6/23/2003

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OxiDateTM

Broad Spectrum Bactericide / Fungicide (Alternate Brand Name: StorOx)

ACCEPTED

JUN 2 3 2003

Under the Federal Insecticide. Fungiside. and Rodesticide Act as amended. for the posticide registered under 70299-2 EPA Reg. No.

- * Preventative treatment for 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.

FOR AGRICULTURAL AND COMMERCIAL USE ONLY

ACTIVE INGREDIENT:

 Hydrogen Dioxide
 27%

 INERT 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	• Hold eye open and rinse slowly and gently with water for 15 – 20 minutes.
	• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.
	Call a poison control center or doctor for treatment advice.
If on skin or	Take off contaminated clothing.
clothing	• Rinse skin immediately with plenty of water for 15 – 20 minutes.
	Call a poison control center or doctor for treatment advice.
If swallowed	Call poison control center or doctor immediately for treatment advice.
	Have person sip a glass of water if able to swallow.
	Do not induce vomiting unless told to do so by the poison control center.
	Do not give anything by mouth to an unconscious person.
Have the pro	duct container or label with you when calling a poison control center or doctor, or going for
	treatment.
	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

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PRECAUTIONARY STATEMENTS HAZARDS TO HUMAN AND DOMESTIC ANIMALS

CORROSIVE: Concentrate causes irreversible eye damage. Concentrate may be fatal if swallowed. Concentrate causes skin irritation or temporary discoloration on exposed skin. Do not breathe vapor of concentrate. Do not get concentrate in eyes, on skin or on clothing.

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.

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

FOR TERRESTRIAL USES. Keep out of lakes, ponds and streams. This pesticide is toxic to birds and fish. Do not apply directly to water, or to areas where surface water is present or to inter-tidal areas below the mean high water mark. Do not contaminate water by cleaning of equipment or disposal of wash waters.

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) 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, waterproof gloves and shoes plus socks.

There is a restricted entry of zero (0) hours for pre-plant dip, 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.

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, σ the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

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

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™ concentrate 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. per 50 gallons of water.
- 2) Immerse plants or cuttings; remove and allow to drain. Do not rinse.

Soil Drench -

OxiDateTM 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 OxiDateTM on potting soil and growing mediums prior to planting.

- 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 -

OxiDateTM works immediately on contact with any plant surface for control. Good coverage and wetting of the foliage is required.

Foliar Applications: Plant Sensitivity Testing:

For foliar applications, be sure to use OxiDateTM 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). OxiDateTM has been designed to provide a balanced source of the active ingredient directly to the plant surface. OxiDateTM has been used and test 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 OxiDateTM. Therefore, before treating large numbers of plants, test OxiDateTM on a few plants for sensitivity.

Use care when applying OxiDate[™] for curative control of obligate organisms living in the plant tissue (such as Downy and Powdery Mildew). These treatments 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 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, 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., per gallon of clean water. Use a dilution of 1:50 or 2½ fl. oz. 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 $2\frac{1}{2}$ fl. oz. $\frac{1}{2}$ fl. oz., 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.

For clean, non-porous surfaces -

Pots, Flats, Trays: Use a dilution of 1:100 - 1:300 or 1½ fl oz. - ½ fl. oz. per galion of clean water. Spray until runoff. The use of additional surfactant is acceptable.

Cutting Tools: Use a dilution of 1:100 - 1:300 or 1½ fl oz. - ½ fl. oz. per gallon of clean water. Soak tools to ensure complete coverage. The use of additional surfactant is acceptable.

Benches and Work Area: 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 1½ fl oz. - ½ fl oz. per gallon of clean water. Use a dilution of 1:50 or 2½ fl. oz. 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.

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, airassisted or other similar sprayer or foamer.

For direct injection into dump tanks, hydro coolers 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 water filter treatment -

To suppress, control and prevent clogging of filters from growth of plant pathogenic algae, bacteria or fungi, as well as the oxidation of iron deposits.

- 1) Apply 1:50 or 2½ fl. oz. per gallon of water.
- 2) Soak filters in solution for time period of not less than 5 minutes.
- 3) Drain and then rinse with clean water.

