



U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Pesticide Programs
Biopesticides and Pollution Prevention Division (7511P)
1200 Pennsylvania Ave., N.W.
Washington, D.C. 20460

EPA Reg. Number:

70299-28

Date of Issuance:

12/28/2018

NOTICE OF PESTICIDE:

☒ Registration
☐ Reregistration
(under FIFRA, as amended)

Term of Issuance:

Unconditional

Name of Pesticide Product:

Oxide 5.0

Name and Address of Registrant (include ZIP Code):

BioSafe Systems, LLC
22 Meadow St.
East Hartford, CT 06108

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

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

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

This product is unconditionally registered in accordance with FIFRA section 3(c)(5) provided that you:

1. Submit and/or cite all data required for registration or registration review of your product when the EPA requires all registrants of similar products to submit such data.
2. Make the following labeling change before you release this product for shipment:
 - Revise the EPA Registration Number to read, "EPA Reg. No. 70299-28."

Signature of Approving Official:

Andrew Bryceland, Team Leader
Biochemical Pesticides Branch
Biopesticides and Pollution Prevention Division (7511P)
Office of Pesticide Programs

Date:

12/28/2018

3. Submit one (1) copy of the final printed labeling for the record before you release this product for shipment.

Should you wish to add/retain a reference to your company's website on your label, then please be aware that the website becomes labeling under FIFRA and is subject to review by the EPA. If the website is false or misleading, the product will be considered to be misbranded and sale or distribution of the product is unlawful under FIFRA section 12(a)(1)(E). 40 CFR § 156.10(a)(5) lists examples of statements the 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 EPA 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 Assurance.

Your release for shipment of this product constitutes acceptance of these terms. If these terms are not complied with, this registration will be subject to cancellation in accordance with FIFRA section 6. A stamped copy of the labeling is enclosed for your records. Please also note that the record for this product currently contains the following acceptable Confidential Statements of Formula (CSFs):

- Basic CSF dated 05/23/2018
- Alternate CSF #1 dated 05/23/2018

Any CSFs other than those listed above are superseded.

If you have any questions, please contact Menyon Adams of my team by phone at (703) 347-8496 or via email at adams.menyon@epa.gov.

Sincerely,

A handwritten signature in blue ink, reading "Andrew C. Bryceland".

Andrew Bryceland, Team Leader
Biochemical Pesticides Branch
Biopesticides and Pollution
Prevention Division (7511P)
Office of Pesticide Programs

Enclosure

OxiDate[®] 5.0

Broad Spectrum Bactericide, Fungicide and Algacide

Sublabel A: Horticultural and Turf

Sublabel B: Agricultural

(Alternative Brand Names: OxiDate 5.0, OxiDate Tree and Vine, ZeroTol 5.0)

ACTIVE INGREDIENTS: Hydrogen Peroxide 27.00%

Peroxyacetic Acid 5.00%

OTHER INGREDIENTS: 68.00%

TOTAL: 100.00%

ACCEPTED

12/28/2018

Under the Federal Insecticide, Fungicide
and Rodenticide Act as amended, for the
pesticide registered under
EPA Reg. No. 70299-28

EPA Registration No. 70299-XX

EPA Establishment No: 089546-NV-001, 082521-GA-001, 92957-MI-001, 067441-IL-001

Manufactured by:

BioSafe Systems, LLC

22 Meadow Street

East Hartford, CT 06108

(888) 273-3088

Net Contents: (1, 2.5, 5, 30, 55, 275, 330 gallons)

OxiDate 5.0; EPA Reg. No. 70299-XX

New Registration

Label version (1) dated May 23, 2018

Sublabel A: Horticultural and Turf

OxiDate[®] 5.0

Broad Spectrum Bactericide, Fungicide and Algacide

FOR HORTICULTURAL AND TURF USE

ACTIVE INGREDIENTS: Hydrogen Peroxide 27.00%
Peroxyacetic Acid 5.00%
OTHER INGREDIENTS: 68.00%
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	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• Call poison control center or doctor immediately for treatment advice.• Have person sip a glass of water if able to swallow.• Do not induce vomiting unless told to do so by the poison control center or doctor.• Do not give anything by mouth to an unconscious person.
If inhaled	<ul style="list-style-type: none">• Move person to fresh air.• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.• Call a poison control center or doctor for further treatment advice
HOTLINE Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For emergency information on OxiDate 5.0, call the National Pesticides Information Center at 1-800-858-7378, 6:30AM to 4:30 PM Pacific Time (PT), seven days a week. During other times, call the Poison Control Center at 1-800-222-1222.	
NOTE TO PHYSICIAN Probable mucosal damage may contraindicate the use of gastric lavage.	

See (back) (side) (inside) (panel) (booklet) for first aid, additional precautionary statements and directions for use.

EPA Registration No. 70299-XX

Net Contents: (1, 2.5, 5, 30, 55, 275, 330 gallons)

EPA Establishment No. 089546-NV-001, 082521-GA-001, 92957-MI-001, 067441-IL-001

Batch Code _____

Manufactured by:
BioSafe Systems, LLC
22 Meadow Street
East Hartford, CT 06108
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OxiDate 5.0; EPA Reg. No. 70299-XX
New Registration
Label version (1) dated May 23, 2018

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS
DANGER

CORROSIVE: Causes irreversible eye damage. Causes skin irritation or temporary discoloration on exposed skin. Harmful if absorbed through skin. May be fatal if swallowed. Do not breathe vapor. Do not get in eyes, on skin or on clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

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 and maintaining PPE. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product. Do not reuse them. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

USER SAFETY RECOMMENDATIONS

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

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. Treated seed exposed on soil surface may be hazardous to birds, wildlife, fish and aquatic invertebrates. Cover or collect seeds spilled during loading. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high-water mark. Do not contaminate water when disposing of equipment washwaters or rinsate. Do not apply directly to treated, finished drinking water reservoirs or drinking water receptacles when the water is intended for human consumption.

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.

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.

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.

For enclosed environments:

There is a restricted entry of one (1) hour for this product when applied via spraying to growing plants, surfaces, equipment, structures and non-porous surfaces in enclosed environments such as glasshouses and greenhouses. PPE requirement for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil or water, is coveralls worn over long-sleeved shirt and pants, waterproof gloves and shoes plus socks.

There is a restricted entry of zero (0) hours for pre-plant dip, seed treatment, soil drench, mop, sponge, dip, soak, rinse or other non-spraying application methods when used in enclosed environments such as glasshouses and greenhouses.

For field applications:

Keep unprotected persons out of treated areas until sprays have dried.

Non-Agricultural Use Requirements

The requirements in this box apply to uses of this product that are **not** within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries or greenhouses.

Keep unprotected persons out of treated areas until sprays have dried.

INTRODUCTION

OxiDate 5.0 is a liquid bactericide/fungicide used to treat and control plant pathogens on greenhouse grown vegetables, ornamental plants and turf. Use OxiDate 5.0 as a foliar treatment for suppressing the following foliar diseases: Bacterial Leaf Spot/Blight caused by *Xanthomonas* and *Pseudomonas*, Fungal Leaf Spots/Blights, *Anthracnose* Black Spot, Botrytis Blight, Downy Mildew – *Erwinia* Soft Rot, Powdery Mildew, Leaf Rust, Scab, White Mold.

Use OxiDate 5.0 as a soil/media drench to control soil borne pathogens such as *Fusarium* spp., *Phytophthora* spp., *Pythium* spp. *Rhizoctonia* spp. and *Thielaviopsis* spp., *Ralstonia solanacearum* (causing Bacterial wilt).

Use OxiDate 5.0 to treat/control plant pathogens on bedding plants, flowering plants, roses, poinsettia, ornamentals, turf, synthetic/artificial turf, [cut flowers, bulbs, cuttings, seedlings, seeds and seedbeds.]

Use OxiDate 5.0 to treat and control plant pathogens on trees and nursery stock.

OxiDate 5.0 is a liquid bactericide/fungicide used to treat and control plant pathogens on greenhouse-grown fruits, vegetables and herbs. Apply OxiDate 5.0 up to and including the day of harvest. See the label for a complete list of plant pathogens.

Apply OxiDate 5.0 to treat/control bacteria, fungi and algae on greenhouse structures, benches, pots, watering systems, evaporative coolers, storage rooms, ventilation equipment, floors and other equipment (*optional text: turf equipment, irrigation systems and structures*).

Solution Preparation:

OxiDate 5.0 works best when diluted with water containing low levels of organic or inorganic materials and having a neutral pH (pH value of 7.0). pH can be measured using a pH meter or indicator test strips. Measuring total suspended solids and EC (Electrical Conductivity) can help in determining concentration of organic and inorganic content in the water. Thoroughly rinse out mixing tank with water before mixing. OxiDate 5.0 will readily mix with clean, neutral water and does not require agitation.

OxiDate 5.0 is formulated with minimal surfactant for plants having waxy or hairy surfaces. In order to increase the effectiveness of OxiDate 5.0, additional non-ionic surfactant may be added, for treatment of plants with difficult to reach surfaces, or for plants having waxy or hairy surfaces. Only non-ionic surfactants are compatible with OxiDate 5.0.

OxiDate 5.0 works by surface contact with the plants and materials being treated. It is important to ensure that all surfaces are thoroughly wetted. OxiDate 5.0 does not produce any visible residue, distinct odor or deleterious effects to plants when used in accordance with label directions.

Tank mixes of metal-based chemicals and OxiDate 5.0 that have a pH of less than 7.0 may cause excessive foaming and phytotoxicity. Consult specific product labels for additional information or restrictions concerning tank mixing. Observe the most restrictive limitations and precautions of the labeling of all products used in mixtures.

OxiDate 5.0 is a strong oxidizing agent and may react with residues of metal-based fungicides or supplements. Do not apply OxiDate 5.0 as a foliar spray immediately following foliar applications of metal-based products. Allow at least 24 hrs. after application of metal-based products before applying OxiDate 5.0 as a foliar spray. Check the label of the metal-based product prior to application for specific instructions for use with other fungicide products.

Note: Use spray solution the same day it is prepared, do not store and reuse mixed spray solution.

Compatibility:

OxiDate 5.0 is compatible as a direct injection or tank-mix with many commonly used pesticides, fertilizers, adjuvants and non-ionic surfactants but has not been fully evaluated with all of these. Do not direct inject or tank mix OxiDate 5.0 in to the irrigation system or in spray tank with pesticides, surfactants or fertilizers before conducting a compatibility test to show it is physically compatible, effective and non-injurious under your use conditions. Do not tank mix OxiDate 5.0 with copper or other pesticide containing metals at a dilution rate stronger than 1:100.

To ensure compatibility, evaluate them prior to use as follows: Using a suitable container, add proportional amounts of product to water. Add wettable powders first, followed by water dispersible granules, then by liquid flowables and lastly, emulsifiable concentrates. Mix thoroughly and let stand for at least five minutes. If the combination stays mixed or can be remixed, it is physically compatible. Test the combination on a small portion of the crop to be treated to ensure that a phytotoxic response will not occur as a result of application.

Plant Sensitivity Testing:

For foliar applications, only use OxiDate 5.0 at labeled dilutions. Solutions more concentrated than prescribed on this label may result in leaf necrosis for some plants. OxiDate 5.0 has been designed to provide a balanced source of the active ingredient directly to the plant surface. OxiDate 5.0 has been used and tested on many varieties of plant material; however, the nature of the target plant, environmental conditions, plant vigor, and the use of other pesticides can all affect plant sensitivity to OxiDate 5.0. The safety of OxiDate 5.0 has not been determined on all plants and crops. Plants grown in greenhouses vary greatly from those grown under field conditions. Determine if OxiDate 5.0 can be safely used prior to application. Before treating large numbers of plants, test OxiDate 5.0 or tank mixes of OxiDate 5.0 and other pesticides or fertilizers at labeled rates on a separate set of plants and observe for symptoms of sensitivity prior to use. Symptoms on foliage include yellow or brown spotting, "burned" tips and/or yellow or brown scorching along the leaf edges.

When using OxiDate 5.0 for control of organisms living on the plant tissue (such as downy and powdery mildew), treatment may result in lesions on plant tissue. OxiDate 5.0 will oxidize parasitic organisms living in plant tissue that are not always visible to the naked eye. Resulting oxidative effects may include spotting, or drying of the plant tissue where organisms inhabited tissue.

Read the entire label before using this product. Use only according to label directions. Do not use OxiDate 5.0 above labeled rates.

USE RATES AND DIRECTIONS

GREENHOUSE FRUIT & VEGETABLE APPLICATIONS

Use OxiDate 5.0 to treat plant diseases on crops grown in commercial greenhouses through soil drench, irrigation and foliar applications. For specific foliar applications refer to **Application Instructions chart**.

Foliar Spray Treatments For Crops Grown In Greenhouses

OxiDate 5.0 works immediately on contact with any plant surface for control of plant diseases – see Application Instructions chart. Good coverage and wetting of the foliage is required. Do not spray OxiDate 5.0 during conditions of intense heat, drought or poor plant vigor.

Run a plant sensitivity test when considering using spray concentrations great than 0.39% v/v (1:256) by following instructions under “plant sensitivity testing”. If plants show symptoms of phytotoxicity, decrease the spray solution concentration to a level that does not demonstrate symptoms

Curative application rates:

- 1) For best results, apply at first sign of disease. Use a 1:256 dilution rate (50 fl. oz. of OxiDate 5.0 per every 100 gallons of clean water). Do not store and reuse mixed spray solution, prepare a fresh solution daily.
- 2) Spray or mist plants in morning or evening. Apply in 50 - 500 gallons of water (12 - 115 gallons per 10,000 sq. ft.), ensuring adequate coverage of upper and lower foliage, stems, branches and stalks. Final spray solution volume will depend on crop type, canopy size and/or growth stage.
- 3) Maintain a 3 -10 day spray schedule until control is achieved. Under heavy disease pressure or when conditions are favorable for rapid disease development; spray intervals can be shortened to 3 – 5 days.

