

OxiDate™

Broad Spectrum Bactericide / Fungicide

(Alternate Brand Names: "StorOx™" "OxiDate™ Bactericide / Fungicide")

- * Preventative treatment for seeds, growing plants, fruits, nuts and vegetables.
- * Preventative treatment for postharvest fruits, vegetables and other agricultural crops.
- * A treatment for the prevention and control of plant pathogenic diseases in field grown crops, commercial greenhouses, and storage sites.
- * A treatment for the prevention and control of plant pathogenic diseases on crops after harvest.
- * A treatment for the prevention and control of plant pathogenic diseases on surfaces, equipment and structures used in processing postharvest commodities.
- * A treatment for the prevention and control of algae & cyanobacteria in waters.

FOR AGRICULTURAL AND COMMERCIAL USE ONLY

ACCEPTED
NOV 03 2004
Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 70299-2

ACTIVE INGREDIENT:

Hydrogen Dioxide..... 27%

OTHER INGREDIENTS:..... 73%

TOTAL:..... 100%

**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 a 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 mouth-to-mouth if possible. • Call poison control center or doctor for treatment advice.
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-222-1222 for emergency medical treatment information.	
NOTE TO PHYSICIAN Probable mucosal damage may contraindicate the use of gastric lavage.	

Sold by: BioSafe Systems, 36 Commerce Street, Glastonbury, CT 06033
EPA Registration No. 70299-2
EPA Establishment No. 60156-IL-001
Net Contents: 2.5 gallons

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMAN AND DOMESTIC ANIMALS – DANGER: **Corrosive.** Concentrate causes irreversible eye damage. Concentrate may be fatal if swallowed or absorbed through skin. Concentrate causes skin burns or temporary discoloration on exposed skin. Do not breathe vapor of concentrate. Do not get concentrate in eyes, on skin or on clothing. Wear protective eyewear such as goggles or face shield. Wash thoroughly with soap and water after handling. Remove and wash contaminated clothing before reuse.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

When handling concentrate wear protective eyewear (goggles or face shield) and rubber gloves. Applicators and handlers must wear coveralls over long-sleeved shirt, long pants, and chemical resistant footwear plus socks. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions exist for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

USER SAFETY RECOMMENDATIONS

Users should wash hands thoroughly with soap and water before eating, drinking, chewing gum, using tobacco or using the toilet. 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 pesticide is toxic to birds and fish. Do not contaminate water when disposing of equipment washwaters or rinsate. Exposed treated seed may be hazardous to birds and other wildlife. Dispose of all excess treated seed and seed packaging by burial away from bodies of water.

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.

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 agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about Personal Protective Equipment (PPE), notification to workers, and Restricted-Entry Interval (REI). The requirements in this box only apply to the uses of this product that are covered by the Worker Protection Standard.

For enclosed environments:

There is a restricted entry of one (1) hour for this product when applied via fogging or spraying to growing plants, surfaces, equipment, structures and non-porous surfaces in enclosed 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 or fogging 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.

DIRECTIONS FOR USE:

- * OxiDate™ works best when diluted with water containing low levels of organic or inorganic materials, and with water having a neutral pH. Thoroughly rinse out tank with water before mixing concentrate. OxiDate™ will readily mix with clean, neutral water and does not require agitation.
- * *(Optional Text for agricultural uses only: Do not combine or mix OxiDate™ with any other pesticide or fertilizer.)*
- * *(Optional Text for agricultural uses only: OxiDate™ is formulated with a minimal amount of surfactant for plants having waxy or hairy surfaces. The use of additional surfactant is acceptable.)*
- * OxiDate™ works by surface contact with the plants and materials being treated. It is important to ensure that all surfaces are thoroughly wetted. OxiDate™ does not produce any visible residue, distinct odor or deleterious effects to plants or to postharvest commodities when used in

accordance with label directions. Do not use at higher than suggested dilution rates as leaf burn may result.

Do not apply this product through any irrigation system unless directed by the label; refer to Chemigation Directions for Use.

APPLICATION DIRECTIONS:

Pre-Plant Dip Treatment -

Use OxiDate™ for the control of damping-off, root disease and stem rot disease caused by *Pythium*, *Phytophthora*, *Rhizoctonia*, *Fusarium* or *Thielaviopsis*, on seeds, seedlings, bulbs, or cuttings.

- 1) Mix 64-fl. oz. OxiDate™ per 50 gallons of water.
- 2) Immerse plants or cuttings; remove and allow to drain. Do not rinse.

Seed Treatment -

Use OxiDate™ for the control of damping-off, root disease and stem rot disease caused by *Pythium*, *Phytophthora*, *Rhizoctonia*, *Fusarium* or *Thielaviopsis*, on seeds of seed sprout crops such as mung bean, red clover, soybeans and alfalfa, and on crops grown exclusively for seed for planting.

- 1) Mix 64-fl. oz. OxiDate™ per 50 gallons of water.
- 2) Immerse seeds and let soak for two minutes; remove and allow to drain. Do not rinse.

Do not use treated seed for food or feed purposes or process for oil. Treat only those seeds needed for immediate use, minimizing the interval between treatments at planting. Do not store excess treated seeds beyond planting time.

Seed treatment on agricultural establishments in hopper-box, planter-box or other seed treatment application at or immediately before planting is within the scope of WPS, while commercial treatment of seeds is not within the scope.

For treatment of tank and spray system water in bean sprout production process and packing lines, refer to the label section entitled "For direct injection into dump tanks, hydro coolers, spray system and process waters."

Soil Drench -

OxiDate™ is effective for the control of soil-borne plant diseases such as *Pythium*, *Phytophthora*, *Rhizoctonia*, *Thielaviopsis* or *Fusarium*. Use as a soil drench at the time of seeding or transplanting, as well as a periodic drench throughout the plant's life. Use OxiDate™ on potting soil and growing mediums prior to planting.

- 1) Mix 1¼ fl. oz. OxiDate™ per gallon of clean water.
- 2) Apply to soil or growing media to the point of saturation.
- 3) Wait fifteen minutes before planting or watering.

Foliar Spray Treatments for field grown crops, crops grown in commercial greenhouses or crops grown in other similar sites -

OxiDate™ 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.

Foliar Applications: Plant Sensitivity Testing:

For foliar applications, be sure to use OxiDate™ at labeled dilutions as solutions more concentrated can result in leaf necrosis for some crops (i.e., do not use dilutions less than 1:100 for foliar treatments). OxiDate™ has been designed to provide a balanced source of the active ingredient directly to the plant surface. OxiDate™ 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™. Therefore, before treating large numbers of plants, test OxiDate™ on a few plants for sensitivity.

