PM 91 70299-2 6/22/99 1 of 11

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Pesticide Programs
Biopesticides and Pollution Prevention Division
(7511C) 401 M St., S.W.
Washington, D.C. 20460

NOTICE OF PESTICIDE:
X Registration
____ Reregistration

(under FIFRA, as amended)

EPA Reg. Number:	Date of Issuance:
70299-2	JUN 22 1999

Term of Issuance: Unconditional

Name of Pesticide Product: Oxidate Broad Spectrum Bactericide/Fungicide

Name and Address of Registrant (include ZIP Code):

Biosafe Systems
80 Commerce Street, Glastonberry, CT 06033

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

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act.

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

This registration does not eliminate the need for continual reassessment of the pesticide. If EPA determines at any time, that additional data are required to maintain in effect an existing registration, the Agency will require submission of such data under section 3(c)(2)(B) of FIFRA.

This product is registered in accordance with FIFRA section 3(c)(5) and is subject to the following terms and conditions:

1. Make the following modifications to your label before you release your product for shipment:

   a) Change the EPA File Symbol 70299-E to EPA Reg. No. 70299-2

2. Submit five (5) copies of the revised final printed labeling before you release the product for shipment. Refer to the A-79 enclosure for a further description of final printed labeling.

A stamped copy of the label is enclosed for your records.

Signature of Approving Official: Daniel L. Rosenblum
Date: JUN 22 1999

EPA Form 8570-6

CONCURRENCES

SYMBOL	7511C	7511C						
SURNAME	BALL	Reilly						
DATE	6/17/99	6/21/99						

EPA Form 1320-1A (1/90) *Printed on Recycled Paper* **OFFICIAL FILE COPY**

Revised 5/82

A-79 ENCLOSURE

Final printed labeling is defined as that labeling which will accompany the pesticide product to market, and includes not only the container label, but also all accompanying technical information, brochures, etc.

Final printed labeling for the Agency's files should be of a size that can be stored conveniently in 8 1/2 x 11 inch files. Labels may be mounted or photoreduced to meet the size requirements provided the printing is legible and is of microfilm reproduction quality. Should photo reduction make any of the text illegible, the text must be typed out on an accompanying sheet of paper.

PASTE-ON LABELING: This should be submitted as is, unless it requires photo reduction.

SCREEN PRINTED LABELING: These labels should be printed by taping paper on the container as it goes through the printing process. The actual container should not be submitted.

EMBOSSED LABELING: These labels should be photocopied.

UNUSUAL SIZE LABELING: Large bags or boxes must be photoreduced, either the entire label on one reduction or in sections so that each section is 8 1/2 x 11 inches.

Type Size Requirements for 3 Front Panel Headings

Size of front panel square inches	Minimum type size for "RESTRICTED USE PESTICIDE" (if required) and Signal Word in capital letters	Minimum type for "Storage and Disposal" heading & "Keep Out of Reach of Children" warning
5 and under	6 point	6 point
above 5 to 10	10 point	6 point
above 10 to 15	12 point	8 point
above 15 to 30	14 point	10 point
over 30	18 point	12 point

Oxidate™

Broad Spectrum Bactericide / Fungicide

* Preventative treatment for growing plants, fruits, nuts and vegetables.

* A treatment for the prevention and control of plant pathogenic diseases in field grown crops, commercial greenhouses, and storage sites.

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 detaile.
(If you do not understand this label, find someone to explain it to you in detail.)

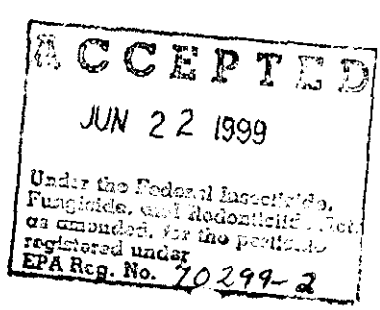
STATEMENT OF PRACTICAL TREATMENT

IF IN EYES: Hold eyelids open and flush with a steady, gentle stream of water for 15 minutes. Get immediate medical attention.
IF ON SKIN: Remove contaminated clothing and wash affected areas with plenty of soap and water. Get immediate medical attention.
IF SWALLOWED: Call a physician or poison control center immediately. Drink large quantities of water. Do not induce vomiting or give anything by mouth to an unconscious person. Avoid alcohol. Note to physician: Probable mucosal damage may contraindicate the use of gastric lavage.
IF INHALED: Remove victim to fresh air. Get immediate medical attention.

