive to buckets, pails, scrapers, squeegees, brooms, mops, shovels, rakes, hooks, wrenches, and screwdrivers.

SaniDate 5.0 Sanitizer/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.

#### **SANITIZING PRE-CLEANED, HARD, NON-POROUS FOOD CONTACT SURFACES:**

- Tanks, vats, piping systems, pumps, filters, evaporators, clean-in-place systems, pasteurizers and aseptic equipment used in dairies, breweries, wineries, beverage, and food processing plants.
- Conveyors, boxing or packing equipment, peelers, corers, de-boners, scrapers, collators, slicers, dicers, knives, saws, cutting boards, tabletops, trays, pans, racks, platters, and cans.

#### **Clean equipment such as tanks immediately after use:**

1. Remove all products from equipment unless treating only the return portion of a conveyor.
2. Remove gross food particulate matter and soil by a warm water flush, or pre-flush, or a pre-scrape and, when necessary, pre-soak treatment.
3. Thoroughly wash surfaces or equipment with a good detergent or compatible cleaning solution. Rinse equipment with potable water.
4. Add 1.6 to 1.7 liquid ounces SaniDate 5.0 Sanitizer/Disinfectant to 5 gallons of potable water, and apply by wiping, mopping, or coarse spray, or by adding to closed system.
5. If applicable, fill closed systems with diluted sanitizer solution at a temperature of 5°C (41°F) to 40°C (104°F).
6. Allow a contact time of one (1) minute.
7. Allow items and/or surfaces to drain thoroughly before resuming operation. No potable water rinse is required.

#### **SANITIZING GENERAL ENVIRONMENTAL SURFACES (non-food contact):**

- 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 tiles, and other 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, grocery 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 establishments.
- Animal hospitals, veterinary clinics, animal life science laboratories, catteries, kennels, kennel runs, cages, feeding and watering equipment, pet shops, zoos, pet animal quarters, poultry premises, trucks, hatcheries, and livestock quarters and pens.

#### **Pre-Cleaned Surfaces:**

1. Remove gross filth with a cleaner or other suitable detergent.
2. Add 1.6 to 1.7 liquid ounces SaniDate 5.0 Sanitizer/Disinfectant to 5 gallons of potable water. Soak items in/with diluted solution using mop/wipe, coarse spray or flood techniques.
3. Allow contact for at least (1) one minute.
4. Allow items and/or surfaces to air dry. No potable water rinse is required.

#### **SANITIZING OF EATING ESTABLISHMENT EQUIPMENT (such as plates, utensils, cups, glasses):**

1. Scrape/pre-wash plates, utensils, cups, glasses, etc. whenever possible.
2. Wash all items with a detergent.
3. Rinse thoroughly with potable water.
4. Add 1.6 to 1.7 liquid ounces SaniDate 5.0 Sanitizer/Disinfectant to 5 gallons of potable water. Immerse all items for at least 1 minute or for a contact time as specified by a local governing sanitizing code.
5. Place all sanitizing items on a rack or drain board to air dry. No potable water rinse is required.

#### **SANITIZING OF TABLEWARE IN LOW TO AMBIENT TEMPERATURE WARE WASHING MACHINES**

1. Prepare solution by adding 1.6 to 1.7 liquid ounces SaniDate 5.0 Sanitizer/Disinfectant to 5 gallons of potable water.
2. Inject solution into final rinse water. Solution must contact tableware for a minimum of 1 minute.
3. Place all sanitizing items on a rack or drain board to air dry. No potable water rinse is required.

#### **FINAL SANITIZING BOTTLE RINSE FOR PLASTIC, GLASS, OR METAL RETURNABLE AND NON-RETURNABLE BOTTLES/CANS.**

1. Wash bottles with detergent or cleaning solution and rinse with potable water.
2. Prepare solution by adding 1.6 to 1.7 liquid ounces SaniDate 5.0 Sanitizer/Disinfectant to 5 gallons of potable water.
3. Rinse bottles/cans with the diluted solution for a minimum of 1 minute.
4. Place all bottles/cans on a rack or drain board to air dry. No potable water rinse is required.

#### **SANITIZING CONVEYORS FOR MEAT, POULTRY, SEAFOOD, FRUITS, AND VEGETABLES**

1. Remove all products from equipment.
2. Prepare solution by adding 1.6 to 1.7 SaniDate 5.0 Sanitizer/Disinfectant liquid ounces to 5 gallons of potable water.
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 for a minimum of 60 seconds contact time. Control the volume of solution so as to permit maximum drainage and to prevent puddles.