Application of OxiDate™ for curative control of obligate organisms living in the plant tissue (such as Downy and Powdery Mildew) can result in lesions on plant tissue. OxiDate™ will oxidize parasitic organisms living in plant tissue that are not always visible to the naked eye. Resulting oxidative effects can include spotting, or drying of the plant tissue where organisms inhabited tissue.

For clean, non-porous surfaces -

Pots, Flats, Trays: Use a dilution of 1:100 - 1:300 or 1¼ fl oz. - ½ fl. oz. of OxiDate™ per gallon of clean water. Spray until runoff. The use of additional surfactant is acceptable.

Cutting Tools: Use a dilution of 1:100 - 1:300 or 1¼ fl oz. - ½ fl. oz. of OxiDate™ per gallon of clean water. Soak tools to ensure complete coverage. The use of additional surfactant is acceptable.

Benches and Work Areas: Sweep and remove all plant debris. Use power sprayer to wash all surfaces to remove loose dirt. Use a dilution of 1:100 - 1:300 or 1¼ fl oz. - ½ fl. oz. of OxiDate™ per gallon of clean water. Use a dilution of 1:50 or 2½ fl. oz. of OxiDate™ per gallon of clean water if surfaces that are to be treated have not been pre-cleaned with water to remove organic deposits. The use of additional surfactant is acceptable.

For surfaces, equipment and structures–

Use OxiDate™ to suppress / control bacteria, fungi and slime forming algae on surfaces, equipment, and structures such as: plastic, 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. Follow treatment of any food contact surfaces, equipment or structures with a potable water 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 1:100 - 1:300, or 1¼ fl oz. - ½ fl. oz., of OxiDate™ per gallon of clean water. Use a dilution of 1:50 or 2½ fl. oz. of OxiDate™ per gallon of clean water if surfaces that are to

be treated have not been pre-cleaned with water to remove organic deposits. The use of additional surfactant is acceptable.

- 3) Apply solution with mop, sponge, power sprayer or fogger to thoroughly wet all surfaces.

Fog enclosed areas as an adjunct to manual surface application. Wear protective eyewear (goggles or face shield) when fogging. Prior to fogging, pre-clean surfaces with water to remove any organic deposits. Fog the desired areas using dilution rates of 1:50-1:300, or 2½ fl. oz. - ½ fl. oz., of OxiDate™ using any type of fogging equipment including but not limited to cold foggers, thermal foggers, low pressure air assisted and high pressure fog systems. Solutions are corrosive to materials that are easily oxidized such as natural rubber, copper, galvanized and black iron pipe. Test solutions on surfaces prior to use.

- 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™ to wash away dead growth.
- 6) Reapply often for control.

Surface Treatment for the control of Citrus Canker –

Use OxiDate™ to control and prevent the transfer of *Xanthomonas* bacterial species including Citrus Canker on field equipment and surfaces in packinghouses.

Field Equipment: Apply OxiDate™ 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 *Xanthomonas* bacterial species including Citrus Canker.

- 1) Remove loose soil or organic matter with clean water and/or detergent rinse.
- 2) Use OxiDate™ at a dilution ratio of 1:800 to 1:600 or 16.00 fl. oz. to 21.3 fl. oz. of OxiDate™ per 100 gallons of water. Apply as a coarse spray until run-off.
- 3) Allow OxiDate™ treated equipment to air dry. Do not rinse.

Packinghouses: Apply OxiDate™ to all surfaces and equipment found in commercial 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™ at a dilution ratio of 1:800 to 1:600 or 16.00 fl. oz. to 21.3 fl. oz. of OxiDate™ per 100 gallons of water. Apply as a coarse spray until runoff.
- 3) Allow OxiDate™ treated surfaces to air dry. Do not rinse.

Foaming Applications: Apply OxiDate™ as a foam treatment to enhance contact on 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™ solution. Apply foam until the surface treated is completely covered. Allow foam treated surface to air dry. Do not rinse.

For agricultural irrigation and drainage water and ditches -

Use OxiDate™ to suppress / control algae, bacteria and fungi in agricultural irrigation and drainage water and ditches. For irrigation water, apply 1 to 2 fluid ounces of OxiDate™ per 250 gallons of water. Product can be simply added to the body of water as the residual control will allow for even distribution throughout the water column. Where existing algae mats are present at time of treatment, the most effective control will be obtained by breaking up mats and/or evenly dispersing diluted OxiDate™ over the algae mats. Apply OxiDate™ as needed to control and prevent algae growth; apply more frequently in times of higher water temperatures.

For stock tanks and livestock water –

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

Drip system application for livestock watering tanks: Tanks fed by a continuous flow of spring or well water can be equipped with a chemical drip system designed to meter-in OxiDate™ based upon water flow rates. Pre-dilute OxiDate™ at a 100: 1 rate or 4-mL/minute water flow rate. Treat continuously or as needed to control and prevent algae regrowth.

Treatment for nonpotable water systems (wash tanks, dip tanks, drench tanks, evaporators, humidification systems and/or storage tanks) –

Treat water containing plant pathogens with 1½ fl. oz. of OxiDate™ for every 10 gallons of water or use a dilution rate of 1:2000.

For direct injection into spray waters used on process lines -

Treat water containing plant pathogens by injecting OxiDate™ directly into spray system water with 12.8 fl. oz. of OxiDate™ for every 100 gallons of water or use a dilution rate of 1:1000. Applicable for use on all types of postharvest commodities.

For post-harvest spray treatments on process and packing lines –

Inject OxiDate™ directly into spray system water on process and packing lines to prevent bacterial and fungal diseases on post-harvest fruits and vegetables. Inject at 1:100 - 1:1,000 OxiDate™ to clean water. For best results, where dump tanks are used, make post harvest spray treatment as fruit is leaving dump tanks. Applicable for use on all types of post harvest commodities.

For post-harvest spray treatment -

Use OxiDate™ to prevent bacterial and fungal diseases on post-harvest fruits and vegetables. Mix 1.25 – 0.50 fl. oz. OxiDate™ per gallon of clean water. Spray fruit or vegetables to runoff using hydraulic, backpack, air-assisted or other similar sprayer or foamer.

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

For treatment of water containing plant pathogens, inject OxiDate™ and maintain a predetermined residual level by using metering equipment, coupled with ORP measuring probes.