Preventative application rates:

- 1) Begin applications early when plants are small. Use a rate of 1:800 - 1:500 (16 - 26 fl. oz. of OxiDate 5.0 per every 100 gallons of water).
- 2) Spray or mist plants in morning or evening. Apply in 50 - 500 gallons of water (12 - 115 gallons per 10,000 sq. ft.), ensuring adequate coverage of upper and lower foliage, stems, branches and stalks. Final spray solution volume will depend on crop type, canopy size and/or growth stage.
- 3) Maintain a 5 - 10 day spray schedule.

Rescue treatment rates:

- 1) Concentrations up to 1:100 (1 gallon of OxiDate 5.0 per every 100 gallons of water) can be used as a rescue treatment for severe infestations on berries (excluding strawberries), citrus crops, cucurbit crops and fruiting vegetables.
- 2) Always test for phytotoxicity by spraying on a few plants before using this rate on a large scale. Do not apply 1:100 rescue treatment rate while crops are in bloom.
- 3) Spray or mist plants in morning or evening. Apply in 50 - 500 gallons of water (12 - 115 gallons per 10,000 sq. ft.), ensuring adequate coverage of upper and lower foliage, stems, branches and stalks. Final spray solution volume will depend on crop type, canopy size and/or growth stage.
- 4) Maintain a 3 - 5 day spray schedule until control is achieved.

Electrostatic Spray Applications:

- For electrostatic sprayers, use the 1:256 curative rate applied in 10 - 25 gallons of spray solution per treated acre or 2.3 - 5.7 gallons per 10,000 sq. ft. Follow spray equipment manufacturer's instructions for final spray volume to obtain adequate coverage.

Soil or Soilless Media Drench Treatments For Crops Grown in Greenhouses

OxiDate 5.0 is effective for the control of soil-borne plant diseases caused by pathogens such as *Pythium*, *Phytophthora*, *Rhizoctonia*, *Ralstonia*, *Thielaviopsis* or *Fusarium*. Drench OxiDate 5.0 prior to planting or seeding, at planting and periodically throughout plant's life.

Applications Prior to Seeding or Transplanting:

- 1) Mix at a dilution of 1:256 - 1:100 (25 - 64 fl. oz. of OxiDate 5.0 per every 50 gallons of water).

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- 2) Drench soil or growing mediums to the point of saturation. To increase soil penetration, consider using a compatible wetting agent/non-ionic surfactant.
- 3) Wait at least fifteen minutes before planting or watering.
- 4) Wait one day following treatment before inoculating the soil with beneficial organisms.

Applications to Existing Plantings/ Post Seeding or Transplanting:

- 1) Mix at a dilution of 1:800 - 1:256 (8 – 25 fl. oz. of OxiDate 5.0 per every 50 gallons of water). **Note: for applications to rockwool and other soilless media do not apply more than 12.5 fl. oz. of OxiDate 5.0 per every 50 gallons of water (1:500).**
- 2) Drench soil or growing mediums to the point of saturation. To increase soil penetration, consider using a compatible wetting agent/non-ionic surfactant.
- 3) Wait one day following treatment before inoculating the soil with beneficial organisms.

Greenhouse Vegetables Rates and Directions Chart

Crop	Disease	Application Rates
Cane Berries/Small Fruits Blackberries Blueberries Raspberries	Anthracnose Botrytis (fruit rot or blight) Downy Mildew Mummy Berry Disease Cane Blight Leaf Rust Leaf Spot Powdery Mildew	Foliar Applications: see “Foliar Spray Treatments For Crops Grown In Greenhouses” directions Preventative: 1:800 – 1:500 dilution. Begin preventative sprays early in season, when new shoot growth appears. Maintain a 5-10 day spray schedule Curative: 1:256 dilution. Apply at first sign/symptom of disease. Maintain a 3 - 10 day spray schedule until control is achieved Rescue: 1:100 dilution. Apply under severe disease conditions. Maintain a 3 - 5 day spray schedule until control is achieved. DO NOT apply 1:100 rate to blooming crops.
	Mummy Berry Disease	Start sprays at green tip and continue until fruit. Use curative rate at first sign/symptom of disease.
	Botrytis Blight	Start sprays at pre-bloom and continue until end of bloom. Use curative rate at first sign/symptom of disease.
Strawberries	Anthracnose Angular Leaf Spot Botrytis (fruit rot or blight) Powdery Mildew	Foliar Applications: see “Foliar Spray Treatments For Crops Grown In Greenhouses” directions. Preventative: 1:800 – 1:500 dilution. Apply preventative sprays on a 5 - 10 day schedule with thorough coverage. Curative: 1:256 dilution. Apply at first sign/symptom of disease. Maintain a 3-10 day spray schedule until control is achieved.
	For control of damping off caused by soil borne pathogens.	Soil or Soilless Media Drench Applications: See “Soil or Soilless Media Drench Treatments for Crops Grown in Greenhouses” directions. Prior to Seeding or Transplanting: 1:256 – 1:100 dilution. Drench to the point of saturation. Existing Plantings/Post Seeding or Transplanting: 1:800 – 1:256 dilution. For rockwool and soilless media do not exceed a 1:500 dilution. Drench to the point of saturation.

Citrus Crops: Citrus Hybrids Grapefruit Kumquat Lemon Limes Orange Tangerine	Alternaria (leaf spot / blight) Anthracnose Greasy Spot Black Spot Rust Citrus Scab Citrus Canker	<p>Foliar Applications: see “Foliar Spray Treatments For Crops Grown In Greenhouses” directions.</p> <p>Preventative: 1:800 – 1:500 dilution. Begin sprays early in season. Maintain a 5 - 10 day spray schedule. Spray entire tree including trunk, branches, leaf canopy. Spray all areas where branches have been pruned, grafted or have become damaged or have apparent lesions or breaks in bark.</p> <p>Curative: 1:256 dilution. Spray diseased plants using OxiDate 5.0 treatment solution for one to three consecutive days until control is achieved, then continue treatments on a 5 - 10 day spray schedule.</p> <p>Rescue: 1:100 dilution. Apply under severe disease conditions. Maintain a 3 - 5 day spray schedule until control is achieved. DO NOT apply 1:100 rate to blooming crops.</p>
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Cole Crops: Broccoli Brussels Sprouts Cabbage Cauliflower Collards Kale	Alternaria Leaf Spot Bacterial Leaf Spot Black Rot Downy Mildew Early Blight Late Blight Powdery Mildew	<p>Foliar Applications: see “Foliar Spray Treatments For Crops Grown In Greenhouses” directions.</p> <p>Preventative: 1:800 – 1:500 dilution. Begin sprays early in season. Maintain a 5 - 10 day spray schedule.</p> <p>Curative: 1:256 dilution. Apply at first sign/symptom of disease. Maintain a 3 - 10 day spray schedule until control is achieved.</p>
	For control of damping off caused by soil borne pathogens.	<p>Soil or Soilless Media Drench Applications: See “Soil or Soilless Media Drench Treatments for Crops Grown in Greenhouses” directions.</p> <p>Prior to Seeding or Transplanting: 1:256 – 1:100 dilution. Drench to the point of saturation.</p> <p>Existing Plantings/Post Seeding or Transplanting: 1:800 – 1:256 dilution. For rockwool and soilless media do not exceed a 1:500 dilution. Drench to the point of saturation.</p>

Cucurbit Crops: Cucumber Melons Squash	Alternaria Anthracnose Belly Rot Downy Mildew Gummy Stem Blight Leaf Spot Powdery Mildew	<p>Foliar Applications: see “Foliar Spray Treatments For Crops Grown In Greenhouses” directions.</p> <p>Preventative: 1:800 – 1:500 dilution. Begin sprays early in season. Maintain a 5 - 10 day spray schedule.</p> <p>Curative: 1:256 dilution. Apply at first sign/symptom of disease. Maintain a 3 - 10 day spray schedule until control is achieved.</p> <p>Rescue: 1:100 dilution. Apply under severe disease conditions. Maintain a 3 - 5 day spray schedule until control is achieved. DO NOT apply 1:100 rate to blooming crops.</p>
	For control of damping off caused by soil borne pathogens	<p>Soil or Soilless Media Drench Applications: See “Soil or Soilless Media Drench Treatments for Crops Grown in Greenhouses” directions.</p> <p>Prior to Seeding or Transplanting: 1:256 – 1:100 dilution. Drench to the point of saturation.</p> <p>Existing Plantings/Post Seeding or Transplanting: 1:800 – 1:256 dilution. For rockwool and soilless media do not exceed a 1:500 dilution. Drench to the point of saturation.</p>

Fruiting Vegetables: Eggplant Peppers Tomatoes Tomatillos	Alternaria Anthracnose Belly Rot Downy Mildew Gummy Stem Blight Leaf Spot Powdery Mildew	<p>Foliar Applications: see “Foliar Spray Treatments For Crops Grown In Greenhouses” directions.</p> <p>Preventative: 1:800 – 1:500 dilution. Begin sprays early in season. Maintain a 5 - 10 day spray schedule.</p> <p>Curative: 1:256 dilution. Apply at first sign/symptom of disease. Maintain a 3 - 10 day spray schedule until control is achieved</p> <p>Rescue: 1:100 dilution. Apply under severe disease conditions. Maintain a 3 - 5 day spray schedule until control is achieved. DO NOT apply 1:100 rate to blooming crops.</p>
	For control of damping off caused by soil borne pathogens	<p>Soil or Soilless Media Drench Applications: See “Soil or Soilless Media Drench Treatments for Crops Grown in Greenhouses”</p> <p>Prior to Seeding or Transplanting: 1:256 – 1:100 dilution. Drench to the point of saturation</p> <p>Existing Plantings/Post Seeding or Transplanting: 1:800 – 1:256 dilution. For rockwool and soilless media do not exceed a 1:500 dilution. Drench to the point of saturation.</p>
Herbs & Spices: Basil Chives Cilantro Coriander Dill Medicinal Mint Oregano Rosemary Sage Other miscellaneous herbs	Anthracnose Downy Mildew Powdery Mildew	<p>Foliar Applications: see “Foliar Spray Treatments For Crops Grown In Greenhouses” directions.</p> <p>Preventative: 1:800 – 1:500 dilution. Apply preventative sprays as new shoots emerge on a 5 - 10 day schedule with thorough coverage.</p> <p>Curative: 1:256 dilution. Apply at first sign/symptom of disease. Maintain a 3 - 10 day spray schedule until control is achieved.</p>
	For control of damping off caused by soil borne pathogens	<p>Soil or Soilless Media Drench Applications: See “Soil or Soilless Media Drench Treatments for Crops Grown in Greenhouses” directions.</p> <p>Prior to Seeding or Transplanting: 1:256 – 1:100 dilution. Drench to the point of saturation.</p> <p>Existing Plantings/Post Seeding or Transplanting: 1:800 – 1:256 dilution. For rockwool and soilless media do not exceed a 1:500 dilution. Drench to the point of saturation.</p>
Leafy Vegetables: Lettuce Microgreens	Downy Mildew Powdery Mildew	<p>Foliar Applications: see “Foliar Spray Treatments For Crops Grown In Greenhouses” directions.</p> <p>Preventative: 1:800 – 1:500 dilution. Apply preventative sprays as new shoots emerge on a 5-10 day schedule with thorough coverage.</p> <p>Curative: 1:256 dilution. Apply at first sign/symptom of disease. Maintain a 3 - 10 day spray schedule until control is achieved.</p>
	For control of damping off caused by soil borne pathogens	<p>Soil or Soilless Media Drench Applications: See “Soil or Soilless Media Drench Treatments for Crops Grown in Greenhouses”</p> <p>Prior to Seeding or Transplanting: 1:256 – 1:100 dilution. Drench to the point of saturation.</p> <p>Existing Plantings/Post Seeding or Transplanting: 1:800 – 1:256 dilution. For rockwool and soilless media do not exceed a 1:500 dilution. Drench to the point of saturation.</p>

Other Miscellaneous Crops: Tobacco Hops	Anthracnose Alternaria Leaf Spot – (Brown Mold) Angular Leaf Spot Frogeye Leaf Spot Late Blight Botrytis - Gray Mold Downy Mildew Powdery Mildew Blue Mold	Foliar Applications: see “Foliar Spray Treatments For Crops Grown In Greenhouses” directions. Preventative: 1:800 – 1:500 dilution. Begin sprays early in season. Maintain a 5 - 10 day spray schedule. Curative: 1:256 dilution. Apply at first sign/symptom of disease. Maintain a 3 - 10 day spray schedule until control is achieved Rescue: 1:100 dilution. Apply under severe disease conditions. Maintain a 3 - 5 day spray schedule until control is achieved. DO NOT apply 1:100 rate to blooming crops.
	For control of damping off caused by soil borne pathogens	Soil or Soilless Media Drench Applications: See “Soil or Soilless Media Drench Treatments for Crops Grown in Greenhouses” directions. Prior to Seeding or Transplanting: 1:256 – 1:100 dilution. Drench to the point of saturation. Existing Plantings/Post Seeding or Transplanting: 1:800 – 1:256 dilution. For rockwool and soilless media do not exceed a 1:500 dilution. Drench to the point of saturation.