4. Allow equipment to drain dry before using. No potable water rinse is required.

#### **DISINFECTION**

SaniDate 5.0 Sanitizer/Disinfectant may be used as a disinfectant at a rate of 0.5 fl. oz. in 1 gallon of water in general commercial environments such as:

- Schools, colleges, industrial facilities, dietary areas, office buildings, recreational facilities, retail and wholesale establishments.
- Animal hospitals, veterinary clinics, animal life science laboratories, kennels, kennel runs, catteries, cages, feeding and watering equipment, pet shops, zoos, pet animal quarters, poultry premises, trucks, hatcheries, live stock quarters, stables, stalls, and pens.
- Packinghouses, food processing and rendering plants
- Farms, farm equipment and harvesting equipment
- Healthcare facilities
- Commercial floral shops
- Hairdressing salons/barber shops
- Pharmaceutical/cosmetic facilities

SaniDate 5.0 Sanitizer/Disinfectant disinfects as it cleans in one operation. It is effective against gram positive and negative bacteria (vegetative forms) such as *Xanthomonas axonopodis*, *Staphylococcus aureus*, *Pseudomonas aeruginosa*, *Salmonella enterica*, *Pediococcus damnosus*, *Lactobacillus malefermentans*, and can be used to clean, disinfect, and deodorize floors, walls and other hard, nonporous surfaces such as tables, chairs, countertops, garbage bins/cans, 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 polyethylene, stainless steel, or glass.

When applied at recommended disinfectant rates, SaniDate 5.0 Sanitizer/Disinfectant is also effective as a fungicide against *Trichophyton mentagrophytes*.

#### **CLEANING OF SURFACES IN PREPARATION FOR DISINFECTION**

Prepare SaniDate 5.0 Sanitizer/Disinfectant disinfecting solution by adding 1 fl. oz. of the product to 1 gallon of potable water. Remove gross filth from surfaces to be disinfected by cleaning with SaniDate 5.0 Sanitizer/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 0.5 fl. oz. per gallon for hard, non-porous surfaces that are lightly soiled or have been pre-cleaned to remove gross contamination. For heavily soiled, hard non-porous surfaces use a rate of 1 fl. oz per

1 gallon of water. Apply solution with mop, cloth, sponge, brush, scrubber, or coarse spray device or by soaking so as to wet all surfaces thoroughly. Allow surface to remain wet for ten (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 5.0 Sanitizer/Disinfectant by adding 1 fl. oz. of the product to 1 gallon of potable water. Remove gross filth from surfaces by cleaning with SaniDate 5.0 Sanitizer/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 cleaning.

#### **DISINFECTING HOSPITALS, DENTAL OFFICES, NURSING HOMES, AND OTHER HEALTH CARE INSTITUTIONS**

For disinfecting hard, non-porous surfaces such as floors, walls, countertops, bathing areas, lavatories, bed frames, tables, chairs, and garbage pails. For heavily soiled surfaces, a pre-cleaning step is required.

Add 2.5 - 5 fl. oz. of SaniDate 5.0 Sanitizer/Disinfectant to 5 gallons of water. Treated surfaces must remain wet for ten (10) minutes. At this dilution, SaniDate 5.0 Sanitizer/Disinfectant is an effective bactericide against: *Staphylococcus aureus*, *Pseudomonas aeruginosa*, *Salmonella enterica*, *Pedococcus damnosus*, and *Lactobacillus malefermentans*.

#### **DISINFECTING PHARMACEUTICAL AND COSMETIC SURFACES**

SaniDate 5.0 Sanitizer/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 0.5 fl. oz. per 1 gallon of water for pre-cleaned or lightly soiled surfaces to disinfect.

#### **DISINFECTING HAIRDRESSING SALON/ BARBER SHOP INSTRUMENTS AND TOOLS**

Immerse pre-cleaned barber/salon tools (combs, brushes, razors, manicure/pedicure tools, clippers, scissors, trimmer blades) in a solution of SaniDate 5.0 Sanitizer/Disinfectant at a dilution of 1:256 or 0.5 fl. oz. per gallon of water, for at least ten (10) minutes. Rinse instruments thoroughly and dry before reuse. A fresh use-solution should be prepared daily or more often if the use solution becomes cloudy or soiled. Note: Plastics may remain immersed until ready to use. Stainless steel shears and instruments must be removed after 10 minutes, rinsed, dried and kept in a clean non-contaminated receptacle. Prolonged immersion may cause damage to stainless steel or metal instruments.