- 1) Determine biological organic loading prior to treatment if possible.
- 2) For waters that contain low levels of biological and organic loading inject OxiDate™ at 2.5 fl. oz. – 1.25 fl. oz. of OxiDate™ for every 100 gallons of water or at a dilution rate of 1:5000-10,000.
- 3) For clean water inject OxiDate™ at 1.25 fl. oz. – 0.625 fl. oz. of OxiDate™ for every 100 gallons of water or a dilution rate of 1:10,000- 1:20,000 to prevent the formation of algae, bacteria and fungi.

For contained waters -

To suppress, control and prevent algae and cyanobacteria in contained waters such as Ponds, Lakes, Lagoons, Water Gardens, Ornamental Pools/Ponds, Ornamental Waterfalls, Fountains, Bird Baths, Irrigation Ponds, Golf Course Ponds, Farm Ponds, Fish Ponds, Fish Hatcheries, Impounded Waters, Bilge Water, Reservoirs, Waterways, Conveyance Ditches, Canals, Laterals, Drainage Systems, Catch Basins, Fire Ponds, Watering Tanks, Storage Tanks, Water Collectors and Domestic/Commercial Waters. Waters treated with OxiDate™ are permissible to be used without interruption.

DETERMINING WATER VOLUME

Measure length (L), width (W), and average depth (D) in feet (ft) or meters (m) and calculate volume using one of the following formulas:

Square/Rectangular:

$$L(\text{ft}) \times W(\text{ft}) \times D(\text{ft}) \times 7.5 = \text{Gallons}$$

$$L(\text{m}) \times W(\text{m}) \times D(\text{m}) \times 1000 = \text{Liters}$$

Circular/Elliptical:

$$L(\text{ft}) \times W(\text{ft}) \times D(\text{ft}) \times 5.9 = \text{Gallons}$$

$$L(\text{m}) \times W(\text{m}) \times D(\text{m}) \times 786 = \text{Liters}$$

$$\frac{\text{Avg. Length (ft)} \times \text{Avg. Width (ft)}}{43,560} = \text{acres}$$

APPLICATION METHODS

In bodies of water where an aerator is available, and when treating the entire water volume, dose at the edges, or in the turbulence created while the aerator runs to facilitate rapid and adequate mixing.

Spot Treatment: Apply OxiDate™ directly over the infested area. Re-treatment is required when heavy growth occurs.

Liquid Treatment: Spray solution on the water surface from shore or a properly equipped boat.

Injection Treatment: Inject solution into the water via a piping system.

APPLICATION RATES**GALLONS PER SURFACE ACRE**

Growth/Density (Alga Type)	PPM A.I.	DEPTH IN FEET			
		1	2	3	4
Low Density (Cyanobacteria)	1.0	1.2	2.4	3.6	4.8
	2.0	2.4	4.8	7.2	9.6
	3.0	3.6	7.2	10.8	14.4
Moderate Density	---4.0---	---4.8---	---9.6---	---14.4---	---19.2---
	5.0	6.0	12.0	18.0	24.0
	6.0	7.2	14.4	21.6	28.8
High Density (Filamentous)	---7.0---	---8.4---	---16.8---	---25.2---	---33.6---
	8.0	9.6	19.2	28.8	38.4
	9.0	10.8	21.6	32.4	43.2
Extreme Density (Full Bloom)	10.0	12.0	24.0	36.0	48.0
	15.0	18.0	36.0	54.0	72.0
	20.0	24.0	48.0	72.0	96.0
	25.0	30.0	60.0	90.0	120.0

GENERAL TREATMENT NOTES

- Control is most easily achieved when algae are not yet well established. Treat when growth first begins to appear.
- Apply early in the day under calm, sunny conditions, and when water temperatures are warm. Sunlight and higher temperatures both enhance activity.
- Apply evenly over the water surface directly over the algae to be treated.
- Break up any heavy floating algae mats before or during application.
- If using in conjunction with other water additives (such as bacteria or enzymes), always apply OxiDate™ first and wait several hours before adding any other products.
- Re-treat areas if re-growth begins to appear. Allow 48 hours between consecutive treatments.
- Maintain an algae free pond with maintenance rates at a frequency appropriate for your environmental conditions.
- Do not tank mix with aquatic herbicides or algaecides containing copper or bromides

EFFECTIVENESS FACTORS

- Effects of OxiDate™ treatment are immediately apparent (bubbling, bleaching, & discoloration of algae).
- OxiDate™ treatments are successful when contact of the pesticide is made with the algae.

- When treating surface mats and blooms, it is possible that OxiDate™ will not penetrate the water column below the infested area, and a second application is then required for treating any bottom growing algae.
- Apply more frequently during the summer months when water consumption and temperatures are high.

Application Instructions (Alphabetical by Crop)

Crops	Disease	Dilution Rate	Application Rate	Directions
Asparagus	Phytophthora	1:100	128 fl. oz. of OxiDate per 100 gallons of water; apply 50–100 gallons of spray solution per treated acre.	<p>Curative: Spray diseased plants using 128 fl. oz. of OxiDate per 100 gallons of water for one to three consecutive days and continue treatments on five to seven day intervals.</p> <p>Preventive: Begin when plants are small. Apply first three treatments using the curative rate at 5-day intervals. Reduce rate to 40 fl. oz. of OxiDate per 100 gallons of water after the completion of third treatment and maintain 5-day interval spray cycle until harvest.</p>
		1:100 – 1:300	40–128 fl. oz. of OxiDate per 100 gallons of water; apply 50–100 gallons of spray solution per treated acre.	
Bananas Plantains	Sigatoka	1:100	128 fl. oz. of OxiDate per 100 gallons of water; apply 50–100 gallons of spray solution per treated acre.	<p>Curative: Spray diseased plants using 128 fl. oz. of OxiDate per 100 gallons of water for one to three consecutive days and continue treatments on five to seven day intervals.</p> <p>Preventive: Begin when plants are small. Apply first three treatments using the curative rate at 5-day intervals. Reduce rate to 40 fl. oz. of OxiDate per 100 gallons of water after the completion of third treatment and maintain 5-day interval spray cycle until harvest.</p>
		1:100 – 1:300	40–128 fl. oz. of OxiDate per 100 gallons of water; apply 50–100 gallons of spray solution per treated acre.	
Beans Snap & Dry	Anthracnose Botrytis Downy Mildew Early & Late Blight Fusarium Phytophthora Powdery Mildew Pythium Rhizoctonia Sclerotinia Rust White Mold	1:100 – 1:2000	See Beans – Snap and Dry Application Instructions.	For specific application instructions, see <u>Beans – Snap and Dry Application Instructions</u> .
Berries, including but not limited to: Blackberry Blueberry Cranberry	Alternaria Angular Leaf Spot Botrytis Crown Rot Downy Mildew Fruit Rot Leaf Blight	1:100	128 fl. oz. of OxiDate per 100 gallons of water; apply 25–100 gallons of spray solution per treated acre.	<p>Curative: Spray diseased plants using 128 fl. oz. of OxiDate per 100 gallons of water for one to three consecutive days and continue treatments on five to seven day intervals.</p> <p>Preventive: Begin when plants are small. Apply first three treatments using the curative</p>
		1:100 – 1:300	40–128 fl. oz. of OxiDate per 100 gallons	