Boom Irrigation Treatments For Crops Grown in Greenhouses

When using boom irrigation inject OxiDate 5.0 as a periodic application at a rate of 1:800 – 1:256 or as a continuous application at a rate of 1:6,256 - 1:12,500.

Pre-harvest Clean-up Sprays for Spoilage and Decay Causing Organisms on Greenhouse Grown Crops

Use OxiDate 5.0 as a foliar spray for control of spoilage and decay causing organisms prior to harvest. Use a 0.4% (1:256) solution. Ensure good coverage and wetting of the food crop. For increased coverage and penetration of spray, use a compatible non-ionic wetting agent/surfactant.

Seed Treatments for Greenhouse Grown Crops

Use OxiDate 5.0 as a surface seed treatment to reduce disease causing fungi and bacterial pathogens on or in seeds.

- 1) Use a dilution of 1:256 (25 fl. oz. of OxiDate 5.0 per every 50 gallons of water).
- 2) Immerse seeds and let soak for at least two minutes; remove and allow to drain. Do not rinse. Plant seed according to seed package directions.

GREENHOUSE ORNAMENTALS, BEDDING PLANTS, FLOWERING PLANTS, SHRUBS, AND TREE APPLICATIONS

Foliar Spray Treatments For Ornamentals, Bedding Plants, Flowering Plants, Shrubs, And Trees Grown In Greenhouses

OxiDate 5.0 works immediately on contact with any plant surfaces for the control/suppression of fungi and bacteria such as *Botrytis*, Downy Mildew, Powdery Mildew, *Xanthomonas*. To ensure that this contact fungicide is effective, thorough coverage and wetting of the foliage is necessary.

Curative application rates:

- 1) For best results, apply at first sign of disease. Use a 1:256 dilution rate (50 fl. oz. of OxiDate 5.0 per every 100 gallons of clean water). Do not store and reuse mixed spray solution, prepare a fresh solution daily.
- 2) Spray or mist plants in morning or evening. Apply in 50 - 500 gallons of water (12 - 115 gallons per 10,000 sq. ft.), ensuring adequate coverage of upper and lower foliage, stems, branches and stalks. Final spray solution volume will depend on crop type, canopy size and/or growth stage.
- 3) Maintain a 3 - 10 day spray schedule until control is achieved. Under heavy disease pressure or when conditions are favorable for rapid disease development; spray intervals can be shortened to 3 – 5 days.

Preventative application rates:

- 1) Begin applications early when plants are small. Use a rate of 1:800 - 1:500 (16 - 26 fl. oz. of OxiDate 5.0 per every 100 gallons of water).
- 2) Spray or mist plants in morning or evening. Apply in 50 - 500 gallons of water (12 - 115 gallons per 10,000 sq. ft.), ensuring adequate coverage of upper and lower foliage, stems, branches and stalks. Final spray solution volume will depend on crop type, canopy size and/or growth stage.
- 3) Maintain a 5 - 10 day spray schedule.

Soil or Soilless Media Drench Treatments For Ornamentals, Bedding Plants, Flowering Plants, Shrubs, And Trees Grown in Greenhouses

OxiDate 5.0 is effective for the control of soil-borne plant diseases caused by pathogens such as *Pythium*, *Phytophthora*, *Rhizoctonia*, *Ralstonia*, *Thielaviopsis* or *Fusarium*. Drench OxiDate 5.0 prior to planting or seeding, at planting and periodically throughout plant's life

Applications Prior to Seeding or Transplanting: as well as a periodic drench throughout the plant's life. Use OxiDate 5.0 on potting soil and growing mediums prior to planting.

- 1) Mix at a dilution of 1:256 - 1:100 (25 - 64 fl. oz. of OxiDate 5.0 per every 50 gallons of water).
- 2) Drench soil or growing mediums to the point of saturation. To increase soil penetration, consider using a compatible wetting agent / non-ionic surfactant.
- 3) Wait at least fifteen minutes before planting or watering.
- 4) Wait one day following treatment before inoculating the soil with beneficial organisms.

Applications to Existing Plantings/ Post Seeding or Transplanting:

- 1) Mix at a dilution of 1:800 - 1:256 (8 – 25 fl. oz. of OxiDate 5.0 per every 50 gallons of water). **Note: for applications to rockwool and other soilless media do apply more than 12.5 fl. oz. of OxiDate 5.0 per 50 gallons of water (1:500).**
- 2) Drench soil or growing mediums to the point of saturation. To increase soil penetration, consider using a compatible wetting agent / non-ionic surfactant.
- 3) Wait one day following treatment before inoculating the soil with beneficial organisms.

For Mist Propagation of Cuttings And Plugs

Inject OxiDate 5.0 into misting systems to control/suppress algae, fungi and bacterial disease from becoming established on plant material. Inject OxiDate 5.0 using a 1:12,500 – 1:2,500 dilution rate. Rates will depend on pathogens present, density of contamination and frequency of application. To prevent the establishment of disease or algae formation maintain continuous application throughout propagation cycle, adjust injections rates to achieve desired level of control.

As A Pre-Plant Dip Treatment

Use OxiDate 5.0 for the control/suppression of damping-off, root and stem rot diseases caused by pathogens such as *Pythium*, *Phytophthora*, *Rhizoctonia*, *Fusarium*, *Erwinia*, (*Not approved for use in California*), or *Thielaviopsis* on ornamental and nursery plants, seed beds, seeds, seedlings, bulbs, or cuttings.

- 1) Use 25 fl. oz. per 50 gallons of water, a dilution of 1:256.
- 2) Immerse plants or cuttings. Remove and allow to drain. Do not rinse.

Treatment of Water used for Pesticide Spray Solutions

Use OxiDate 5.0 as a bactericide/microbiocide to treat and suppress algae, bacteria and fungi in water collected from open or closed sources including but not limited to wells, ditches, canals, reservoirs, and ponds, used for pesticide spray solutions and mixtures. Add OxiDate 5.0 at a 1:700 - 1:2,500 dilution rate (18.0 – 5.0 fl. oz. of OxiDate 5.0 per every 100 gallons of water) to water in spray or mix tank. Mix and allow a contact time of 3 - 5 minutes before adding other pesticides to spray solution.

HYDROPONIC APPLICATIONS (Not Approved For Use In California)

For control of root diseases: *Pythium* (Root Rot and Damping off), *Phytophthora* (Blight) *Fusarium* (Wilt), *Verticillium* (Wilt), *Rhizoctonia* (Root Rot/Bottom Rot), *Thielaviopsis* (Root Rot) in hydroponic systems.

Nutrient/Reservoir Tank

Use at a rate of 1:5,000 - 1:25,000 (2.56 – 0.5 fl. oz. per every 100 gallons of water). Use lower rates (1:25,000 or less) for seedlings and/or plants with sensitive root systems. Recharge as needed when fresh water is added, or at least once every 5 - 7 days.

Media Drench

Use at a rate of 1:3,750 - 1:5,000 (3.4 – 2.56 fl. oz. per every 100 gallons of water). Apply to soil or growing media to the point of saturation. Repeat once every 7 - 10 days as needed.

NOTE: When using OxiDate 5.0 on hydroponic growing systems as a foliar treatment, follow the label directions for foliar treatments. Use OxiDate 5.0 as a water treatment only after a water sample has been submitted to BioSafe Systems for analysis and special direction is provided for dosing recommendations. Inert growing media in a hydroponic growing system provides special conditions that the grower needs to adjust for due to the unbuffered water conditions. Water pH, EC and supplements such as fertilizer, biological loading and minor elements are factors that need to be considered before determining correct water treatment rates.

For Cut Flowers

Use OxiDate 5.0 to prevent *Botrytis*, Downy Mildew and Powdery Mildew on flowers in cold storage or in transit. Use a dilution of 1:1,280 or 1.0 fl. oz. per 10 gallons of clean water. Spray flowers after grading and prior to storage or shipment. Repeat weekly for flowers in storage.

FOLIAR SPRAY TREATMENT IN FIELD NURSERIES

OxiDate 5.0 works immediately on contact with any plant surface for control/suppression of disease. Apply OxiDate 5.0 to nursery stock such as: woody ornamentals, bedding plants, flowering plants, roses, container plants, azaleas, rhododendrons, conifers, and shade trees. Good coverage and wetting of the foliage is necessary.

Run a plant sensitivity test when considering using spray concentrations greater than 0.39% v/v (1:256) by following instructions under “plant sensitivity testing”. If plants show symptoms of phytotoxicity, decrease the spray solution concentration to a level that does not demonstrate symptoms.

Curative application rates:

- 1) For best results, apply at first sign of disease. Use a 1:256 dilution rate (50 fl. oz. of OxiDate 5.0 per every 100 gallons of clean water). Do not store and reuse mixed spray solution, prepare a fresh solution daily.
- 2) Spray or mist plants in morning or evening. Apply in 50 - 500 gallons of water (12 - 115 gallons per 10,000 sq. ft.), ensuring adequate coverage of upper and lower foliage, stems, branches and stalks. Final spray solution volume will depend on crop type, canopy size and/or growth stage.
- 3) Maintain a 3 - 10 day spray schedule until control is achieved. Under heavy disease pressure or when conditions are favorable for rapid disease development; spray intervals can be shortened to 3 – 5 days.

Preventative application rates:

- 1) Begin applications early in season. Use a rate of 1:800 - 1:500 (16 - 26 fl. oz. of OxiDate 5.0 per every 100 gallons of water).
- 2) Spray or mist plants in morning or evening. Apply in 50 - 500 gallons of water (12 - 115 gallons per 10,000 sq. ft.), ensuring adequate coverage of upper and lower foliage, stems, branches and stalks. Final spray solution volume will depend on crop type, canopy size and/or growth stage.
- 3) Maintain a 5 - 10 day spray schedule.

Rescue treatment rates:

- 1) Concentrations up to 1:100 (1 gallon of OxiDate 5.0 per every 100 gallons of water) can be used as a rescue treatment for severe infestations.

- 2) Always test for phytotoxicity by spraying on few plants before using this rate on a large scale. Do not apply 1:100 rescue treatment rate while crops are in bloom.
- 3) Spray or mist plants in morning or evening. Apply in 50 - 500 gallons of water (12 - 115 gallons per 10,000 sq. ft.), ensuring adequate coverage of upper and lower foliage, stems, branches and stalks. Final spray solution volume will depend on crop type, canopy size and/or growth stage.
- 4) Maintain a 3 - 5 day spray schedule until control is achieved.

For Bareroot Nursery Stock

Use OxiDate 5.0 to prevent *Botrytis* on budwood and nursery stock in storage. Use a dilution of 1:256 or 0.5 fl. oz. per gallon of water. Dip plants or spray until dripping wet. Repeat weekly if necessary.

FOR GREENHOUSE SURFACES AND EQUIPMENT

Use OxiDate 5.0 to suppress and control algae, fungi, viruses (except in California) and bacterial growth on hard, non-porous surfaces such as glazing, plastic, pots, flats, trays, cutting tools, benches, work areas, walkways, floors, walls, fan blades, ventilation ducts, watering systems, coolers, storage rooms, structures and equipment.

- 1) Sweep and remove all plant debris. Use power sprayer to wash all surfaces to remove loose dirt.
- 2) Use a dilution of 1:256 – 1:50 of OxiDate 5.0 or 0.5 – 2 ½ fl. oz. per gallon of water (220 – 1,100 ppm of active peroxyacetic acid) for all non-porous surfaces that have been pre-cleaned with water. Use the low dilution rate of 1:50 or 2½ fl. oz. of OxiDate 5.0 per gallon of clean water if surfaces have not been pre-cleaned with water to remove organic deposits. Additional surfactant may be used.
- 3) Apply solution with mop, sponge, or power sprayer to thoroughly wet all surfaces.
- 4) Scrub off heavy growths of algae and fungi following application. Use a solution of OxiDate 5.0 to wash away dead growth.
- 5) Reapply as often as needed for control.

Heavy growths of algae and fungi may have to be scrubbed off following application. Repeat treatment as required to maintain control.

Foaming Applications: Apply OxiDate 5.0 as a foam treatment to enhance contact on hard, non-porous surfaces, vertical surfaces and irregular surfaces such as metal grating and structural steel where contact is difficult to maintain with coarse spray treatments. Add a foaming agent to the spray tank that contains the diluted OxiDate 5.0 solution. Apply foam until the surface treated is completely covered. Allow foam treated surface to air dry. Do not rinse.

TREATMENT OF CLEAN, HARD, NON-POROUS SURFACES

Use OxiDate 5.0 to suppress / control bacteria, fungi and slime forming algae on the following surfaces:

SURFACE	USE RATE	INSTRUCTIONS
Pots, Flats, Trays	1:50 - 1:256, or 2½ – ½ fl. oz. per gallon of clean water.	Spray until runoff. Add additional surfactant if needed. Allow surfaces to remain wet for 10 minutes.
Cutting Tools	1:50 - 1:256, or 2½ - ½ fl. oz. per gallon of clean water. Tobacco Mosaic Virus control: 1:50 - 1:256 or 2½ – ½ fl. oz. per gallon of clean water.	Soak tools to ensure complete coverage. Add additional surfactant if needed. Allow surfaces to remain wet for 10 minutes. Use OxiDate 5.0 to prevent the spread of Tobacco Mosaic Virus on cutting tools. Allow surfaces to remain wet for 1 minute.
Benches and Work Areas	Pre-cleaned surfaces: 1:256 - or ½ fl. oz. per gallon of clean water.	Sweep and remove all plant debris. Use power sprayer to wash all surfaces to remove loose dirt. Add additional surfactant if needed. Allow surfaces to

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	Unclean surfaces: 1:50 or 2½ fl. oz. per gallon of clean water if surfaces have not been pre-cleaned with water to remove organic deposits.	remain wet for 10 minutes.
Foot Bath Mats Foot pads and walk-through trays	1:256 or ½ fl. oz. per gallon of water.	Apply OxiDate 5.0 to prevent the tracking and spread of dirt and microorganisms. Make a solution of OxiDate 5.0 per gallon of water and fill foot bath mat, foot pad or walk-through tray to capacity. Allow treated surface to remain wet with solution for 10 minutes. Change solution as needed.
Evaporative Coolers	Contaminated surfaces- 1:50 - 1:256 or 2 ½ - ½ fl. oz. per gallon of clean water. Add a foaming agent to the spray tank that contains the diluted solution. Cooler water shock treatment: 1:256 or ½ fl. oz. for every gallon of cooler water. Cooler water continuous treatment: 1:800 or 1.6 fl. oz per 10 gallons of cooler water.	Apply foam solution until the surface treated is completely covered. Turn off coolers for 20 minutes to allow foam to work. Allow foam-treated surfaces to air dry. Do not rinse. Treat cooler water weekly as a preventative shock treatment. Continuously inject OxiDate 5.0 to prevent algae and slime contamination.