#### **FIELD EQUIPMENT DISINFECTION**

SaniDate 5.0 Sanitizer/Disinfectant may be used to disinfect harvest equipment such as pickers, harvesters, 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 axonopodis* (citrus canker surrogate). This product can also be used to disinfect surfaces contaminated with *Staphylococcus aureus*, *Pseudomonas aeruginosa*, *Salmonella enterica*, *Pedococcus damnosus*, and *Lactobacillus malefermentans*. When applied at recommended disinfectant rates, SaniDate 5.0 Sanitizer/Disinfectant is also effective as a fungicide against *Trichophyton mentagrophytes*.

1. Before disinfection, move the field equipment into an area with an impervious surface and with controlled drainage. Ensure that no disinfection solution will be released into the environment.
2. Remove gross contamination with a cleaner or other suitable detergent and rinse with water.
3. For *Xanthomonas axonopodis*, use SaniDate 5.0 Sanitizer/Disinfectant at a dilution rate of 1:1,000 or 0.65 fl. oz per 5 gallons of water, as a general coarse spray. For bacteria such as *P. aeruginosa*, *S. enterica*, and *S. aureus*, use SaniDate 5.0 Sanitizer/Disinfectant at a dilution rate of 1:256 (0.5 fl. oz/gal) as a general coarse spray.
4. Allow solution to contact surface for ten (10) minutes.
5. Allow to air dry, do not rinse.

#### **ANIMAL HEALTH**

SaniDate 5.0 Sanitizer/Disinfectant is designed for use in animal hospitals, animal laboratories, kennels, pet shops, zoos, pet animal quarters, poultry premises, poultry hatcheries, livestock and dairy quarters. When used as directed, it is specifically designed to disinfect, deodorize and clean inanimate, hard, non-porous surfaces such as walls, floors, sink tops, furniture, operation tables, kennel runs, cages and feeding and watering equipment. In addition it will disinfect bins and cans, and any other hard, non-porous 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 Premises, Trucks, Coops, and Crates**

1. Remove all poultry and feeds from premises, trucks, coops and crates.
2. Remove all litter 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 water.
5. Saturate all surfaces with a solution of 0.5 fl. oz. per 1 gallon of water for a period of ten (10) minutes.
6. Immerse all types of equipment used in handling and restraining poultry, 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 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 feeds 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 0.5 fl. oz. per 1 gallon of water for period of ten (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.

#### **Disinfection and Deodorizing of Animal Housing Facilities (Barns, Kennels, Hutches)**

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.
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 0.5 fl. oz. per 1 gallon of water for a period of ten (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, cars, boats 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.

#### **Terrarium and Small Animal Cage and Cage Furniture Disinfection**

1. Remove all animals and feed from enclosure to be cleaned.
2. Thoroughly clean all surfaces and objects (hot rocks, caves, cage furniture, feeding and watering dishes, and appliances) including the substrate in the terrarium or cage with soap or detergent and rinse with water.
3. Saturate all surfaces (floors, walls, cages and other washable hard, non-porous environmental surfaces) with a solution of 0.5 fl. oz. per 1 gallon of water for a period of ten (10) minutes. For smaller surfaces, use a trigger spray bottle to spray all surfaces with solution until wet. Then wipe surfaces dry.
4. Saturate gravel as above and let stand for 10 minutes. Place in bucket of clean water and swirl for 15-30 seconds. Thoroughly air dry before returning to terrarium.
5. Thoroughly scrub all treated surfaces with soap or detergent and rinse with potable water before reuse.
6. Do not return animals to the habitat until it is dry and ventilated.
7. Clean terrarium at least once weekly or more as needed.

**Note:** Substrates for desert terrariums (i.e. gravel) must be completely dry before returning to terrarium to avoid high humidity levels. Always replace substrate if a foul odor persists.

#### **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 0.5 – 1.0 fl. oz. of SaniDate 5.0 Sanitizer/Disinfectant per gallon of water and add to foot bath mat, pad or tray, filling to capacity.
3. Place boots and shoes in the foot bath mat, pad or tray containing the recommended solution of SaniDate 5.0 Sanitizer/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 foaming solution. Follow foaming directions as specified by the manufacturer of the foam generator/aerator.

#### **DISINFECTION OF WATER FILTER MEDIA, MEMBRANES AND RELATED COMPONENTS AND SYSTEMS**

SaniDate 5.0 Sanitizer/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. It 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.

For filter media disinfection applications, use a rate of 0.1 - 1 fl. oz. per gallon, and allow to soak for ten (10) minutes. Drain filter media and then rinse with clean water. Prior to producing product water (Permeate), test a sample of the permeate using BioSafe Systems Test Strips to determine the level of active ingredients remaining in the permeate.