Raspberry Strawberry <i>(see Strawberry Application Instructions)</i>	Powdery Mildew		of water; apply 50-100 gallons of spray solution per treated acre.	rate at 5-day intervals. Reduce rate to 40 fl. oz. of OxiDate per 100 gallons of water after the completion of third treatment and maintain 5-day interval spray cycle until harvest.
Celery	Early Blight Late Blight	1:100	128 fl. oz. of OxiDate per 100 gallons of water; apply 50-100 gallons of spray solution per treated acre.	Curative: Spray diseased plants using 128 fl. oz. of OxiDate per 100 gallons of water for one to three consecutive days and continue treatments on five to seven day intervals. Preventive: Begin when plants are small. Apply first three treatments using the curative rate at 5-day intervals. Reduce rate to 40 fl. oz. of OxiDate per 100 gallons of water after the completion of third treatment and maintain 5-day interval spray cycle until harvest.
		1:100 - 1:300	40-128 fl. oz. of OxiDate per 100 gallons of water; apply 50-100 gallons of spray solution per treated acre.	
Citrus Crops, including but not limited to: Grapefruit Kumquat Lemon Orange Tangerine	Alternaria Anthracnose Brown Rot Citrus Canker Phytophthora Powdery Mildew Rust Scab	1:100	128 fl. oz. of OxiDate per 100 gallons of water; apply 50-100 gallons of spray solution per treated acre.	Curative: Spray diseased plants using 128 fl. oz. of OxiDate per 100 gallons of water for one to three consecutive days and continue treatments on five to seven day intervals. Preventive: Begin when plants are small. Apply first three treatments using the curative rate at 5-day intervals. Reduce rate to 40 fl. oz. of OxiDate per 100 gallons of water after the completion of third treatment and maintain 5-day interval spray cycle until harvest.
		1:100 - 1:300	40-128 fl. oz. of OxiDate per 100 gallons of water; apply 50-100 gallons of spray solution per treated acre.	
Cole Crops, including but not limited to: Broccoli Brussels Sprouts Cabbage Cauliflower Collards	Alternaria Leaf Spot Downy Mildew Early Blight Late Blight Powdery Mildew	1:100	128 fl. oz. of OxiDate per 100 gallons of water; apply 50-100 gallons of spray solution per treated acre.	Curative: Spray diseased plants using 128 fl. oz. of OxiDate per 100 gallons of water for one to three consecutive days and continue treatments on five to seven day intervals. Preventive: Begin when plants are small. Apply first three treatments using the curative rate at 5-day intervals. Reduce rate to 40 fl. oz. of OxiDate per 100 gallons of water after the completion of third treatment and maintain 5-day interval spray cycle until harvest.
		1:100 - 1:300	40-128 fl. oz. of OxiDate per 100 gallons of water; apply 50-100 gallons of spray solution per treated acre.	
Cucurbit crops, including but not limited to: Cucumber Melons Pumpkin Squash	Alternaria Anthracnose Belly Rot Downy Mildew Fusarium Wilt Gummy Stem Blight Leaf Spot Phytophthora Powdery Mildew Pythium Rot Rhizoctonia Root Rots	1:100 - 1:2000	See <i>Cucurbit Application Instructions</i> .	For specific application instructions, see <i>Cucurbit Application Instructions</i> .

Filberts	E. Filbert Blight Bacterial Blight	1:100	128 fl. oz. of OxiDate per 100 gallons of water; apply 50–100 gallons of spray solution per treated acre.	Pre-Bloom: Begin applications at ¼ - ½ inch green tip and continue on a five to seven day schedule through bloom. Curative: Spray diseased trees for three consecutive days and continue treatments on five to seven day intervals.
Garlic Leeks Onions Shallots	Botrytis Downy Mildew Powdery Mildew	1:100 1:100 – 1:300	128 fl. oz. of OxiDate per 100 gallons of water; apply 50–100 gallons of spray solution per treated acre. 40–128 fl. oz. of OxiDate per 100 gallons of water; apply 50–100 gallons of spray solution per treated acre.	Curative: Spray diseased plants using 128 fl. oz. of OxiDate per 100 gallons of water for one to three consecutive days and continue treatments on five to seven day intervals. Preventive: Begin when plants are small. Apply first three treatments using the curative rate at 5-day intervals. Reduce rate to 40 fl. oz. of OxiDate per 100 gallons of water after the completion of third treatment and maintain 5-day interval spray cycle until harvest.
Grapes	Black Rot Botrytis Downy Mildew Powdery Mildew Sour Rot	1:100 1:100 – 1:300	128 fl. oz. of OxiDate per 100 gallons of water; apply 50–100 gallons of spray solution per treated acre. 40–128 fl. oz. of OxiDate per 100 gallons of water; apply 50–100 gallons of spray solution per treated acre.	Curative: Spray diseased plants using 128 fl. oz. of OxiDate per 100 gallons of water for one to three consecutive days and continue treatments on five to seven day intervals. Preventive: Begin when plants are small. Apply first three treatments using the curative rate at 5-day intervals. Reduce rate to 40 fl. oz. of OxiDate per 100 gallons of water after the completion of third treatment and maintain 5-day interval spray cycle until harvest.
Grasses grown for seed or sod	Leaf Rust Leaf Spot Stem Rust	1:100 – 1:300	40–128 fl. oz. of OxiDate per 100 gallons of water; apply 50–100 gallons of spray solution per treated acre.	Use sufficient water to achieve good coverage. Begin applications during stem elongations. Repeat weekly or as needed. Livestock can graze treated areas.
Herbs and Spices, including but not limited to: Basil Chives Cilantro Coriander Dill Mint Rosemary Sage	Anthraxnose Downy Mildew Powdery Mildew Pythium Rot	1:100 1:100 – 1:300 1:500– 1:1000	128 fl. oz. of OxiDate per 100 gallons of water; apply 50–100 gallons of spray solution per treated acre. 40–128 fl. oz. of OxiDate per 100 gallons of water; apply 50–100 gallons of spray solution per treated acre. Direct Injection at a dilution ratio of 1:500 – 1:1000.	Curative: Spray diseased plants using 128 fl. oz. of OxiDate per 100 gallons of water for one to three consecutive days and continue treatments on five to seven day intervals. Preventive: Begin when plants are small. Apply first three treatments using the curative rate at 5-day intervals. Reduce rate to 40 fl. oz. of OxiDate per 100 gallons of water after the completion of third treatment and maintain 5-day interval spray cycle until harvest. Direct Injection: Inject directly into misting systems for continual treatment during propagation.