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.	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.
		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.	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.
Bananas Piantains	Sigatoka	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.
		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.	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.
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</u> <u>Instructions.</u>
Berries, including but not limited to:	Alternaria Angular Leaf Spot Botrytis Crown Rot	1:100	128 fl. oz. of OxiDate per 100 gallons of water; apply 25–100 gallons of spray solution per	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.
Blackberry Blueberry Cranberry Raspberry Strawberry (see Strawberry Application Instructions)	Downy Mildew Fruit Rot Leaf Blight Powdery Mildew	1:100 — 1:300	treated acre. 40-128 fl. oz. of OxiDate per 100 gallons of water; apply 50-100 gallons of spray solution per treated acre.	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.

Celery	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.
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 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.
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 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.
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 Curcurbit Application Instructions.	For specific application instructions, see Cucurbit Application Instructions.

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	Pre-Bloom: Begin applications at ¼ - ½ inch green tip and continue on a five to seven day schedule through bloom.
			treated acre.	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	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.
		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.	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	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.
		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.	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:	Anthracnose Downy Mildew Powdery Mildew Pythium Rot	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.
Basil Chives Cilantro Coriander Dill Mint Rosemary		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.	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.
Sage		1:500– 1:1000	Direct Injection at a dilution ratio of 1:500 - 1:1000.	Direct Injection: Inject directly into misting systems for continual treatment during propagation.

Leafy	Brown Rot	1:100	128 fl. oz. of OxiDate per	Curative: Spray diseased plants using 128 fl.
Vegetables	Botrytis Downy Mildew Early Blight Late Blight		100 gallons of water; apply 50–100 gallons of spray solution per treated acre.	oz. of OxiDate per 100 gallons of water for one to three consecutive days and continue treatments on five to seven day intervals.
	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.	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.
Mushrooms	Bacterial Blotch Mycogene Necrotic Spot Trichoderma Verticillium Spot	1:100	1¼ fl. oz. of OxiDate per gallon of water; apply 6 gallons of solution per 1000 sq. ft.	Curative: Spray diseased mushrooms using 1½ fl. oz. of OxiDate per gallon of water for one to three consecutive days. Preventive: Spray mushrooms using ½ fl. oz.
		1:300	½ fl. oz. of OxiDate per gallon of water; apply 6 gallons of solution per 1000 sq. ft.	of Oxidate per gallon of water on five to seven day intervals. Begin at pinning stage and continue through harvest.
Peanuts	Early Blight Late Blight Rust	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.
		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.	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.

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	Alternaria Crown Rot 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.
Ginseng Sweet Potato Yams		1:300	40-128 fl. oz. of OxiDate per 100 gallons of water; apply 50-100 gallons of spray solution per treated acre.	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.
Tobacco (Field)	Blue Mold	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.
Tobacco (Float Beds)	Blue Mold Fusarium Pythium Phytophthora	1:500- 1:1000 1:5,000- 1:10,000	1¼ – 2½ fl. oz. of Oxidate per 10 gallons. 6 – 24 fl. oz. of Oxidate per 1000 gallons.	Curative: Initial treatment of float bed water. Preventive: Treat water on a regular basis or maintain a residual 100 ppm concentration.
Tomatoes	(See Peppers Section)	1.10,000	por 1000 gamons.	maniam a residual rev ppm concentration.
Tropical Fruit, including but not limited to: Casaba Coconut Dates Guava Kiwi Mango Passion Fruit Pineapple Poi Star Fruit	Alternaria Anthracnose Leaf Blight Powdery Mildew Rhizoctonia Sooty Mold Stem 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.

Spray Treatments for newly harvested potatoes before storage -

Crops	Disease	Application Rate	Directions
Potatoes	Bacteria Soft Rot Early Blight Fusarium Tuber Rot Late Blight	11/4-5 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
	Silver Scurf		potatoes.