For clean in place (CIP) applications involving filters, use a rate of 2.5 to 10.25 fl. oz. per 100 gallons. Re-circulate solution for a minimum of 10 minutes. Upon completion of cleaning cycle, flush filter housings and/or assemblies with clean water. Test a sample of water being used to flush filter media with BioSafe Systems Test Strips to determine levels of active ingredients remaining in the flush water.

For direct disinfection of membranes, use a solution of 0.1 fl. oz. per 1 gallon of water, or 0.5 fl. oz. for 5 gallons of water, within 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 membrane CIP systems, use a dilution rate of 2.5 – 10.25 fl. oz. per 100 gallons within a pH of 3-7 and a maximum water temperature of 80 Degrees F. After thorough draining of the solution, rinse the media thoroughly with clean or sterile water for a minimum of ten (10) minutes. Test sample of flush water with BioSafe Systems Test Strips to determine remaining active ingredient levels.

To calculate the 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.

#### **TREATMENT OF COOLING WATER SYSTEMS (such as cooling towers, evaporative condensers)**

Severely fouled systems should be cleaned before treatment. Discontinue use of chlorine or bromine products prior to using this product. SaniDate 5.0 Sanitizer/Disinfectant should be added to the system directly and not mixed with other chemicals or additives prior to dosing. Other chemicals should be added separately. Check compatibility of SaniDate 5.0 Sanitizer/Disinfectant with any other chemicals or additives prior to use. Contamination with certain chemicals could result in lack of efficacy. Add SaniDate 5.0 Sanitizer/Disinfectant at a point in the system where uniform mixing and even distribution will occur such as the cooling tower basin sump. Shock doses may be applied for 1 to 2 hours, as necessary, whereas intermittent doses are applied for 5 to 60 minutes 1 to 100 times per day. For either shock, intermittent or continuous dosing, apply 3.2 fl oz to 22.5 fl. oz. of SaniDate 5.0 Sanitizer/Disinfectant solution per 1,000 gallons of water. This will provide 25 to 175 ppm of SaniDate 5.0 Sanitizer/Disinfectant, or 1 to 9 ppm of peroxyacetic acid. Repeat treatment as required to maintain control.

#### **COMMERCIAL FLORIST USE DIRECTIONS (Not for use in California)**

To clean, disinfect, and deodorize hard, non-porous surfaces, prepare use solution by adding 0.5 - 1 fl. oz. for one gallon of water.

1. Remove all leaves, petals, garbage, and refuse. Pre-clean surfaces using pressurized water where possible.
2. Apply SaniDate 5.0 Sanitizer/Disinfectant solution to hard (inanimate) non-porous surfaces thoroughly wetting surfaces as recommended and required with a cloth, mop, brush, sponge, or sprayer.
3. Allow treated surfaces to remain wet for ten (10) minutes.
4. Ventilate treated surfaces and allow to air dry.
5. Prepare a fresh solution at least daily or sooner if use solution becomes visibly dirty.

#### **DISINFECTION OF HARD, NON-POROUS FOOD-CONTACT SURFACES IN FOOD PROCESSING PLANTS AND FOOD SERVICE ESTABLISHMENTS**

Before using this product, food products and packaging materials must be removed from area or carefully protected.

1. Prior to use of this product, remove gross soil particles from surfaces to be treated. For heavily soiled surfaces, a pre-wash is required.
2. Apply 0.5 fl. oz of SaniDate 5.0 Sanitizer/Disinfectant per gallon of water with a mop, cloth, sponge, or hand trigger spray so as to wet all surfaces thoroughly.
3. Allow to remain wet with solution for ten (10) minutes.

4. Rinse all treated surfaces thoroughly with potable water before operations are resumed.

#### **DISINFECTION OF NON-FOOD CONTACT PACKAGING EQUIPMENT**

1. Prior to use of this product, remove gross soil particles from surfaces to be treated. For heavily soiled surfaces, a pre-wash is required.
2. For disinfection against beverage spoilage organisms that include *Pediococcus damnosus*, *Lactobacillus malefermentans*, and *Saccharomyces cerevisiae* apply 0.5 fl. oz. of SaniDate 5.0 Sanitizer/Disinfectant per gallon of water to surfaces at a temperature of 25° to 45° C.
3. Allow to remain wet with solution for ten (10) minutes.
4. Rinse surfaces thoroughly with potable water before operations are resumed.