CONTROL OF ALGAL, FUNGAL AND ODOR CAUSING BACTERIAL GROWTH ON NON FOOD CONTACT GREENHOUSE WATERING SYSTEMS

TREATMENT OF GREENHOUSE EVAPORATIVE COOLERS

Treat contaminated surfaces with a dilution of 1:50 - 1:256 of OxiDate 5.0 or 2 ½ - ½ fl. oz. per gallon of water (220 - 1100 ppm of 100% peroxyacetic acid). For maintenance, treat cooler water once a week with a dilution of 1:800 of OxiDate 5.0, or 1.6 fl. oz., for every 10 gallons of cooling water.

TREATMENT OF GREENHOUSE IRRIGATION WATER

Use OxiDate 5.0 to treat irrigation water during all phases of greenhouse crop production to suppress/control algae, bacteria, and fungi, fungi like organisms (water molds) in irrigation water applied as flooded floors, flooded benches, recycled water systems, drip trickle, capillary mats, sprinkler systems, humidification and misting systems.

Apply the product at a rate of 5.8 - 46.5 fl. oz. of OxiDate 5.0 per 1,000 gallons of water. (1:22,000 - 1:2,750). This amount will provide 2.7 - 21 ppm of 100% peroxyacetic acid. A water test is recommended to determine the proper rate of product. Product can be injected directly into the irrigation water at the point of intake from the source or directly to the water in the holding tank or inject into the water exiting the water holding tank preferably after fertilizer injection point. For best results, continuous injection into the water is recommended every time crop is irrigated.

TREATMENT OF GREENHOUSE IRRIGATION SYSTEMS

Use OxiDate 5.0 to prevent/control algal and/or bacterial growth inside the greenhouse irrigation systems in between crop growing season. To control existing growth, fill irrigation lines with 1:100 – 1:50 solution of OxiDate 5.0 (1.0 – 2.0 gallons of OxiDate 5.0 per 100 gallons of water; 550 – 1,100 ppm of 100% peroxyacetic acid) and allow a contact time of at least 60 minutes or overnight if possible. Lines should then be flushed with fresh irrigation water.

TURF TREATMENTS

Use on well-established lawns, athletic fields, golf course fairways, greens and tees of Bentgrass, Bluegrass, Bermudagrass, Fescue, Ryegrass, St. Augustine grass, Zoysia and their mixtures to control / suppress algae, bacterial and fungal diseases, and the odors and conditions that these organisms may cause.

For Algae Control on Turf:

Use OxiDate 5.0 to treat algae and algae crust:

- 1) Mix 5 - 12 fl. oz. of OxiDate 5.0 per each 5 gallons of water. Apply in 5 to 10 gallons of water per 1,000 sq. ft. of turf.
- 2) Add a non-ionic surfactant to penetrate algae crust.
- 3) Under severe conditions use higher rate and increase volume of spray solution. Repeat application may be necessary for severe infestations.

For Turf Disease Control:

Use OxiDate 5.0 to treat / prevent the bacterial/fungal turf diseases such as: Anthracnose, Brown Patch, Dollar Spot, Copper Spot, Summer Patch, Strip Smut, Take-All Patch, Leaf Spot, *Fusarium*, Fairy Ring, and Pink Snow Mold*

- 1) Use a dilution rate of 1:100 – 1:256 or 1.25 – 0.5 fl. oz. per each gallon of water. Apply up to 5 gallons of diluted solution per 1,000 sq. ft. of turf. Add a non-ionic drift control or wetting agent to increase canopy and thatch penetrations. Optimum treatment time is early morning or late afternoon.
- 2) For best results, apply immediately after grass has been cut. Applications can be made during wet or rainy weather.
- 3) Inject OxiDate 5.0 through automatic irrigation systems in turf areas. Refer to Chemigation Directions for Use for specific instructions on using this product through irrigation systems.
- 4) Curative control will require consecutive treatments to eradicate disease. Reapply as disease pressure warrants.

Soil Drench Applications:

Use OxiDate 5.0 to treat and prevent soil-borne diseases caused by: *Pythium*, *Phytophthora*, *Rhizoctonia*.

- 1) For best results pre-irrigate or water area to 80% of saturation.
- 2) Use OxiDate 5.0 at a dilution rate of 1:100 - 1:256 or 1.25 to 0.5 fl. oz. per gallon of water. Apply up to 10 gallons of dilution solution per 1,000 sq. ft. of turf. Add a non-ionic wetting agent to increase soil penetration.
- 3) If applying prior to seeding wait at least one hour before seeding area.
- 4) If using prior to inoculation with beneficial microorganisms wait at least 4 hours before inoculating the soil.

*For Pink Snow Mold:

Spray in early fall to reduce the number of dormant spores. Treat every two weeks prior to first snow cover. May be applied to frozen ground.

- This product may be tank mixed with compatible residual fungicides.

ARTIFICIAL TURF TREATMENT (Not Approved for Use in California)

Use OxiDate 5.0 for the prevention and control of algae, fungi, moss, slime molds and their spores.

Application Directions

- 1) Make a liquid solution of OxiDate 5.0 at a rate of 0.5 fl. oz. for each gallon of water.
- 2) Spray evenly over area to be treated.
- 3) Allow treated area to remain wet for five minutes.
- 4) Allow to dry thoroughly before use.
- 5) Repeat treatment as needed.

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, 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 as needed.
- 6) 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.
- 7) 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 must 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.
- 8) 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 must 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.
- 5) 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.
- 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.
- 7) Do not apply when wind speed favors drift beyond the area intended for treatment.

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

- 1) 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, a 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 -

- 1) Remove scale, pesticide residues, and other foreign matter from the chemical supply tank and entire injector system. Flush with clean water until no scale or pesticide residues are present. 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 amount of water and then adding product as required. The product will immediately go into solution without any agitation. Use mixed solution within two hours.
- 4) OxiDate 5.0 may be applied in conjunction with other pesticides or fertilizers. Agricultural chemicals may perform in an unpredictable manner when tank mixed, especially where several products are involved. Reduced effect on pests or crop injury may occur. Conduct a compatibility jar test before mixing a whole tank. Because of the wide variety of possible combinations which can be encountered, observe all precautions and limitations on the labels of all products used in mixtures. Test for potential crop injury on a small set of plants prior to commercial use of a new tank mix.

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Store in original container in a cool, dry well-vented area, away from direct sunlight. Do not allow product to become overheated in storage. 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 $\frac{1}{4}$ 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. If burned, stay out of smoke. 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 $\frac{1}{4}$ 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. If burned, stay out of smoke. Batch Code _____

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.

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 must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury 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, to the extent consistent with applicable law.

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. To the extent consistent with applicable law, 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 TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BIOSAFE SYSTEMS MAKES NO WARRANTIES OF MERCHANTABILITY FOR A PARTICULAR PURPOSE, NOR ANY OTHER EXPRESSED OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

To the extent consistent with applicable law, 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. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, 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.

OxiDate[®] 5.0

Broad Spectrum Bactericide, Fungicide and Algacide

ACTIVE INGREDIENTS: Hydrogen Peroxide 27.00%

Peroxyacetic Acid 5.00%

OTHER INGREDIENTS:..... 68.00%

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	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• Call poison control center or doctor immediately for treatment advice.• Have person sip a glass of water if able to swallow.• Do not induce vomiting unless told to do so by the poison control center or doctor.• Do not give anything by mouth to an unconscious person.
If inhaled	<ul style="list-style-type: none">• Move person to fresh air.• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.• Call a poison control center or doctor for further treatment advice
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For emergency information on OxiDate 5.0, call the National Pesticides Information Center at 1-800-858-7378, 6:30AM to 4:30 PM Pacific Time (PT), seven days a week. During other times, call the Poison Control Center at 1-800-222-1222.	
NOTE TO PHYSICIAN	
Probable mucosal damage may contraindicate the use of gastric lavage.	

See (back) (side) (inside) (panel) (booklet) for first aid, additional precautionary statements and directions for use.

EPA Registration No. 70299-XX

Net Contents: (1, 2.5, 5, 30, 55, 275, 330 gallons)

EPA Establishment No. 089546-NV-001, 082521-GA-001, 92957-MI-001, 067441-IL-001

Batch Code _____

Manufactured by:

BioSafe Systems, LLC

22 Meadow Street

East Hartford, CT 06108

(888) 273-3088

OxiDate 5.0; EPA Reg. No. 70299-XX

New Registration

Label version (1) dated May 23, 2018

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS
DANGER

CORROSIVE: Causes irreversible eye damage. Causes skin irritation or temporary discoloration on exposed skin. Harmful if absorbed through skin. May be fatal if swallowed. Do not breathe vapor. Do not get in eyes, on skin or on clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

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 and maintaining PPE. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product. Do not reuse them. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

USER SAFETY RECOMMENDATIONS

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

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. Treated seed exposed on soil surface may be hazardous to birds, wildlife, fish and aquatic invertebrates. Cover or collect seeds spilled during loading. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high-water mark. Do not contaminate water when disposing of equipment washwaters or rinsate. Do not apply directly to treated, finished drinking water reservoirs or drinking water receptacles when the water is intended for human consumption.

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.

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.

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.

For enclosed environments:

There is a restricted entry of one (1) hour for this product when applied via spraying to growing plants, surfaces, equipment, structures and non-porous surfaces in enclosed environments such as glasshouses and greenhouses. PPE requirement for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil or water, is coveralls worn over long-sleeved shirt and pants, waterproof gloves and shoes plus socks.

There is a restricted entry of zero (0) hours for pre-plant dip, seed treatment, soil drench, mop, sponge, dip, soak, rinse or other non-spraying application methods when used in enclosed environments such as glasshouses and greenhouses.

For field applications:

Keep unprotected persons out of treated areas until sprays have dried.

Non-Agricultural Use Requirements

The requirements in this box apply to uses of this product that are **not** within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries or greenhouses.

Keep unprotected persons out of treated areas until sprays have dried.

INTRODUCTION

OxiDate 5.0 is a liquid bactericide/fungicide used to treat and control plant pathogens on Tree crops, Berries, Citrus crops, Grapes, Pome Fruits, Tree nuts and other permanent crops. Apply OxiDate 5.0 up to and including the day of harvest. See the label for a complete list of plant pathogens.

OxiDate 5.0 is a liquid bactericide/fungicide used to treat and control plant pathogens on Fruit and Vegetable Field Crops. Apply OxiDate 5.0 up to and including the day of harvest. See the label for a complete list of plant pathogens.

Solution Preparation:

OxiDate 5.0 works best when diluted with water containing low levels of organic or inorganic materials and having a neutral pH (pH value of 7.0). pH can be measured using a pH meter or indicator test strips. Measuring total suspended solids and EC (Electrical Conductivity) can help in determining concentration of organic and inorganic content in the water. Thoroughly rinse out mixing tank with water before mixing. OxiDate 5.0 will readily mix with clean, neutral water and does not require agitation. OxiDate 5.0 is formulated with minimal surfactant for plants having waxy or hairy surfaces. In order to increase the effectiveness of OxiDate 5.0, additional non-ionic surfactant may be added, for treatment of plants with difficult to reach surfaces, or for plants having waxy or hairy surfaces. Only non-ionic surfactants are compatible with OxiDate 5.0.

OxiDate 5.0 works by surface contact with the plants and materials being treated. It is important to ensure that all surfaces are thoroughly wetted. OxiDate 5.0 does not produce any visible residue, distinct odor or deleterious effects to plants when used in accordance with label directions.

Tank mixes of metal-based chemicals and OxiDate 5.0 that have a pH of less than 7.0 may cause excessive foaming and phytotoxicity. Consult specific product labels for additional information or restrictions concerning tank mixing. Observe the most restrictive limitations and precautions of the labeling of all products used in mixtures.

OxiDate 5.0 is a strong oxidizing agent and may react with residues of metal-based fungicides or supplements. Do not apply OxiDate 5.0 as a foliar spray immediately following foliar applications of metal-based products. Allow

at least 24 hrs. after application of metal-based products before applying OxiDate 5.0 as a foliar spray. Check the label of the metal-based product prior to application for specific instructions for use with other fungicide products.

Note: Use spray solution the same day it is prepared, do not store and reuse mixed spray solution.

Compatibility:

OxiDate 5.0 is compatible as a direct injection or tank-mix with many commonly used pesticides, fertilizers, adjuvants and non-ionic surfactants but has not been fully evaluated with all of these. Do not direct inject or tank mix OxiDate 5.0 in to the irrigation system or in spray tank with pesticides, surfactants or fertilizers before conducting a compatibility test to show it is physically compatible, effective and non-injurious under your use conditions. Do not tank mix OxiDate 5.0 with copper or other pesticide containing metals at a dilution rate stronger than 1:256.