Leafy Vegetables	Brown Rot	1:100	128 fl. oz. of OxiDate per 100 gallons of water; apply 50–100 gallons of spray solution per treated acre.	<p>Curative: Spray diseased plants using 128 fl. oz. of OxiDate per 100 gallons of water for one to three consecutive days and continue treatments on five to seven day intervals.</p> <p>Preventive: Begin when plants are small. Apply first three treatments using the curative rate at 5-day intervals. Reduce rate to 40 fl. oz. of OxiDate per 100 gallons of water after the completion of third treatment and maintain 5-day interval spray cycle until harvest.</p>
	Botrytis Downy Mildew Early Blight Late Blight Phytophthora Powdery Mildew Rust	1:100 – 1:300	40–128 fl. oz. of OxiDate per 100 gallons of water; apply 50–100 gallons of spray solution per treated acre.	
Mushrooms	Bacterial Blotch	1:100	1¼ fl. oz. of OxiDate per gallon of water; apply 6 gallons of solution per 1000 sq. ft.	<p>Curative: Spray diseased mushrooms using 1¼ fl. oz. of OxiDate per gallon of water for one to three consecutive days.</p> <p>Preventive: Spray mushrooms using ½ fl. oz. of Oxidate per gallon of water on five to seven day intervals. Begin at pinning stage and continue through harvest.</p>
	Mycogene Necrotic Spot Trichoderma Verticillium Spot	1:300	½ fl. oz. of OxiDate per gallon of water; apply 6 gallons of solution per 1000 sq. ft.	
Peanuts	Early Blight	1:100	128 fl. oz. of OxiDate per 100 gallons of water; apply 50–100 gallons of spray solution per treated acre.	<p>Curative: Spray diseased plants using 128 fl. oz. of OxiDate per 100 gallons of water for one to three consecutive days and continue treatments on five to seven day intervals.</p> <p>Preventive: Begin when plants are small. Apply first three treatments using the curative rate at 5-day intervals. Reduce rate to 40 fl. oz. of OxiDate per 100 gallons of water after the completion of third treatment and maintain 5-day interval spray cycle until harvest.</p>
	Late Blight Rust	1:100 – 1:300	40–128 fl. oz. of OxiDate per 100 gallons of water; apply 50–100 gallons of spray solution per treated acre.	
Peppers & Tomatoes	Alternaria Anthracnose Bacterial Speck Bacterial Spot Botrytis Cladosporium Mold Early Blight Late Blight Leaf Spot Phytophthora Powdery Mildew Pythium Rhizoctonia	1:100 – 1:2000	See Tomato and Pepper Application Instructions	For specific application instructions, see <u>Tomato and Pepper Application Instructions</u> .

Pome Fruit, including but not limited to: Apples Pears	Powdery Mildew Rusts Scab	1:100 1:100 – 1:300	128 fl. oz. of OxiDate per 100 gallons of water; apply 50–100 gallons of spray solution per treated acre. 40–128 fl. oz. of OxiDate per 100 gallons of water; apply 50–100 gallons of spray solution per treated acre.	Curative: Spray diseased plants using 128 fl. oz. of OxiDate per 100 gallons of water for one to three consecutive days and continue treatments on five to seven day intervals. Preventive: Begin when plants are small. Apply first three treatments using the curative rate at 5-day intervals. Reduce rate to 40 fl. oz. of OxiDate per 100 gallons of water after the completion of third treatment and maintain 5-day interval spray cycle until harvest.
Potatoes	Early Blight Late Blight	1:100 1:100 – 1:300	128 fl. oz. of OxiDate per 100 gallons of water; apply 50–100 gallons of spray solution per treated acre. 40–128 fl. oz. of OxiDate per 100 gallons of water; apply 50–100 gallons of spray solution per treated acre.	Curative: Spray diseased plants using 128 fl. oz. of OxiDate per 100 gallons of water for one to three consecutive days and continue treatments on five to seven day intervals. Preventive: Begin when plants are small. Apply first three treatments using the curative rate at 5-day intervals. Reduce rate to 40 fl. oz. of OxiDate per 100 gallons of water after the completion of third treatment and maintain 5-day interval spray cycle until harvest.
Potatoes (Seed)	Fusarium	1:50	2½ fl. oz. of OxiDate per gallon of water.	Dip whole or cut tubers into tank of working solution. Let soak for a period of five minutes before removing seed pieces.
Root Crops, including but not limited to: Beets Carrots Ginseng Sweet Potato Yams	Alternaria Crown Rot Early Blight Late Blight	1:100 1:100 – 1:300	128 fl. oz. of OxiDate per 100 gallons of water; apply 50–100 gallons of spray solution per treated acre. 40–128 fl. oz. of OxiDate per 100 gallons of water; apply 50–100 gallons of spray solution per treated acre.	Curative: Spray diseased plants using 128 fl. oz. of OxiDate per 100 gallons of water for one to three consecutive days and continue treatments on five to seven day intervals. Preventive: Begin when plants are small. Apply first three treatments using the curative rate at 5-day intervals. Reduce rate to 40 fl. oz. of OxiDate per 100 gallons of water after the completion of third treatment and maintain 5-day interval spray cycle until harvest.
Stone Fruits, including but not limited to: Cherries Nectarines Peaches Plums Prunes	Brown Rot Downy Mildew Powdery Mildew	1:100	128 fl. oz. of OxiDate per 100 gallons of water; apply 50–100 gallons of spray solution per treated acre.	Pre-Bloom: Begin applications at ¼ - ½ inch green tip and continue on a five to seven day schedule through bloom. Curative: Spray diseased trees for three consecutive days and continue treatments on five to seven day intervals.