See side panel for additional precautionary statements.

Sold by: BioSafe Systems, 80 Commerce Street, Glastonbury, CT 06033

EPA Registration No. 70299-E
EPA Establishment No. 68660-TX-01



Net Contents: 2.5 gallons

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

Strong oxidizing agent. **Corrosive.** 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.

There is a restricted entry of zero (0) hours for this product.

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 rinses (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.

* Oxidate™ should not be combined or mixed with any other pesticide or fertilizer.

* Oxidate™ is formulated with a minimal amount of surfactant for plants having waxy or hairy surfaces. Additional surfactant may be added, if needed.

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 when used in accordance with label directions. Do not use at higher than recommended 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.

Use Rates and 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 -

Oxidate™ is effective for the control of soil borne plant diseases such as *Pythium*, *Phytophthora*, *Rhizoctonia*, *Thielvaviopis* 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. Oxidate™ can also be used 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. Good coverage and wetting of the foliage is necessary.

Crops	Disease	Dilution Rate	Application Rate	Directions
Beans	Anthracnose Downy Mildew Powdery Mildew Rust	1:100 1:100 – 1:300	128 oz. Oxidate per 100 gallons of water; apply 50–100 gallons of spray solution per acre. 40–128 oz. Oxidate per 100 gallons of water; apply 50–100 gallons of spray solution per acre.	**Curative**: Spray diseased plants using a 1:100 rate for three consecutive days and continue treatments on five to seven day intervals. **Preventive:** Begin when plants are small. Apply first three treatments at 1:100, for 5-day intervals. Reduce rate to 1:300 after the completion of third treatment and maintain 5-day interval spray cycle until harvest.
Broccoli **Cauliflower** **Cabbage**	Alternaria Leaf Spot Downy Mildew Powdery Mildew	1:100 1:100 – 1:300	128 oz. Oxidate per 100 gallons of water; apply 50–100 gallons of spray solution per acre. 40–128 oz. Oxidate per 100 gallons of water; apply 50–100 gallons of spray solution per acre.	**Curative**: Spray diseased plants using a 1:100 rate for three consecutive days and continue treatments on five to seven day intervals. **Preventive:** Begin when plants are small. Apply first three treatments at 1:100, for 5-day intervals. Reduce rate to 1:300 after the completion of third treatment and maintain 5-day interval spray cycle until harvest.

Crops	Disease	Dilution Rate	Application Rate	Directions
Citrus	Rust Scab Powdery Mildew Brown Rot Phytophthora	1:100	128 oz. Oxidate per 100 gallons of water; apply 50–100 gallons of spray solution per acre.	**Pre-Bloom:** Begin applications at ¼ - ½ inch green tip and continue on a five to seven day schedule through bloom.
		1:100 – 1:300	40–128 oz. Oxidate per 100 gallons of water; apply 50–100 gallons of spray solution per acre.	**Curative:** Spray diseased trees using a 1:100 rate for three consecutive days and continue treatments on five to seven day intervals. **Preventive:** Spray once a week until harvest.
Cucurbits	Alternaria Anthracnose Downy Mildew Powdery Mildew Pythium Rot	1:100	128 oz. Oxidate per 100 gallons of water; apply 50–100 gallons of spray solution per acre.	**Curative:** Spray diseased plants using a 1:100 rate for three consecutive days and continue treatments on five to seven day intervals.
		1:100 – 1:300	40–128 oz. Oxidate per 100 gallons of water; apply 50–100 gallons of spray solution per acre.	**Preventive:** Begin when plants are small. Apply first three treatments at 1:100, for 5-day intervals. Reduce rate to 1:300 after the completion of third treatment and maintain 5-day interval spray cycle until harvest.
Onions	Botrytis Downy Mildew Powdery Mildew	1:100	128 oz. Oxidate per 100 gallons of water; apply 50–100 gallons of spray solution per acre.	**Curative:** Spray diseased plants using a 1:100 rate for three consecutive days and continue treatments on five to seven day intervals.
		1:100 – 1:300	40–128 oz. Oxidate per 100 gallons of water; apply 50–100 gallons of spray solution per acre.	**Preventive:** Begin when plants are small. Apply first three treatments at 1:100, for 5-day intervals. Reduce rate to 1:300 after the completion of third treatment and maintain 5-day interval spray cycle until harvest.
Peppers	Anthracnose Phytophthora Blight Powdery Mildew	1:100	128 oz. Oxidate per 100 gallons of water; apply 50–100 gallons of spray solution per acre.	**Curative:** Spray diseased plants using a 1:100 rate for three consecutive days and continue treatments on five to seven day intervals.
		1:100 – 1:300	40–128 oz. Oxidate per 100 gallons of water; apply 50–100 gallons of spray solution per acre.	**Preventive:** Begin when plants are small. Apply first three treatments at 1:100, for 5-day intervals. Reduce rate to 1:300 after the completion of third treatment and maintain 5-day interval spray cycle until harvest.
Potatoes	Early Blight Late Blight	1:100	128 oz. Oxidate per 100 gallons of water; apply 50–100 gallons of spray solution per acre.	**Curative:** Spray diseased plants using a 1:100 rate for three consecutive days and continue treatments on five to seven day intervals.
		1:100 – 1:300	40–128 oz. Oxidate per 100 gallons of water; apply 50–100 gallons of spray solution per acre.	**Preventive:** Begin when plants are small. Apply first three treatments at 1:100, for 5-day intervals. Reduce rate to 1:300 after the completion of third treatment and maintain 5-day interval spray cycle until harvest.