Direct injection into humidification water for postharvest potatoes in storage –

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

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

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

Chemigation Directions for Use

General Requirements:

- 1) Apply this product only through a sprinkler including a center pivot, lateral move, end tow, side wheel roll, traveler, solid set, hand move, flood basin or drip trickle irrigation system. Do not apply this product through any other type of irrigation system.
- 2) Crop injury or lack of effectiveness will result from non-uniform distribution of treated water.
- 3) Ensure that the irrigation system used is properly calibrated and if you have questions, call the state extension service or the equipment manufacturer.
- 4) Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless proper safety devices for public water systems are in place. Read label for instructions.
- A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, will shut the system down and make any necessary adjustments.

Specific Requirements:

- Public water supply 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 25 individuals daily at least 60 days throughout the year.
- 2) Chemigation systems connected to the public water systems must contain a functional, reduced-pressure zone (RPZ), backflow preventer or the functional equivalent in the water supply 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 of the 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 liquid back towards the injector.
- 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 drawn 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.
- Systems must use a metering pump, such as a positive displacement injection pump, or equivalent, 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.

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 will cause product to loose 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.

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 MERCHANTIBILITY IS MADE.

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.	 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. 	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.	Apply one application of OxiDate™ to the point of saturation.	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.	Apply OxiDate™ at the 2 to 4 true leaf stage as a foliar spray with sufficient water to achieve complete coverage.	Repeat at 7-day intervals.	

At Planting Application

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

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Rate	Application	Notes
½ to 1 gallon of OxiDate™ per treated acre in 50-200 gallons of water.	Add OxiDate to transplant water or starter fertilizer and make in- furrow or dibble application just prior to plant set.	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.	 Apply OxiDateTM as a foliar spray with sufficient water to achieve runoff to soil. Repeat applications every 7 days through infectious season. 	 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.	Apply through drip trickle, center pivot, lateral move, end tow, side wheel roll, traveler, solid set, hand move or flood basin irrigation systems.	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.

D-4- F-E C	A 85 45	
Rate – Foliar Spray	Application	Notes

1/3 to 1 gallon of OxiDate™ per 100 gallons of water. Complete coverage is essential.	 Begin applications of OxiDateTM 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. 	 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.	Apply through center pivot, lateral move, end tow, side-wheel roll, traveler, solid set, or hand move irrigation systems.	 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.	 Make in-furrow applications just before seed is covered. Make band applications to soil surface after seed is covered 	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

For control of Belly Rot, Root Rots, Fusarium Witt, Pythium, Phytophthora, and Rhizoctonia		
Rate for Spray Application	Application	Notes
1/3 to 1 gallon of OxiDate™ per 100 gallons of water.	 Apply OxiDateTM as a foliar spray with sufficient water to achieve runoff to soil when vines begin to run. Repeat every seven days through infectious season. 	 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 OxiDateTM 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.	 Apply through drip trickle, center pivot, lateral move, end tow, side wheel roll, traveler, solid set, hand move or flood basin irrigation systems. 	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.	 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. 	 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.	Apply through center pivot, lateral move, end tow, side-wheel roll, traveler, solid set, or hand move irrigation systems.	 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™	 Add OxiDate™ to setting water or 	In fields with a history of disease
per treated acre in 50-200	starter fertilizer and make in-furrow	pressure, use the high rate.
gallons of water.	application just prior to seed drop.	

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.	 Apply OxiDate™ as a foliar spray with sufficient water to achieve runoff to soil. Repeat applications every 7 days through infectious season. 	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.	 Apply through drip trickle, center pivot, lateral move, end tow, side wheel roll, traveler, solid set, hand move or flood basin irrigation systems. 	 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.	 Begin applications of OxiDateTM 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. 	 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.	Apply through center pivot, lateral move, end tow, side-wheel roll, traveler, solid set, or hand move irrigation systems.	 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.	 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.

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.	Add OxiDate™ to transplant water or starter fertilizer and make in- furrow or dibble application at the time of plant set.	 OxiDateTM 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™	Immediately following planting,	Typical applications use 30 to 1100
per 100 gallons of water.	apply OxiDate™ as a foliar spray	gallons of spray solution per treated
Complete coverage is	with sufficient water to achieve	acre. In fields with a history of disease
essential.	runoff to soil or plastic.	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.	 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. 	 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.	 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. 	 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 OxiDateTM application. Combine low rates of OxiDateTM with non-metal based fungicides.