To ensure compatibility, evaluate them prior to use as follows: Using a suitable container, add proportional amounts of product to water. Add wettable powders first, followed by water dispersible granules, then by liquid flowables and lastly, emulsifiable concentrates. Mix thoroughly and let stand for at least five minutes. If the combination stays mixed or can be remixed, it is physically compatible. Test the combination on a small portion of the crop to be treated to ensure that a phytotoxic response will not occur as a result of application.

Plant Sensitivity Testing:

For foliar applications, only use OxiDate 5.0 at labeled dilutions. Solutions more concentrated than prescribed on this label may result in leaf necrosis for some plants. OxiDate 5.0 has been designed to provide a balanced source of the active ingredient directly to the plant surface. OxiDate 5.0 has been used and tested on many varieties of plant material; however, the nature of the target plant, environmental conditions, plant vigor, and the use of other pesticides can all affect plant sensitivity to OxiDate 5.0. The safety of OxiDate 5.0 has not determined on all plants and crops. Plants grown in greenhouses vary greatly from those grown under field conditions. Determine if OxiDate 5.0 can be safely used prior to application. Before treating large numbers of plants, test OxiDate 5.0 or tank mixes of OxiDate 5.0 and other pesticides or fertilizers at labeled rates on a separate set of plants and observe for symptoms of sensitivity prior to use. Symptoms on foliage include yellow or brown spotting, "burned" tips and/or yellow or brown scorching along the leaf edges.

When using OxiDate 5.0 for control of organisms living on the plant tissue (such as downy and powdery mildew), treatment may result in lesions on plant tissue. OxiDate 5.0 will oxidize parasitic organisms living in plant tissue that are not always visible to the naked eye. Resulting oxidative effects may include spotting, or drying of the plant tissue where organisms inhabited tissue.

Read the entire label before using this product. Use only according to label directions. Do not use OxiDate 5.0 above labeled rates.

Use Rates and Directions for Foliar Applications on Tree, Vine and other Permanent Crops

OxiDate 5.0 works immediately on contact with any plant surface for control of plant diseases – see Application Instructions chart. Good coverage and wetting of the foliage is required. For increased coverage and penetration of spray, use a compatible non-ionic wetting agent/surfactant. For drift reduction and to aid spray deposition. Do not spray OxiDate 5.0 during conditions of intense heat, drought or poor plant vigor.

Run a plant sensitivity test when considering using spray concentrations greater than 0.39% v/v (1:256) by following instructions under "plant sensitivity testing". If plants show symptoms of phytotoxicity, decrease the spray solution concentration to a level that does not demonstrate symptoms

See Crop Specific Directions, Rates and Usage Section For Additional Instructions.

Preventative application rates:

1. Begin applications early in season. Use a rate of 1:800 - 1:500 (16 - 26 fl. oz. of OxiDate 5.0 per every 100 gallons of water).

2. Spray plants in morning or evening. Apply in 50 - 500 gallons of water per acre, ensuring adequate coverage of upper and lower foliage, stems, branches and stalks. Final spray solution volume will depend on crop type, canopy size and/or growth stage.
3. Maintain a 5 - 10 day spray schedule to prevent the establishment of disease inoculum.

Curative application rates:

1. For best results, apply at first sign of disease. Use a 1:256 dilution rate (50 fl. oz. of OxiDate 5.0 per every 100 gallons of clean water). Do not store and reuse mixed spray solution, prepare a fresh solution daily.
2. Spray plants in morning or evening. Apply in 50 - 500 gallons of water per acre, ensuring adequate coverage of upper and lower foliage, stems, branches and stalks. Final spray solution volume will depend on crop type, canopy size and/or growth stage.
3. Maintain a 3 - 10 day spray schedule until control is achieved.

Rescue treatment rates:

1. Concentrations up to 1:100 (1 gallon of OxiDate 5.0 per every 100 gallons of water) can be used as a rescue treatment for severe infestations.
2. Always test for phytotoxicity by spraying on few plants before using this rate on a large scale. Do not apply 1:100 rescue treatment rate while crops are in bloom.
3. Spray plants in morning or evening. Apply in 50 - 500 gallons of water per acre, ensuring adequate coverage of upper and lower foliage, stems, branches and stalks. Final spray solution volume will depend on crop type, canopy size and/or growth stage.
4. Maintain a 3 - 5 day spray schedule until control is achieved.

Electrostatic Spray Applications:

- For electrostatic sprayers, use the 1:256 curative rate applied in 10 - 25 gallons of spray solution per treated acre. Follow spray equipment manufacturer's instructions for final spray volume to obtain adequate coverage.

Aerial Spray Treatments

Spray Drift Management- Avoiding spray drift is the responsibility of the applicator.

- Do not apply when wind conditions favor drift away from the intended area for treatment. Many factors including droplet size, equipment type and weather related factors determine the potential for spray drift.
- To ensure optimum product performance, use at the foliar application rate indicated in sufficient water for adequate coverage of plant foliage. Apply between 3 - 20 gallons per acre of total spray solution. Do not make applications at a height greater than 10 ft. above the plant canopy, unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to wind and evaporation. Do not exceed the maximum application rate or apply more often than labeled in the Application Instructions for that crop.

EARLY AND LATE DORMANT SPRAYS APPLICATION INSTRUCTIONS

Use dormant sprays for early and late season applications on tree crops, small fruits, cane berries and vine crops to control dormant spores of bacterial and fungal pathogens.

- 1) Make applications after leaf drop in fall, after pruning and prior to bud swell in spring.
- 2) Use a 1:500 - 1:100 dilution rate, or 26 – 128 fl. oz. of OxiDate 5.0 per every 100 gallons of water.
- 3) Use up to 500 gallons of spray solution per acre. For the most effective results, use enough volume of spray solution to obtain complete and uniform coverage of foliage and stems.

For dormant spray application for specific crops follow direction on the Tree and Vine Application Direction & Rate Chart.

Dilution Rate Chart

Amount of OxiDate 5.0 per Acre						
Dilution Rate Of OxiDate 5.0	Spray Volume (Gallons/Acre)					
	50	100	200	300	400	500
1:100 (1.0% v/v)	0.5 gal.	1.0 gal.	2.0 gal.	3.0 gal.	4.0 gal.	5.0 gal.
1:256 (0.39% v/v)	26 fl. oz.	50 fl. oz.	100 fl. oz.	150 fl. oz.	200 fl. oz.	250 fl. oz.
1:500 (0.20% v/v)	12.8 fl. oz.	26 fl. oz.	0.51 fl. oz.	77 fl. oz.	102 fl. oz.	128 fl. oz.
1:800 (0.125% v/v)	8 fl. oz.	16 fl. oz.	32 fl. oz.	48 fl. oz.	64 fl. oz.	80 fl. oz.

Tree and Vine Application Rates and Directions Chart

Crop	Disease	Application Rates
Avocado	Anthrachnose Blotch	<p>Foliar Applications: Follow “Use Rates and Directions for Foliar Applications on Tree, Vine and other Permanent Crops.”</p> <p>Preventative: 1:800 – 1:500 dilution. Apply preventative sprays when bloom buds swell and continue on a 5 - 10 day schedule through bloom.</p> <p>Curative: 1:256 dilution. Apply at first sign/symptom of disease. Maintain a 3 - 10 day spray schedule until control is achieved.</p> <p>Rescue: 1:100 dilution. Apply under severe disease conditions. Maintain a 3 - 5 day spray schedule until control is achieved. DO NOT apply 1:100 rate to blooming crops.</p>
Bananas Plantains	Sigatoka	<p>Foliar Applications: Follow “Use Rates and Directions for Foliar Applications on Tree, Vine and other Permanent Crops.”</p> <p>Preventative: 1:800 – 1:500 dilution. Apply preventative sprays on a 5 - 10 day schedule with thorough coverage. Can be applied in combination or alternation with a protectant fungicide.</p> <p>Curative: 1:256 dilution. Apply at first sign/symptom of disease. Maintain a 3 - 10 day spray schedule until control is achieved.</p> <p>Rescue: 1:100 dilution. Apply under severe disease conditions. Maintain a 3 - 5 day spray schedule until control is achieved. DO NOT apply 1:100 rate to blooming crops.</p>
Cane Berries Blackberry Blueberry Raspberry	Anthrachnose Botrytis (fruit rot or blight) Downy Mildew Cane Blight Leaf Rust Leaf Spot Powdery Mildew	<p>Foliar Applications: Follow “Use Rates and Directions for Foliar Applications on Tree, Vine and other Permanent Crops.”</p> <p>Preventative: 1:800 – 1:500 dilution. Begin sprays early in season, when new shoot growth appears. Maintain a 5 - 10 day spray schedule.</p> <p>Curative: 1:256 dilution. Apply at first sign/symptom of disease. Maintain a 3 - 10 day spray schedule until control is achieved.</p> <p>Rescue: 1:100 dilution. Apply under severe disease conditions. Maintain a 3 - 5 day spray schedule until control is achieved. DO NOT apply 1:100 rate to blooming crops.</p>
	Mummy Berry Disease	Start sprays at green tip and continue until fruit. Use curative rate at first sign/symptom of disease.
	Botrytis Blight	Start sprays at pre-bloom and continue until end of bloom. Use curative rate at first sign/symptom of disease.
Citrus Crops Citrus Hybrids Grapefruit Kumquat Lemon Limes Orange Tangerine	Alternaria (leaf spot / blight) Anthrachnose Greasy Spot Black Spot Rust Citrus Scab	<p>Foliar Applications: Follow “Use Rates and Directions for Foliar Applications on Tree, Vine and other Permanent Crops.”</p> <p>Preventative: 1:800 – 1:500 dilution. Begin sprays early in season. Maintain a 5 - 10 day spray schedule.</p> <p>Curative: 1:256 dilution. Apply at first sign/symptom of disease. Maintain a 3 - 10 day spray schedule until control is achieved.</p> <p>Rescue: 1:100 dilution. Apply under severe disease conditions. Maintain a 3 - 5 day spray schedule until control is achieved. DO NOT apply 1:100 rate to blooming</p>

		crops.
	Citrus Canker	<p>Foliar and Tree Treatment Applications: Follow “Use Rates and Directions for Foliar Applications on Tree, Vine and other Permanent Crops”</p> <p>Preventative: 1:800 – 1:500 dilution. Begin sprays early in season. Maintain a 5 - 10 day spray schedule. Spray entire tree including trunk, branches, leaf canopy. Spray all areas where branches have been pruned, grafted or have become damaged or have apparent lesions or breaks in bark.</p> <p>In groves with a history of disease pressure use the 1:256 dilution rate on a 5 - 7 day spray schedule</p> <p>Curative: 1:256 dilution. Spray diseased plants using OxiDate 5.0 treatment solution for one to three consecutive days until control is achieved, then continue treatments on a 5 - 7 day interval.</p> <p>Rescue: 1:100 dilution. Apply under severe disease conditions. Maintain a 3 - 5 day spray schedule until control is achieved. DO NOT apply 1:100 rate to blooming crops.</p>
Coffee	Bacterial Blight Leaf Rust Coffee Berry Disease (Not approved for use in California)	<p>Foliar Applications: Follow “Use Rates and Directions for Foliar Applications on Tree, Vine and other Permanent Crops”</p> <p>Preventative: 1:800 – 1:500 dilution. Begin sprays early when conditions favor disease development. Maintain a 5 - 10 day spray schedule.</p> <p>Curative: 1:256 dilution. Apply at first sign/symptom of disease. Maintain a 3 - 10 day spray schedule until control is achieved.</p> <p>Rescue: 1:100 dilution. Apply under severe disease conditions. Maintain a 3 - 5 day spray schedule until control is achieved. DO NOT apply 1:100 rate to blooming crops.</p>
Grapes	Black Rot Botrytis Downy Mildew Phomopsis Blight Powdery Mildew Sour Rot	<p>Foliar Applications: Follow “Use Rates and Directions for Foliar Applications on Tree, Vine and other Permanent Crops”</p> <p>Preventative: 1:800 – 1:500 dilution. Begin sprays early in season. Maintain a 5 - 10 day spray schedule.</p> <p>Curative: 1:256 dilution. Apply at first sign/symptom of disease. Maintain a 3 - 10 day spray schedule until control is achieved</p>
	Botrytis Blight	Start sprays at pre-bloom and continue until end of bloom. Use curative rate at first sign/symptom of disease.
Hops	Downy Mildew Powdery Mildew	<p>Foliar Applications: Follow “Use Rates and Directions for Foliar Applications on Tree, Vine and other Permanent Crops”</p> <p>Preventative: 1:800 – 1:500 dilution. Begin sprays early in season. Maintain a 5 - 10 day spray schedule.</p> <p>Curative: 1:256 dilution. Apply at first sign/symptom of disease. Maintain a 3 - 10 day spray schedule until control is achieved</p> <p>Rescue: 1:100 dilution. Apply under severe disease conditions. Maintain a 3 - 5 day spray schedule until control is achieved. DO NOT apply 1:100 rate to blooming crops.</p>
Papaya	Anthrachnose Phytophthora	<p>Foliar Applications: Follow “Use Rates and Directions for Foliar Applications on Tree, Vine and other Permanent Crops”</p> <p>Preventative: 1:800 – 1:500 dilution. Begin sprays early in season. Maintain a 5 - 10 day spray schedule.</p> <p>Curative: 1:256 dilution. Apply at first sign/symptom of disease. Maintain a 3 - 10 day spray schedule until control is achieved.</p> <p>Rescue: 1:100 dilution. Apply under severe disease conditions. Maintain a 3 - 5 day spray schedule until control is achieved. DO NOT apply 1:100 rate to blooming crops.</p>