#### **PACKINGHOUSE, FOOD PROCESSING AND RENDERING PLANT DISINFECTION**

SaniDate 5.0 Sanitizer/Disinfectant is effective against *Xanthomonas axonopodis*, *Staphylococcus aureus*, *Pseudomonas aeruginosa*, *Salmonella enterica*, *Pediococcus damnosus*, and *Lactobacillus malefermentans*.

When applied at recommended disinfectant rates, SaniDate 5.0 Sanitizer/Disinfectant is also effective as a fungicide against *Trichophyton mentagrophytes*.

Cover or remove all food and packaging materials before disinfection.

For Pre-Cleaned Surfaces: Use a rate of 0.5 fl. oz per gallon for hard non-porous surfaces that are lightly soiled or have been pre-cleaned to remove gross contamination.

To Fog Dairy, Beverage, and Food Processing Plants: SaniDate 5.0 Sanitizer/Disinfectant can be used as an adjunct to acceptable manual cleaning and disinfecting to treat hard, non-porous room surfaces.

1. Remove gross filth from surfaces to be treated.
2. Prior to fogging, remove or carefully protect all food product and packaging materials.
3. Ensure room is properly ventilated. Vacate all personnel from the room during fogging and for a minimum of 1 hour after fogging, to ensure that there is no strong odor, which is characteristic of acetic acid, before having personnel return to work area.
4. Fog desired areas using 1 quart per 1,000 feet of room area with a solution of 1 fl. oz. of SaniDate 5.0 Sanitizer /Disinfectant per gallon of potable water (0.25 fl. oz. per quart of potable water) or a dilution rate of 1:125.
5. Allow surfaces to drain thoroughly before operations are resumed. Any food contact surfaces must be rinsed with potable water prior to re-use.

#### **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 0.5 – 1.0 fl. oz. of SaniDate 5.0 Sanitizer/Disinfectant per gallon of water and add to foot bath mat, pad or tray, filling to capacity.
3. Place boots and shoes in the foot bath mat, pad or tray containing the recommended solution of SaniDate 5.0 Sanitizer/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 foaming solution. Follow foaming directions as specified by the manufacturer of the foam generator/aerator.

#### **POST HARVEST TREATMENTS IN PACKING HOUSES**

##### **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 0.5 fl. oz. of SaniDate 5.0 Sanitizer/Disinfectant for every 10 gallons of water or use a dilution rate of 1:1,000.

##### **For direct injection into spray waters used on process lines**

Treat water containing plant pathogens by injecting SaniDate 5.0 Sanitizer/Disinfectant directly into spray system water with 0.5 fl. oz. of concentrate for every 100 gallons of water or use a dilution rate of 1:2,500. Applicable for use on all types of post-harvest commodities.

##### **For post-harvest spray treatments on process and packing lines**

Inject SaniDate 5.0 Sanitizer/Disinfectant directly into spray system water on process and packing lines to prevent bacterial and fungal diseases on post-harvest fruits and vegetables. Inject at a rate of 1:250 - 1:2,500 concentrate to clean water. For best results, where dump tanks are used, make post-harvest spray treatment as produce is leaving dump tanks. Applicable for use on all types of post harvest commodities.

##### **For direct injection into dump tanks, hydro coolers, spray system and process waters**

For treatment of water containing plant pathogens, inject SaniDate 5.0 Sanitizer/Disinfectant and maintain a predetermined residual level by using metering equipment, coupled with ORP measuring probes.

1. Determine biological organic loading prior to treatment if possible.
2. For waters that contain low levels of biological and organic loading inject SaniDate 5.0 Sanitizer/Disinfectant at 1.07 - 0.535 fl. oz. of concentrate for every 100 gallons of water or at a dilution rate of 1:5000 – 10,000.
3. For clean water, inject 0.535 - 0.2675 fl. oz. of SaniDate 5.0 Sanitizer/Disinfectant for every 100 gallons of water or a dilution rate of 1:10,000- 1:20,000 to prevent the formation of algae, bacteria and fungi.

#### **BACTERIOSTATIC**

At 0.5 fl. oz. per 1 gallon of water, SaniDate 5.0 Sanitizer/Disinfectant is effective at inhibiting the growth of bacteria when used in the presence of 400 ppm hard water and organic soil. This product can be used on 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 (such as polypropylene and polyethylene), stainless steel, or glass.

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## **BioSafe Systems** L.L.C.

For additional information on SaniDate® 5.0 call us toll-free at 1.888.273.3088 or visit [www.biosafesystems.com](http://www.biosafesystems.com).

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