<p>Sugar Beets</p>	<p>Alternaria Bacterial Leaf Spot Crown Rot Leaf Blight Leaf Spot Rhizoctonia</p>	<p>1:100 1:100 - 1:300</p>	<p>128 fl. oz. of OxiDate per 100 gallons of water; apply 50-100 gallons of spray solution per treated acre. 40-128 fl. oz. of OxiDate per 100 gallons of water; apply 50-100 gallons of spray solution per treated acre.</p>	<p>Curative: Spray diseased plants using 128 fl. oz. of OxiDate per 100 gallons of water for one to three consecutive days and continue treatments on five to seven day intervals. Preventive: Begin when plants are small. Apply first three treatments using the curative rate at 5-day intervals. Reduce rate to 40 fl. oz. of OxiDate per 100 gallons of water after the completion of third treatment and maintain 5-day interval spray cycle until harvest.</p>
<p>Tobacco (Field)</p>	<p>Blue Mold</p>	<p>1:100 1:100 - 1:300</p>	<p>128 fl. oz. of OxiDate per 100 gallons of water; apply 50-100 gallons of spray solution per treated acre. 40-128 fl. oz. of OxiDate per 100 gallons of water; apply 50-100 gallons of spray solution per treated acre.</p>	<p>Curative: Spray diseased plants using 128 fl. oz. of OxiDate per 100 gallons of water for one to three consecutive days and continue treatments on five to seven day intervals. Preventive: Begin when plants are small. Apply first three treatments using the curative rate at 5-day intervals. Reduce rate to 40 fl. oz. of OxiDate per 100 gallons of water after the completion of third treatment and maintain 5-day interval spray cycle until harvest.</p>
<p>Tobacco (Float Beds)</p>	<p>Blue Mold Fusarium Pythium Phytophthora</p>	<p>1:500- 1:1000 1:5,000- 1:10,000</p>	<p>1¼ - 2½ fl. oz. of Oxidate per 10 gallons. 6 - 24 fl. oz. of Oxidate per 1000 gallons.</p>	<p>Curative: Initial treatment of float bed water. Preventive: Treat water on a regular basis or maintain a residual 100 ppm concentration.</p>
<p>Tomatoes</p>	<p><i>(See Peppers Section)</i></p>			
<p>Tropical Fruit, including but not limited to: Casaba Coconut Dates Guava Kiwi Mango Passion Fruit Pineapple Poi Star Fruit</p>	<p>Alternaria Anthracnose Leaf Blight Powdery Mildew Rhizoctonia Sooty Mold Stem Rot</p>	<p>1:100 1:100 - 1:300</p>	<p>128 fl. oz. of OxiDate per 100 gallons of water; apply 50-100 gallons of spray solution per treated acre. 40-128 fl. oz. of OxiDate per 100 gallons of water; apply 50-100 gallons of spray solution per treated acre.</p>	<p>Curative: Spray diseased plants using 128 fl. oz. of OxiDate per 100 gallons of water for one to three consecutive days and continue treatments on five to seven day intervals. Preventive: Begin when plants are small. Apply first three treatments using the curative rate at 5-day intervals. Reduce rate to 40 fl. oz. of OxiDate per 100 gallons of water after the completion of third treatment and maintain 5-day interval spray cycle until harvest.</p>

Spray Treatments for newly harvested potatoes before storage –

Crops	Disease	Application Rate	Directions
Potatoes	Bacteria Soft Rot Early Blight Fusarium Tuber Rot Late Blight Silver Scurf	1¼-5 fl. oz. of OxiDate per gallon of water.	Spray diluted solution on tuber to runoff to achieve full and even coverage. The use of additional surfactant is acceptable to aid in sticking. Use 1 to 2 gallons of water per ton of potatoes.

Direct injection into humidification water for postharvest potatoes in storage –

Crops	Disease	Application Rate	Directions
Potatoes	Bacteria Soft Rot Early Blight Fusarium Tuber Rot Late Blight Silver Scurf	½-1¼ fl. oz. of OxiDate per gallon of water.	Inject concentrate into makeup water used in humidification of postharvest potatoes in storage.

Treatment of rinses for postharvest potatoes; prior, during or after storage -

Crops	Disease	Dilution Rate	Directions
Potatoes	Odor-causing and/or slime-forming bacteria	1:1000 – 1:5000	Inject concentrate into process water used in potato rinses, and associated tanks, flumes and lines.

Directions, Rates and Usage
(Technical Bulletin) Tomato and Pepper Application Instructions

Seed Treatment

For control of Bacterial Speck and Bacterial Spot.

Rate	Application	Notes
1:100 or 1 gallon of OxiDate™ to 100 gallons of water.	<ul style="list-style-type: none"> If seed has not been treated by the seed company, immerse seed in the OxiDate™ solution for one minute, remove seed and allow to drain. 	<ul style="list-style-type: none"> Rinsing of the seed after application is not required.

Seedling Production Treatment

For control of Bacterial Speck, Bacterial Spot, Damping-Off Pythium, Early Blight, Late Blight, and Phytophthora.

Rate at Seeding	Application	Notes
½ to 1¼ fl. oz. OxiDate™ per gallon of water.	<ul style="list-style-type: none"> Apply one application of OxiDate™ to the point of saturation. 	<ul style="list-style-type: none"> Apply on newly seeded plug trays, seed flats or beds with the initial watering.
Rate for Post Emergence	Application	Notes
½ fl. oz. of OxiDate™ per gallon of water.	<ul style="list-style-type: none"> Apply OxiDate™ at the 2 to 4 true leaf stage as a foliar spray with sufficient water to achieve complete coverage. 	<ul style="list-style-type: none"> Repeat at 7-day intervals.

At Planting Application

For control of Early Blight, Late Blight, Phytophthora and Pythium.

Rate	Application	Notes
½ to 1 gallon of OxiDate™ per treated acre in 50-200 gallons of water.	<ul style="list-style-type: none"> Add OxiDate to transplant water or starter fertilizer and make in-furrow or dibble application just prior to plant set. 	<ul style="list-style-type: none"> In fields with a history of disease pressure, use the high rate.

Surface Application

For control of Early Blight, Late Blight, Phytophthora and Pythium.