Pome Fruit Apples Pears Loquats Mayhaws Quince	Fire Blight Powdery Mildew Rusts Scab Flyspeck Sooty Blotch	Foliar Applications: Follow “Use Rates and Directions for Foliar Applications on Tree, Vine and other Permanent Crops” Preventative: 1:800 – 1:500 dilution. Begin sprays early in season. Maintain a 5 - 10 day spray schedule. Curative: 1:256 dilution. Apply at first sign/symptom of disease. Maintain a 3 - 10 day spray schedule until control is achieved. Rescue: 1:100 dilution. Apply under severe disease conditions. Maintain a 3 - 5 day spray schedule until control is achieved. DO NOT apply 1:100 rate to blooming crops.
	Fire Blight	Curative: 1:256 dilution. For Fire Blight control, make 2 - 4 applications during Bloom and Petal Fall stages.
Stone Fruit Apricots Cherries Nectarines Peaches Plums Prunes	Brown Rot Downy Mildew Powdery Mildew Bacterial Canker (<i>Pseudomonas</i>)	Foliar Applications: Follow “Use Rates and Directions for Foliar Applications on Tree, Vine and other Permanent Crops” Preventative: 1:800 – 1:500 dilution. Begin sprays early in season. Maintain a 5 - 10 day spray schedule. Curative: 1:256 dilution. Apply at first sign/symptom of disease. Maintain a 3 - 10 day spray schedule until control is achieved. Rescue: 1:100 dilution. Apply under severe disease conditions. Maintain a 3 - 5 day spray schedule until control is achieved. DO NOT apply 1:100 rate to blooming crops.
Tree Nuts Almonds Brazil Nuts Cashews Filberts Macadamias Pecans Pistachios Walnuts	Alternaria Anthracnose Brown Rot Bacterial Blight Bacterial Canker E. Filbert Blight Jacket Rot Almond Leaf Scorch (<i>Not approved for use in California</i>)	Foliar Applications: Follow “Use Rates and Directions for Foliar Applications on Tree, Vine and other Permanent Crops” Preventative: 1:800 – 1:500 dilution. Begin sprays early in season. Maintain a 5 - 10 day spray schedule. Curative: 1:256 dilution. Apply at first sign/symptom of disease. Maintain a 3 - 10 day spray schedule until control is achieved. Rescue: 1:100 dilution. Apply under severe disease conditions. Maintain a 3 - 5 day spray schedule until control is achieved. DO NOT apply 1:100 rate to blooming crops.
Tropical/Sub Tropical Fruit Casaba Coconut Dates Guava Kiwi Mango Olive Passion Fruit Pineapple Poi Star Fruit	Alternaria Anthracnose Leaf Blight Powdery Mildew Rhizoctonia Sooty Mold Stem Rot	Foliar Applications: Follow “Use Rates and Directions for Foliar Applications on Tree, Vine and other Permanent Crops” Preventative: 1:800 – 1:500 dilution. Begin sprays early in season. Maintain a 5 - 10 day spray schedule. Curative: 1:256 dilution. Apply at first sign/symptom of disease. Maintain a 3 - 10 day spray schedule until control is achieved. Rescue: 1:100 dilution. Apply under severe disease conditions. Maintain a 3 - 5 day spray schedule until control is achieved. DO NOT apply 1:100 rate to blooming crops.

[Optional section]

Use Rates and Directions For Foliar Applications on Field Grown Crops

OxiDate 5.0 works immediately on contact with any plant surface for control of plant diseases – see Application Instructions chart. Good coverage and wetting of the foliage is required. For increased coverage and penetration of spray, use a compatible non-ionic wetting agent/surfactant. For drift reduction and to aid spray deposition. Do not spray OxiDate 5.0 during conditions of intense heat, drought or poor plant vigor.

Run a plant sensitivity test when considering using higher spray concentrations greater than 0.39% v/v (1:256) by following instructions under “plant sensitivity testing”. If plants show symptoms of phytotoxicity, decrease the spray solution concentration to a level that does not demonstrate symptoms.

See "Field Grown Crops - Application Rates and Directions" for Disease list and Additional Instructions.

Preventative application rates:

1. Begin applications early in season. Use a rate of 1:800 - 1:500 (16 - 26 fl. oz. of OxiDate 5.0 per every 100 gallons of water).
2. Spray plants in morning or evening. Apply in 10 - 500 gallons of water per acre, ensuring adequate coverage of upper and lower foliage, stems, branches and stalks. Final spray solution volume will depend on crop type, canopy size and/or growth stage.
3. Maintain a 5 - 10 day spray schedule to prevent the establishment of disease inoculum.

Curative application rates:

1. For best results, apply at first sign of disease. Use a 1:256 dilution rate (50 fl. oz. of OxiDate 5.0 per every 100 gallons of clean water). Do not store and reuse mixed spray solution, prepare a fresh solution daily.
2. Spray plants in morning or evening. Apply in 10 - 500 gallons of water per acre, ensuring adequate coverage of upper and lower foliage, stems, branches and stalks. Final spray solution volume will depend on crop type, canopy size and/or growth stage.
3. Maintain a 3 - 10 day spray schedule until control is achieved.

Rescue treatment rates: (For use on: Bulb Vegetables, Cereal Grains & Commodities, Cotton, Cranberries, Cucurbit Crops, Fruiting Vegetables, Legumes, Peanuts, Root & Tuber Vegetables)

1. Concentrations up to 1:100 (1 gallon of OxiDate 5.0 for every 100 gallons of water) can be used as a rescue treatment for severe infestations.
2. Always test for phytotoxicity by spraying on few plants before using this rate on a large scale. Do not apply 1:100 rescue treatment rate while crops are in bloom.
3. Spray plants in morning or evening. Apply in 10 - 500 gallons of water per acre, ensuring adequate coverage of upper and lower foliage, stems, branches and stalks. Final spray solution volume will depend on crop type, canopy size and/or growth stage.
4. Maintain a 3 - 5 day spray schedule until control is achieved.

Electrostatic Spray Applications:

- For electrostatic sprayers, use the 1:256 curative rate applied in 10 - 25 gallons of spray solution per treated acre. Follow spray equipment manufacturer's instructions for final spray volume to obtain adequate coverage.

Aerial Spray Treatments

Spray Drift Management- Avoiding spray drift is the responsibility of the applicator.

- Do not apply when wind conditions favor drift away from the intended area for treatment. Many factors including droplet size, equipment type and weather related factors determine the potential for spray drift.
- To ensure optimum product performance, use at the foliar application rate indicated in sufficient water for adequate coverage of plant foliage. Apply between 3 - 20 gallons per acre of total spray solution. Do not make applications at a height greater than 10 ft. above the plant canopy, unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to wind and evaporation. Do not exceed the maximum application rate or apply more often than labeled in the Application Instructions for that crop.

Dilution Rate Chart

Amount of OxiDate 5.0 per Acre						
Dilution Rate Of OxiDate 5.0	Spray Volume (Gallons/Acre)					
	50	100	200	300	400	500
1:100 (1.0% v/v)	0.5 gal.	1.0 gal.	2.0 gal.	3.0 gal.	4.0 gal.	5.0 gal.
1:256 (0.39% v/v)	26 fl. oz.	50 fl. oz.	100 fl. oz.	150 fl. oz.	200 fl. oz.	250 fl. oz.
1:500 (0.20% v/v)	12.8 fl. oz.	26 fl. oz.	0.51 fl. oz.	77 fl. oz.	102 fl. oz.	128 fl. oz.
1:800 (0.125% v/v)	8 fl. oz.	16 fl. oz.	32 fl. oz.	48 fl. oz.	64 fl. oz.	80 fl. oz.

Field Grown Crops - Application Rates and Directions Chart

Crop	Disease	Application Rates
Alfalfa	Common Leaf spot	<p>Foliar Applications: Follow: "Use Rates and Directions For Foliar Applications on Field Grown Crops".</p> <p>Preventative: 1:800 – 1:500 dilution. Begin sprays early in season. Maintain a 5 - 10 day spray schedule.</p> <p>Curative: 1:256 dilution. Apply at first sign/symptom of disease. Maintain a 3 - 10 day spray schedule until control is achieved</p> <p>Rescue: 1:100 dilution. Apply under severe disease conditions. Maintain a 3 - 5 day spray schedule until control is achieved. DO NOT apply 1:100 rate to blooming crops.</p>
Asparagus	Purple Spot Rust	<p>Foliar Applications: Follow: "Use Rates and Directions For Foliar Applications on Field Grown Crops".</p> <p>Preventative: 1:800 – 1:500 dilution. Begin sprays early in season. Maintain a 5 - 10 day spray schedule.</p> <p>Curative: 1:256 dilution. Apply at first sign/symptom of disease. Maintain a 3 - 10 day spray schedule until control is achieved.</p> <p>Rescue: 1:100 dilution. Apply under severe disease conditions. Maintain a 3 - 5 day spray schedule until control is achieved. DO NOT apply 1:100 rate to blooming crops.</p>
	Fusarium (Crown/Root Rot) Phytophthora (Crown/Root Rot)	<p>Pre – Plant Soil Treatment:</p> <p>Prior to planting, treat the Phytophthora infested soil with 1:100 - 1:256 solution.</p> <p>Pre – Plant Dip:</p> <p>Dip the Asparagus crowns prior to planting in 1:500 solution of OxiDate 5.0 for 3 - 5 minutes.</p> <p>Post Planting Soil Treatment:</p> <p>Treat the soil as needed using a 1:500 - 1:800 solution of OxiDate 5.0.</p>
Bulb Vegetables: Garlic Green Onions Leeks Onions Scallions Shallots	Bacterial Leaf Blight Bacterial Soft Rot Basal Rot Downy Mildew Neck Rot	<p>Foliar Applications: Follow: "Use Rates and Directions For Foliar Applications on Field Grown Crops".</p> <p>Preventative: 1:800 – 1:500 dilution. Begin sprays early in season. Maintain a 5 - 10 day spray schedule.</p> <p>Curative: 1:256 dilution. Apply at first sign/symptom of disease. Maintain a 3 - 10 day spray schedule until control is achieved.</p> <p>Rescue: 1:100 dilution. Apply under severe disease conditions. Maintain a 3 - 5 day spray schedule until control is achieved. DO NOT apply 1:100 rate to blooming crops.</p>

Cereal Grains & Commodities: Barley Corn (field) Millet Oats Popcorn Rice Rye Sorghum (Milo) Sweet Corn Wheat Wild Rice	Anthrachnose Bacterial Blight Bacterial Leaf Blight Blast Brown Leaf Spot Common Rust Common Smut Downey Mildew Head Smut Leaf Smut Sheath Blight Sorghum Downey Mildew Southern Blight Stem Canker Stem Rot Goss's Wilt	<p>Foliar Applications: Follow: "Use Rates and Directions For Foliar Applications on Field Grown Crops".</p> <p>Preventative: 1:800 – 1:500 dilution. Begin sprays early in season. Maintain a 5 - 10 day spray schedule.</p> <p>Curative: 1:256 dilution. Apply at first sign/symptom of disease. Maintain a 3 - 10 day spray schedule until control is achieved.</p> <p>Rescue: 1:100 dilution. Apply under severe disease conditions. Maintain a 3 - 5 day spray schedule until control is achieved. DO NOT apply 1:100 rate to blooming crops.</p>
Cole Crops: Broccoli Brussels Sprouts Cabbage Cauliflower Collards Kale	Alternaria Leaf Spot Bacterial Leaf Spot Black Rot, Downy Mildew Early Blight Late Blight Powdery Mildew	<p>Foliar Applications: Follow: "Use Rates and Directions For Foliar Applications on Field Grown Crops".</p> <p>Preventative: 1:800 – 1:500 dilution. Begin sprays early in season. Maintain a 5 - 10 day spray schedule.</p> <p>Curative: 1:256 dilution. Apply at first sign/symptom of disease. Maintain a 3 - 10 day spray schedule until control is achieved.</p>
Cotton	Bacterial Blight	<p>Foliar Applications: Follow: "Use Rates and Directions For Foliar Applications on Field Grown Crops".</p> <p>Preventative: 1:800 – 1:500 dilution. Begin sprays early in season. Maintain a 5 - 10 day spray schedule.</p> <p>Curative: 1:256 dilution. Apply at first sign/symptom of disease. Maintain a 3 - 10 day spray schedule until control is achieved.</p> <p>Rescue: 1:100 dilution. Apply under severe disease conditions. Maintain a 3 - 5 day spray schedule until control is achieved. DO NOT apply 1:100 rate to blooming crops.</p>
	Cotton Root Rot Fusarium Wilt Pythium Thielaviopsis Rhizoctonia	<p>Foliar Irrigation (chemigation) Applications:</p> <p>Apply as a preventative treatment through center pivot, lateral move, end tow, side-wheel roll, traveler, solid set, hand move or flood basin irrigation systems.</p> <p>Inject at a dilution of 1:2,000 – 1:400 or ¼ - 2.0 gallons of OxiDate 5.0 per every 500 gallons of water. Apply continuously or during the last 30 – 120 minutes of the irrigation cycle.</p>
		<p>At Planting Applications:</p> <p>Apply at a 1:100 – 1:1,000 dilution rate or ¼ - 1¼ gallons of OxiDate 5.0 in 50 – 200 gallons of water per treated acre. Make in-furrow applications just before seed is covered. Use higher rates for fields with a history of disease pressure.</p> <p>Banded Applications:</p> <p>Apply at a 1:400 – 1:80 dilution rate or ¼ - 1.25 gallons of OxiDate 5.0 in 100 gallons of water per treated acre. Make band applications to soil surface after seed is covered. Use higher rates in fields with a history of disease pressure.</p>
Cranberries	Fruit Rot Leaf Blight Bacterial Stem Canker	<p>Foliar Applications: Follow: "Use Rates and Directions For Foliar Applications on Field Grown Crops".</p> <p>Preventative: 1:800 – 1:500 dilution. Begin sprays early in season. Maintain a 5 - 10 day spray schedule.</p> <p>Curative: 1:256 dilution. Apply at first sign/symptom of disease. Maintain a 3 - 10 day spray schedule until control is achieved.</p> <p>Rescue: 1:100 dilution. Apply under severe disease conditions. Maintain a 3 - 5 day spray schedule until control is achieved. DO NOT apply 1:100 rate to blooming crops.</p>

Cucurbit Crops: Cucumber Melons Pumpkin Squash	Alternaria Anthracnose Downy Mildew Gummy Stem Blight Leaf Spot Powdery Mildew Phytophthora blight/fruit rot	<p><u>Foliar Applications:</u> Follow: "Use Rates and Directions For Foliar Applications on Field Grown Crops".</p> <p>Preventative: 1:800 – 1:500 dilution. Begin sprays early in season. Maintain a 5 - 10 day spray schedule.</p> <p>Curative: 1:256 dilution. Apply at first sign/symptom of disease. Maintain a 3 - 10 day spray schedule until control is achieved.</p> <p>Rescue: 1:100 dilution. Apply under severe disease conditions. Maintain a 3 - 5 day spray schedule until control is achieved. DO NOT apply 1:100 rate to blooming crops.</p>
		<p><u>Foliar Irrigation (chemigation) Applications:</u></p> <p>Apply through center pivot, lateral move, end tow, side-wheel roll, traveler, solid set, hand move or flood basin irrigation systems.</p> <p>Inject at a dilution of 1:2,000 – 1:400 or ¼ - 2.0 gallons of OxiDate 5.0 per every 500 gallons of water. Apply continuously or during the last 30 – 120 minutes of the irrigation cycle.</p>
	Belly Rot Root Rots Fusarium Wilt Pythium Phytophthora Rhizoctonia	<p><u>At Planting Applications:</u></p> <p>Apply at a 1:100 – 1:1,000 dilution rate or ¼ - 1¼ gallons of OxiDate 5.0 in 50 – 200 gallons of water per treated acre. Make in-furrow applications just before seed is covered. Use higher rates for fields with a history of disease pressure.</p>
		<p><u>Banded Applications:</u></p> <p>Apply at a 1:400 – 1:80 dilution rate or ¼ - 1¼ gallons of OxiDate 5.0 in 100 gallons of water per treated acre. Make band applications to soil surface after seed is covered. Use higher rates in fields with a history of disease pressure.</p>
Fruiting Vegetables: Eggplant Peppers Tomatoes Tomatillos	Anthracnose Early Blight Late Blight Bacterial Spot Bacterial Speck Botrytis - Gray Mold Leaf Mold Frog Eye Leaf Spot	<p><u>Foliar Applications:</u> Follow: "Use Rates and Directions For Foliar Applications on Field Grown Crops".</p> <p>Preventative: 1:800 – 1:500 dilution. Begin sprays early in season. Maintain a 5 - 10 day spray schedule.</p> <p>Curative: 1:256 dilution. Apply at first sign/symptom of disease. Maintain a 3 - 10 day spray schedule until control is achieved.</p> <p>Rescue: 1:100 dilution. Apply under severe disease conditions. Maintain a 3 - 5 day spray schedule until control is achieved. DO NOT apply 1:100 rate to blooming crops.</p>
	To reduce disease causing fungi and bacterial pathogens on or in seed	<p><u>Foliar Irrigation (Chemigation) Applications:</u></p> <p>Apply through center pivot, lateral move, end tow, side-wheel roll, traveler, solid set, hand move or flood basin irrigation systems.</p> <p>Inject at a dilution of 1:2,000 – 1:400 or ¼ - 2.0 gallons of OxiDate 5.0 per every 500 gallons of water. Apply continuously or during the last 30 – 120 minutes of the irrigation cycle.</p>
		<p><u>Seed Treatment:</u></p> <p>Apply at a 1:256 – 1:128 dilution or 1.0 – 0.5 gallons per every 100 gallons of water.</p> <p>If the seed company has not treated seed, immerse seed in the OxiDate 5.0 solution for one minute (up to ten minutes), remove seed and allow to drain. Rinsing of the seed after application is not required.</p>

	For control of seedling diseases (pre and post emergence damping off) caused by: Pythium, Phytophthora, Rhizoctonia, & Fusarium.	<p><u>Rate at Seeding or Transplanting</u> Apply at a 1:500 – 1:256 dilution or 2.5 - 5.0 fl. oz. for every ten gallons of water. Apply to point of saturation on newly seeded plugs trays, seed flats or bets with the initial watering.</p> <p>Add OxiDate 5.0 to transplant water or starter fertilizer and make in-furrow or dibble application just prior to plant set.</p> <p><u>Rate For Post Emergence Treatment:</u> Apply at a 1:500 dilution or 2.5 fl. oz. for every ten gallons of water. Apply OxiDate 5.0 at the 2 - 4 true leaf stage as a foliar spray with sufficient water to achieve complete coverage, or to the soil directly via drip trickle, in furrow or flood basin. Repeat at 5 – 7 day intervals</p> <p>.</p>
Globe Artichokes	Black Rot Botrytis Blight Crown Rot Grey Mold Powdery Mildew	<p><u>Foliar Applications:</u> Follow: "Use Rates and Directions For Foliar Applications on Field Grown Crops".</p> <p>Preventative: 1:800 – 1:500 dilution. Begin sprays early in season. Maintain a 5 - 10 day spray schedule.</p> <p>Curative: 1:256 dilution. Apply at first sign/symptom of disease. Maintain a 3 - 10 day spray schedule until control is achieved.</p>
Grasses grown for seed or sod	Grey Leaf Spot Leaf Rust Leaf Spot Stem Rust	<p><u>Foliar Applications:</u> Follow: "Use Rates and Directions For Foliar Applications on Field Grown Crops"</p> <p>Preventative: 1:800 – 1:500 dilution. Begin sprays early in season. Repeat weekly or as needed. Livestock can graze treated areas.</p> <p>Curative: 1:256 dilution. Apply at first sign/symptom of disease. Maintain a 3 - 10 day spray schedule until control is achieved</p>
Herbs and Spices: Basil Chives Cilantro Coriander Dill Mint Oregano Rosemary Sage	Anthrachnose Downy Mildew Powdery Mildew Pythium Rot	<p><u>Foliar Applications:</u> Follow: "Use Rates and Directions For Foliar Applications on Field Grown Crops".</p> <p>Preventative: 1:800 – 1:500 dilution. Begin sprays early in season. Maintain a 5 - 10 day spray schedule.</p> <p>Curative: 1:256 dilution. Apply at first sign/symptom of disease. Maintain a 3 - 10 day spray schedule until control is achieved</p>
Leafy Vegetables: Arugula Celery Chicory Root Endive Fennel Frisee Lettuce Mizuna Spinach Rhubarb Radicchio Swiss Chard	Downy Mildew Powdery Mildew	<p><u>Foliar Applications:</u> Follow: "Use Rates and Directions For Foliar Applications on Field Grown Crops".</p> <p>Preventative: 1:800 – 1:500 dilution. Begin sprays early in season. Maintain a 5 - 10 day spray schedule.</p> <p>Curative: 1:256 dilution. Apply at first sign/symptom of disease. Maintain a 3 - 10 day spray schedule until control is achieved.</p>

Legumes: Chick Peas Dry Beans Lima Beans Peas Snap Beans Soy Beans	Anthracnose Bacterial Leaf Blight Botrytis Blight Downy Mildew Early & Late Blight Powdery Mildew Rust	<p>Foliar Applications: Follow: "Use Rates and Directions For Foliar Applications on Field Grown Crops".</p> <p>Preventative: 1:800 – 1:500 dilution. Begin sprays early in season. Maintain a 5 – 10 day spray schedule.</p> <p>Curative: 1:256 dilution. Apply at first sign/symptom of disease. Maintain a 3 - 10 day spray schedule until control is achieved.</p> <p>Rescue: 1:100 dilution. Apply under severe disease conditions. Maintain a 3 - 5 day spray schedule until control is achieved.</p> <p>Foliar Irrigation (Chemigation) Applications: Apply through, center pivot, lateral move, end tow, side-wheel roll, traveler, solid set, hand move or flood basin irrigation systems. Inject at a dilution of 1:2,000 – 1:400 or ¼ - 2.0 gallons of OxiDate 5.0 per every 500 gallons of water. Apply continuously or during the last 30 – 120 minutes of the irrigation cycle.</p>
	White Mold	For control of White Mold, make 2-3 spray applications during bloom time using the curative rate.
	Early Blight Late Blight Phytophthora Pythium Rhizoctonia Fusarium Root-Rot Sclerotinia	<p>At Planting Applications:</p> <p>Apply at a 1:100 – 1:1,000 dilution rate or ¼ - 1¼ gallons of OxiDate 5.0 in 50 – 200 gallons of water per treated acre. Add OxiDate 5.0 to setting water or starter fertilizer and make in-furrow application just prior to seed drop.</p>
Mushrooms	Bacterial Blotch Mycogene Necrotic Spot Trichoderma Verticillium Spot	<p>Spray mushrooms using 0.16 fl. oz. of OxiDate 5.0 per gallon of water on 5 – 7 day intervals. Begin at pinning stage and continue through harvest.</p> <p>For Bacterial Blotch control, spray surface of mushrooms.</p>
Peanuts	Early Blight Late Blight Rust Leaf Spot	<p>Foliar Applications: Follow: "Use Rates and Directions For Foliar Applications on Field Grown Crops".</p> <p>Preventative: 1:800 – 1:500 dilution. Begin sprays early in season. Maintain a 5 - 10 day spray schedule.</p> <p>Curative: 1:256 dilution. Apply at first sign/symptom of disease. Maintain a 3 - 10 day spray schedule until control is achieved.</p> <p>Rescue: 1:100 dilution. Apply under severe disease conditions. Maintain a 3 - 5 day spray schedule until control is achieved. DO NOT apply 1:100 rate to blooming crops.</p>

Root & Tuber Vegetables: Artichokes Beets Carrots Ginseng Horseradish Parsnip Potatoes Radish Rutabaga Sugar Beets Sweet Potatoes Taro Turnips Yams	Alternaria Bacterial Leaf Spot Crown Rot Early Blight Late Blight Leaf Blight Leaf Spot Powdery Mildew Rhizoctonia Potato Brown Rot	Foliar Applications: Follow: "Use Rates and Directions For Foliar Applications on Field Grown Crops". Preventative: 1:800 – 1:500 dilution. Begin sprays early in season. Maintain a 5 - 10 day spray schedule. Curative: 1:256 dilution. Apply at first sign/symptom of disease. Maintain a 3 - 10 day spray schedule until control is achieved. Rescue: 1:100 dilution. Apply under severe disease conditions. Maintain a 3 - 5 day spray schedule until control is achieved. DO NOT apply 1:100 rate to blooming crops.
	White Mold	For control of White Mold, make 2 - 3 spray applications during bloom time using the 1:256 curative rate.
Strawberries	Botrytis Crown Rot Powdery Mildew	Pre-Plant Dip or Spray: Dilute at a 1:500 – 1:256 rate or 2.6 - 5.0 fl. oz. per every 10 gallons of water. Thoroughly wet transplants by dipping or spraying prior to planting. Excessive foaming or bubbling during the dipping process is an indication of high levels of disease contamination. Remove dead or dying foliage prior to dipping.
	Botrytis	Setting Water Applications: Apply at a 1:100 – 1:1,000 dilution rate or ¼ - 1¼ gallons of OxiDate 5.0 in 50 – 200 gallons of transplant water or starter fertilizer. Make in-furrow or dibble application at the time of plant set. OxiDate 5.0 is chemically compatible with most water-soluble fertilizers, but conduct a compatibility test prior to mixing. Control on Existing plantings: Remove dead plant growth from the beds immediately prior to making a OxiDate 5.0 application Apply at a 1:800 – 1:256 dilution rate or 16 - 50 fl. oz. for every 100 gallons of water. Typical applications use 30 - 100 gallons of spray solution per treated acre. Use sufficient water to obtain complete coverage. Use additional sprays in late winter just after plant bed cleaning.
	Powdery Mildew Leaf Blight Angular Leaf Spot Botrytis	At Planting Foliar Applications: Apply at a 1:256 dilution or 50 fl. oz. for every 100 gallons of water. Make application immediately following planting. Apply in a sufficient amount of water to achieve runoff to soil or plastic, typically 30 to 100 gallons of spray solution per acre. Or apply to the soil directly via drip, trickle, in furrow or flood applications.
	Anthracnose Angular Leaf Spot Botrytis (fruit rot or blight) Powdery Mildew	Foliar Applications to Existing plants: Follow: "Use Rates and Directions For Foliar Applications on Field Grown Crops" Preventative: 1:800 – 1:500 dilution. Begin sprays early in season. Maintain a 5 - 10 day spray schedule. Curative: 1:256 dilution. Apply at first sign/symptom of disease. Maintain a 3 - 10 day spray schedule until control is achieved.
Sugarcane	Eyespot Orange Rust Red Rot Smut	Foliar Applications: Follow: "Use Rates and Directions For Foliar Applications on Field Grown Crops". Preventative: 1:800 – 1:500 dilution. Begin sprays early in season. Maintain a 5 - 10 day spray schedule. Curative: 1:256 dilution. Apply at first sign/symptom of disease. Maintain a 3 - 10 day spray schedule until control is achieved. Rescue: 1:100 dilution. Apply under severe disease conditions. Maintain a 3 - 5 day spray schedule until control is achieved. DO NOT apply 1:100 rate to blooming crops.