Rate – Foliar Spray	Application	Notes
1/3 to 1 gallon of OxiDate™ per 100 gallons of water.	<ul style="list-style-type: none"> Apply OxiDate™ as a foliar spray with sufficient water to achieve runoff to soil. Repeat applications every 7 days through infectious season. 	<ul style="list-style-type: none"> Typical applications use 30 to 100 gallons of spray solution per acre. During periods of wet, cloudy or rainy weather use a higher rate and volumes and shorten spray intervals.
Rate – Irrigation Systems	Application	Notes
½ to 1 gallon of OxiDate™ per treated acre in 500 to 1000 gallons of water.	<ul style="list-style-type: none"> Apply through drip trickle, center pivot, lateral move, end tow, side wheel roll, traveler, solid set, hand move or flood basin irrigation systems. 	<ul style="list-style-type: none"> Combine lower rates of OxiDate™ with other non-metal based fungicides.

Foliar Applications

For control of Anthracnose, Bacterial Speck and Spot, Botrytis, Early Blight, Late Blight, Powdery Mildew and Rhizoctonia Fruit Rot.

Rate – Foliar Spray	Application	Notes
1/3 to 1 gallon of OxiDate™ per 100 gallons of water. Complete coverage is	<ul style="list-style-type: none"> Begin applications of OxiDate™ prior to or in the early stages of disease development and continue 	<ul style="list-style-type: none"> Under severe disease conditions, and during periods of rainy weather, apply immediately following each rain.

essential.	<p>throughout the season.</p> <ul style="list-style-type: none"> • Spray at first appearance or when conditions are favorable for disease development. • Repeat applications at 7-day intervals. 	<p>shorten spray intervals, and use higher rate.</p> <ul style="list-style-type: none"> • Use sufficient water to obtain complete coverage.
Rate - Irrigation Systems	Application	Notes
½ to 1 gallon of OxiDate™ per treated acre in 500-1000 gallons of water.	<ul style="list-style-type: none"> • Apply through center pivot, lateral move, end tow, side-wheel roll, traveler, solid set, or hand move irrigation systems. 	<ul style="list-style-type: none"> • Combine lower rates of OxiDate™ with non-metal based fungicides. • Do not spray OxiDate™ during conditions of intense heat, drought or poor vine canopy.

Directions, Rates and Usage
(Technical Bulletin) Cucurbit Application Instructions

At Planting Application

For control of Belly Rot, Root Rots, Fusarium Wilt, Pythium, Phytophthora, and Rhizoctonia

Rate	Application	Notes
½ to 1 gallon of OxiDate™ per treated acre in 50-200 gallons of water.	<ul style="list-style-type: none"> • Make in-furrow applications just before seed is covered. • Make band applications to soil surface after seed is covered 	<ul style="list-style-type: none"> • In fields with a history of disease pressure, use higher rates.

Surface Application

For control of Belly Rot, Root Rots, Fusarium Wilt, Pythium, Phytophthora, and Rhizoctonia

Rate for Spray Application	Application	Notes
1/3 to 1 gallon of OxiDate™ per 100 gallons of water.	<ul style="list-style-type: none"> • Apply OxiDate™ as a foliar spray with sufficient water to achieve runoff to soil when vines begin to run. • Repeat every seven days through infectious season. 	<ul style="list-style-type: none"> • Typical applications use 30-100 gallons of spray per acre. During periods of wet, cloudy or rainy weather, use higher rates and volumes and shorten spray intervals. • Combine lower rates of OxiDate™ with non-metal based fungicides that are labeled for Rhizoctonia and/or Phytophthora.
Rate for Irrigation App.	Application	Notes
½ to 1 gallon of OxiDate™ per treated acre in 500-1000 gallons of water.	<ul style="list-style-type: none"> • Apply through drip trickle, center pivot, lateral move, end tow, side wheel roll, traveler, solid set, hand move or flood basin irrigation systems. 	<ul style="list-style-type: none"> • Combine lower rates of OxiDate™ with non-metal based fungicides that are labeled for Rhizoctonia and/or Phytophthora.

Foliar Applications

For control of Alternaria, Anthracnose, Downy Mildew, Gummy Stem Blight, Leaf Spot, and Powdery Mildew

Rate for Spray Application	Application	Notes
1/3 to 1 gallon of OxiDate™ per 100 gallons of water. Complete coverage is essential.	<ul style="list-style-type: none"> • Begin applications of OxiDate™ prior to or in early stages of disease development and continue throughout the season. • Spray at first appearance or when conditions are favorable for disease development. • Repeat at 7-day intervals using sufficient water to obtain complete coverage. 	<ul style="list-style-type: none"> • Combine lower rates of OxiDate™ with non-metal based fungicides that are labeled for Rhizoctonia and/or Phytophthora. • Under severe disease conditions, and during periods of rainy weather, apply immediately after each rain, shorten spray intervals, and use the high rate. • Do not spray OxiDate™ during conditions of intense heat, drought or poor vine canopy.
Rate for Irrigation App.	Application	Notes
½ to 1 gallon of OxiDate™ per treated acre in 500-1000 gallons of water.	<ul style="list-style-type: none"> • Apply through center pivot, lateral move, end tow, side-wheel roll, traveler, solid set, or hand move irrigation systems. 	<ul style="list-style-type: none"> • Combine lower rates of OxiDate™ with non-metal based fungicides that are labeled for Rhizoctonia and/or Phytophthora. • Do not spray OxiDate™ during conditions of intense heat, drought or poor vine canopy.

Directions, Rates and Usage
(Technical Bulletin) Beans – Snap and Dry Application Instructions

At Planting Application

For control of Early Blight, Late Blight, Phytophthora, Pythium, Rhizoctonia, Fusarium Root-Rot and Sclerotinia

Rate	Application	Notes
½ to 1 gallon of OxiDate™ per treated acre in 50-200 gallons of water.	<ul style="list-style-type: none"> Add OxiDate™ to setting water or starter fertilizer and make in-furrow application just prior to seed drop. 	<ul style="list-style-type: none"> In fields with a history of disease pressure, use the high rate.

Surface Application

For control of Early Blight, Late Blight, Phytophthora, Pythium, Rhizoctonia, Fusarium Root-Rot and Sclerotinia.

Rate – Foliar Spray	Application	Notes
1/3 to 1 gallon of OxiDate™ per 100 gallons of water.	<ul style="list-style-type: none"> Apply OxiDate™ as a foliar spray with sufficient water to achieve runoff to soil. Repeat applications every 7 days through infectious season. 	<ul style="list-style-type: none"> Typical applications use 30 to 100 gallons of spray solution per acre. During periods of wet, cloudy or rainy weather use a higher rate and volumes and shorten spray intervals.
Rate – Irrigation Systems	Application	Notes
½ to 1 gallon of OxiDate™ per treated acre in 500 to 1000 gallons of water.	<ul style="list-style-type: none"> Apply through drip trickle, center pivot, lateral move, end tow, side wheel roll, traveler, solid set, hand move or flood basin irrigation systems. 	<ul style="list-style-type: none"> Combine lower rates of OxiDate™ with other non-metal based fungicides.