Tobacco (Field)	Blue Mold Alternaria Leaf Spot – (Brown Mold) Angular Leaf Spot Frogeye Leaf Spot	Foliar Applications: Follow: “Use Rates and Directions For Foliar Applications on Field Grown Crops”. Preventative: 1:800 – 1:500 dilution. Begin sprays early in season. Maintain a 5 - 10 day spray schedule. For Blue Mold, start sprays early when conditions are favorable for disease development. Curative: 1:256 dilution. Apply at first sign/symptom of disease. Maintain a 3 - 10 day spray schedule until control is achieved.
	Tobacco Mosaic Virus	To prevent Tobacco Mosaic Virus, thorough sanitation of tools and implements is necessary. Treat seed by soaking in 1:50 - 1:100 solution for 10 - 15 minutes.
Tobacco (Float Beds)	Blue Mold Fusarium Pythium Phytophthora	Pre-Plant Dip or Spray Application: Preventative: Use a 1:25,000 – 1: 12,500 dilution or 5.5 – 10 fl. oz. OxiDate 5.0 for every 1,000 gallons of water. Treat water on a regular basis or maintain a residual 100 ppm concentration. Initial float Bed Treatment: Use a 1:2,500 –1:1,250 dilution or 0.5 – 2½ fl. oz. of OxiDate 5.0 per 10 gallons of water.

Directions For Algae Control In Rice/Wild Rice Fields And Paddies

Use OxiDate 5.0 to suppress/control algae in rice fields and paddies. Apply OxiDate 5.0 at a rate of 5.8 - 11.7 gallons of OxiDate 5.0 per surface acre using conventional sprayer equipment or aerial application. Apply at the first signs of algae. Applications are most effective when made before rice rises to the water surface. Apply OxiDate 5.0 as needed to control and prevent algae growth; apply more often in times of higher water temperatures.

Pre-harvest clean-up sprays for spoilage and decay causing organisms on crops

Use OxiDate 5.0 as a foliar spray for control of spoilage and decay causing organisms up to and including day of harvest. Use a 0.4% v/v (1:256) solution. Use adequate spray solution to ensure complete coverage of foliage and plant material. For increased coverage and penetration of spray, use a compatible non-ionic wetting agent/surfactant.

Treatment of Agricultural Water used for Pesticide Spray Solutions

Use OxiDate 5.0 as a bactericide/microbiocide to treat and suppress algae, bacteria and fungi in water collected from open or closed sources including but not limited to wells, ditches, canals, reservoirs, and ponds, used for pesticide spray solutions and mixtures. Add OxiDate 5.0 at a 1:700 - 1: 2,500 dilution rate (18.0 – 5.0 fl. oz. of OxiDate 5.0 per every 100 gallons of water) to water in spray or mix tank. Mix and allow a contact time of 3 - 5 minutes before adding other pesticides to spray solution.

NON PLANT USES

For Clean, Hard, Non-Porous Surface Applications

Use OxiDate 5.0 to suppress / control bacteria, fungi and slime-forming algae as follows:

SURFACE	USE RATE	INSTRUCTIONS
Pots, Flats, Trays	1:50 - 1:256, or 2½ - ½ fl. oz. per gallon of clean water.	Spray until runoff. Add additional surfactant if needed. Allow surfaces to remain wet for 10 minutes.
Cutting Tools	1:50 - 1:256, or 2½ - ½ fl. oz. per gallon of clean water. Tobacco Mosaic Virus control: 1:50- 1:256 or 2½ - ½ fl. oz. per gallon of clean water.	Soak tools to ensure complete coverage. Add additional surfactant if needed. Allow surfaces to remain wet for 10 minutes. Use OxiDate 5.0 to prevent the spread of Tobacco Mosaic Virus on cutting

		tools. Allow surfaces to remain wet for 1 minute.
Benches and Work Areas	Pre-cleaned surfaces: 1:256 - or ½ fl. oz. per gallon of clean water. Unclean surfaces: 1:50 or 2½ fl. oz. per gallon of clean water if surfaces have not been pre-cleaned with water to remove organic deposits.	Sweep and remove all plant debris. Use power sprayer to wash all surfaces to remove loose dirt. Add additional surfactant if needed. Allow surfaces to remain wet for 10 minutes.
Foot Bath Mats Foot pads and walk-through trays	1:256 or ½ fl. oz. per gallon of water.	Apply OxiDate 5.0 to prevent the tracking and spread of dirt and microorganisms. Make a solution of OxiDate 5.0 per gallon of water and fill foot bath mat, foot pad or walk-through tray to capacity. Allow treated surface to remain wet with solution for 10 minutes. Change solution as needed.

For Hard, Non-Porous Surfaces, Equipment And Structures

Use OxiDate 5.0 to suppress/control bacteria, fungi and slime forming algae on equipment, and structures: benches, walkways, floors, walls, fan blades, watering systems, vats, tanks, coolers, storage rooms, bins, elevators, storage areas, spray equipment, conveyors, irrigation systems, process equipment, process water systems, trucks, structures and related equipment. Allow surfaces to air dry, do not rinse.

- 1) Sweep and remove all plant debris. Use power sprayer to wash all surfaces to remove loose dirt and/or organic material.
- 2) Use a dilution of 1:256 or 0.5 fl oz. of OxiDate 5.0 per gallon of clean water on pre-cleaned surfaces. Use a dilution of 1:128 or 1 ¼ fl. oz. of OxiDate 5.0 per gallon of clean water if surfaces have not been pre-cleaned with water to remove organic deposits. The use of additional surfactant is acceptable.
- 3) Apply solution with mop, sponge, or power sprayer to thoroughly wet all surfaces.
- 4) Follow treatment of any food contact surfaces, equipment or structures with a potable water rinse.
- 5) Scrub off heavy growths of algae and fungi following application. Use a solution of OxiDate 5.0 to wash away dead growth.
- 6) Reapply often for control.

Foaming Applications (*Not Approved for Use in California*)

Apply OxiDate 5.0 as a foam treatment to enhance contact on porous surfaces and irregular surfaces, where contact is difficult to maintain with spray treatments. Use a dilution of 1:128 - 1:256, or 1.0 – ½ fl. oz. of OxiDate 5.0 per gallon of clean water. Use the 1:128 dilution rate or 1.0 fl. oz. of OxiDate 5.0 per gallon of clean water if surfaces to be treated have not been pre-cleaned with water to remove organic deposits. Add a surfactant foaming agent to the spray tank that contains the diluted OxiDate 5.0 spray solution. Follow all mixing instructions on the label. Apply foam until the surface treated is completely covered. Allow foam treated surface to air dry. Do not rinse.

For Surfaces And Equipment Applications In Packing Houses

Apply OxiDate 5.0 to suppress/control bacteria, fungi and slime forming algae on all surfaces and equipment found in packinghouses including, dump tanks, drenches, crates, containers, conveyors, storages, walls, floors, and process lines.

- 1) Remove loose soil or organic matter with clean water and/or detergent rinse.
- 2) Use OxiDate 5.0 at a dilution ratio of 1:500 - 1:128 or 2.5 – 10 fl. oz. of OxiDate 5.0 per every 10 gallons of water. Apply as a coarse spray until runoff.
- 3) Allow OxiDate 5.0 treated surfaces to air dry. Do not rinse.

Foaming Applications (Not Approved for Use in California)

Apply OxiDate 5.0 as a foam treatment to enhance contact on porous surfaces, vertical surfaces and irregular surfaces where contact is difficult to maintain with spray treatments. Remove loose soil or organic matter with clean water and/or detergent rinse. Use OxiDate 5.0 at a dilution ratio of 1:500 - 1:128 or 2.5 –10 fl. oz. of OxiDate 5.0 per every 10 gallons of water. Add a surfactant foaming agent to the spray tank that contains the diluted OxiDate 5.0 solution. Apply foam until the surface treated is completely covered. Allow foam treated surface to air dry. Do not rinse.

Surface Treatment- For Treatment Of Citrus Canker On Vehicles, Field Equipment, Tools, Personnel Clothing.

Rate – Surface Treatment	Application	Notes
6.5 – 8.5 fl. oz. of OxiDate 5.0 per 100 gallons of water. Complete coverage is essential.	Apply to field equipment such as pickers, trailers, trucks (including truck body parts and tires), bins, packing crates, ladders, power tools, pruning shears, gloves, rubber boots, Tyvek suits or other equipment that can transfer <i>Xanthomonas</i> bacterial species including citrus canker. Apply to equipment and surfaces found in commercial packing houses including dump tanks, drenches, crates, containers, conveyors, storages, walls, floors, and process lines.	Remove loose soil or organic matter with clean water or detergent/rinse. Use a power sprayer to remove loose dirt and organic matter. Apply solution as a coarse spray or by mop, sponge, power sprayer, or portable sprayer. Apply until run off. Allow surfaces to remain wet for 10 minutes. Allow treated surfaces to air dry, do not rinse.

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, 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 as needed.
- 6) 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.
- 7) 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 must 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.
- 8) 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 -

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- 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 must 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.
- 5) 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.
- 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.
- 7) Do not apply when wind speed favors drift beyond the area intended for treatment.

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

- 1) 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, a 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 -

- 1) Remove scale, pesticide residues, and other foreign matter from the chemical supply tank and entire injector system. Flush with clean water until no scale or pesticide residues are present. 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 amount of water and then adding product as required. The product will immediately go into solution without any agitation. Use mixed solution within two hours.
- 4) OxiDate 5.0 may be applied in conjunction with other pesticides or fertilizers. Agricultural chemicals may perform in an unpredictable manner when tank mixed, especially where several products are involved. Reduced effect on pests or crop injury may occur. Conduct a compatibility jar test before mixing a whole tank. Because of the wide variety of possible combinations which can be encountered, observe all precautions and limitations on the labels of all products used in mixtures. Test for potential crop injury on a small set of plants prior to commercial use of a new tank mix.

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Store in original container in a cool, dry well-vented area, away from direct sunlight. Do not allow product to become overheated in storage. 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 $\frac{1}{4}$ 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. If burned, stay out of smoke. 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 $\frac{1}{4}$ 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

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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. If burned, stay out of smoke. Batch Code _____

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.

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 must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury 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, to the extent consistent with applicable law.

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. To the extent consistent with applicable law, 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 TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BIOSAFE SYSTEMS MAKES NO WARRANTIES OF MERCHANTABILITY FOR A PARTICULAR PURPOSE, NOR ANY OTHER EXPRESSED OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

To the extent consistent with applicable law, 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. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, 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 For Sublabels A & B

- Fungicide
- Bactericide
- Broad Spectrum
- Broad Spectrum Bactericide/Fungicide
- Broad Spectrum Algacide/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 treatment for the prevention and control of plant pathogenic diseases on surfaces, equipment and structures used in processing post-harvest commodities.
- A treatment for the prevention and control of algae & cyanobacteria in waters, including rice and wild rice fields/paddies.
- Activated peroxygen treatment.
- Virucide (Tobacco mosaic virus)
- Preventative treatment for ornamental plants and turf.
- A treatment for the prevention and suppression / control of horticultural diseases in Greenhouses, Garden Centers, Landscapes, and Nurseries.
- A treatment for the prevention and control of bacteria, algae and fungi on greenhouse surfaces, equipment and structures.
- Preventative treatment for ornamental plants, edible crops, and turf.
- For disease control on tree and vine crops
- For use in greenhouses and nurseries Bactericide/Fungicide for Greenhouses, Garden Centers, Landscapes, and Nurseries.
- For Fruit & Vegetable Crops
- For Hydroponic Crops (*Not Approved For Use in California*)
- For Ornamental Plants & Trees
- For Turf & Landscapes
- Treats & controls root diseases (Pythium (Root Rot and Damping off), Phytophthora (Blight) Fusarium (Wilt), Verticillium (Wilt), Rhizoctonia (Root Rot/Bottom Rot), Thielaviopsis (Root Rot).
- Treats & controls *Alternaria* – *Anthracnose* – *Aphanomyces* – Black Spot - *Botrytis* (grey mold) - Downy Mildew – *Erwinia*, *Fusarium* (root rot) - Leaf Spot - *Phytophthora* (blights, rots) – *Plasmopara* - Powdery Mildew - *Pseudomonas* - *Pythium* - *Rhizoctonia* - Rust - Scab - Smut - *Thielaviopsis* – *Uncinula* (powdery mildew) – *Xanthomonas* - Wilts & Blights - *Ralstonia solanacearum* (brown rot, bacterial wilt) - *Sclerotinia sclerotiorum* (white mold) - *Tobacco mosaic virus*.
- Treats & controls Late Blight, Bacterial Wilt, Botrytis, Downy Mildew, Powdery Mildew
- 0 hour REI for pre-plant dip, seed treatment, soil drench
- 1 hour REI for spray applications
- Made in the USA
- Formulated to enhance your plant's health, quality, and appearance
- Excellent Resistance Management Tool
- Foliar & Root Disease Control
- OxiDate 5.0 can be tank mixed with a compatible systemic chemistry or insecticide
- Chemistry for controlling a broad range of pathogens
- Activated peroxygen chemistry
- For Use on Flowering Plants
- For use on Green Plants