Foliar Application

For control of Anthracnose, Bacterial blights, Botrytis, Powdery Mildew, Rhizoctonia, Rust, and White mold.

Rate – Foliar Spray	Application	Notes
1/3 to 1 gallon of OxiDate™ per 100 gallons of water. Complete coverage is essential.	<ul style="list-style-type: none"> Begin applications of OxiDate™ prior to or in the early stages of disease development and continue throughout the season. Spray at first appearance or when conditions are favorable for disease development. Repeat applications at 7-day intervals. 	<ul style="list-style-type: none"> Under severe disease conditions, and during periods of rainy weather, apply immediately following each rain, shorten spray intervals, and use higher rate. Use sufficient water to obtain complete coverage.
Rate - Irrigation Systems	Application	Notes
½ to 1 gallon of OxiDate™ per treated acre in 500-1000 gallons of water.	<ul style="list-style-type: none"> Apply through center pivot, lateral move, end tow, side-wheel roll, traveler, solid set, or hand move irrigation systems. 	<ul style="list-style-type: none"> Combine lower rates of OxiDate™ with non-metal based fungicides. Do not spray OxiDate™ during conditions of intense heat, drought or poor vine canopy.

Directions, Rates and Usage

(Technical Bulletin) Strawberry Application Instructions

Pre-Plant Dip or Spray Application

For control of Botrytis, Crown Rot and Powdery Mildew

Rate	Application	Notes
64 fl. oz. of OxiDate™ per 100 gallons of water.	<ul style="list-style-type: none"> Thoroughly wet transplants by dipping or spraying prior to planting. 	<ul style="list-style-type: none"> 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.

Setting Water Application

For control of Botrytis.

Rate	Application	Notes
½ to 1 gallon of OxiDate™ in 50 – 200 gallons of water per treated acre.	<ul style="list-style-type: none"> Add OxiDate™ to transplant water or starter fertilizer and make in-furrow or dibble application at the time of plant set. 	<ul style="list-style-type: none"> OxiDate™ is chemically compatible with most water soluble fertilizers. Conduct a compatibility test for each combination before tank mixing. Shake or stir test solution vigorously. Excessive bubbling and/or pressure is an indication of incompatibility.

At-Planting Foliar Application

For control of Powdery Mildew, Leaf Blight, Angular Leaf Spot, Crown Rot and Botrytis.

Rate	Application	Notes
40 – 128 fl. oz. of OxiDate™ per 100 gallons of water. Complete coverage is essential.	<ul style="list-style-type: none"> Immediately following planting, apply OxiDate™ as a foliar spray with sufficient water to achieve runoff to soil or plastic. 	<ul style="list-style-type: none"> Typical applications use 30 to 1100 gallons of spray solution per treated acre. In fields with a history of disease pressure, use the high rate.

Existing Plantings – Foliar and Crown Disease Control

For control of Powdery Mildew, Leaf Blight, Angular Leaf Spot, Crown Rot and Botrytis.

Rate – Foliar Spray	Application	Notes
40 – 128 fl. oz. of OxiDate™ per 100 gallons of water. Complete coverage is essential.	<ul style="list-style-type: none"> Begin applications of OxiDate™ prior to or in the early stages of disease development and continue throughout the season. Spray at first appearance or when conditions are favorable for disease development. Repeat applications at 7-day intervals. 	<ul style="list-style-type: none"> Typical applications use 30 to 1100 gallons of spray solution per treated acre. Under severe disease conditions, and during periods of rainy weather, apply immediately following each rain, shorten spray intervals, and use higher rates. Use sufficient water to obtain complete coverage. OxiDate™ may be applied up to and including the day of harvest.

Botrytis Control on Existing Plantings

Rate – Foliar Spray	Application	Notes
40 – 128 fl. oz. of OxiDate™ per 100 gallons of water. Complete coverage is essential.	<ul style="list-style-type: none">• Apply OxiDate™ at the first growth flush. Repeat applications at 10% bloom, full bloom and at late or extended bloom.• Use additional sprays in late winter just after plant bed cleaning.	<ul style="list-style-type: none">• Typical applications use 30 to 1100 gallons of spray solution per treated acre.• Use sufficient water to obtain complete coverage.• Remove dead plant growth from the beds immediately prior to making an OxiDate™ application.• Combine low rates of OxiDate™ with non-metal based fungicides.

CHEMIGATION:

General Requirements -

- 1) Apply this product only through a drip system or sprinkler including center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set, hand move, flood (basin), furrow, border or drip (trickle) irrigation systems. Do not apply this product through any other type of irrigation system.
- 2) Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.
- 3) If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.
- 4) Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.
- 5) A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.
- 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 should face away from the treated area towards the sensitive area. The signs shall be printed in English. Signs must be posted prior to application and must remain posted until foliage has dried and soil surface water has disappeared. Signs may remain in place indefinitely as long as they are composed of materials to prevent deterioration and maintain legibility for the duration of the posting period.
- 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 should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.
- 3) The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- 4) The pesticide injection pipeline must contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- 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, 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. Failure to provide a clean tank, void of scale or residues may cause product to lose effectiveness or strength.
- 2) Determine the treatment rates as indicated in the directions for use and make proper dilutions.
- 3) Prepare a solution in the chemical tank by filling the tank with the required water and then adding product as required. The product will immediately go into suspension without any required agitation.
- 4) Do not apply OxiDate™ in conjunction with any other pesticides or fertilizers; this has the potential to cause reduced performance of the product. Avoid application in this manner.

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Store in original containers in a cool, well-vented area, away from direct sunlight. Do not allow product to become overheated in storage. This may cause increased degradation of the product, which will decrease product effectiveness. In case of spill, flood area with large quantities of water. Do not store in a manner where cross-contamination with other pesticides or fertilizers could occur.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. Open dumping is prohibited. If wastes cannot be disposed of according to label directions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

WARRANTY - This material conforms to the description on the label and is reasonably fit for the purposes referred to in the directions for use. Timing, method of application, weather, watering practices, nature of soil, potting medium, disease problem, condition of crop, incompatibility with other chemicals, pre-existing conditions and other conditions influencing the use of this product are beyond the control of the seller. Buyer assumes all risks associated with the use, storage, or handling of this material not in strict accordance with directions given herewith. **NO OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR MERCHANTABILITY IS MADE.**