Crops	Disease	Dilution Rate	Application Rate	Directions
Seed Potatoes	Fusarium	1: 50	2.5 oz. 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.
Tomatoes	Anthracnose Cladosporium Mold Early Blight Late Blight Powdery Mildew	1:100 1:100 – 1:300	128 oz. Oxidate per 100 gallons of water; apply 50–100 gallons of spray solution per acre. 40–128 oz. Oxidate per 100 gallons of water; apply 50–100 gallons of spray solution per acre.	**Curative:** Spray diseased plants using a 1:100 rate for three consecutive days and continue treatments on five to seven day intervals. **Preventive:** Begin when plants are small. Apply first three treatments at 1:100, for 5-day intervals. Reduce rate to 1:300 after the completion of third treatment and maintain 5-day interval spray cycle until harvest.
Apples	Rusts Scab Powdery Mildew	1:100 1: 100	128 oz. Oxidate per 100 gallons of water; apply 50–100 gallons of spray solution per acre.	**Curative:** Spray diseased trees using a 1:100 rate for three consecutive days and continue treatments on five to seven day intervals. **Pre-Bloom:** Begin applications at ¼ - ½ inch green tip and continue on a five to seven day schedule through bloom.
Filberts	Eastern Filbert Blight Bacterial Blight	1:100 1: 100	128 oz. Oxidate per 100 gallons of water; apply 50–100 gallons of spray solution per acre.	**Curative:** Spray diseased trees using a 1:100 rate for three consecutive days and continue treatments on five to seven day intervals. **Pre-Bloom:** Begin applications at ¼ - ½ inch green tip and continue on a five to seven day schedule through bloom.
Bananas	Sigatoka	1:100 1:100 – 1:300	128 oz. Oxidate per 100 gallons of water; apply 50–100 gallons of spray solution per acre. 40–128 oz. Oxidate per 100 gallons of water; apply 50–100 gallons of spray solution per acre.	**Curative:** Spray diseased plants using a 1:100 rate for three consecutive days and continue treatments on five to seven day intervals. **Preventive:** Begin when plants are small. Apply first three treatments at 1:100, for 5-day intervals. Reduce rate to 1:300 after the completion of third treatment and maintain 5-day interval spray cycle until harvest.
Grapes	Black Rot Downy Mildew Powdery Mildew	1:100 1:100 - 1:300	128 oz. Oxidate per 100 gallons of water; apply 50–100 gallons of spray solution per acre. 40–128 oz. Oxidate per 100 gallons of water; apply 50–100 gallons of spray solution per acre.	**Curative:** Spray diseased plants using a 1:100 rate for three consecutive days and continue treatments on five to seven day intervals. **Preventive:** Begin when shoots are small. Apply first three treatments at 1:100, for 5-day intervals. Reduce rate to 1:300 after the completion of third treatment and maintain 5-day interval spray cycle until harvest.

Crops	Disease	Dilution Rate	Application Rate	Directions
Stone Fruits **Peaches** **Plums** **Cherries** **Nectarines** **Prunes**	*Downy Mildew* Powdery Mildew Brown Rot	1:100	128 oz. Oxidate per 100 gallons of water; apply 50–100 gallons of spray solution per 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 using a 1:100 rate for three consecutive days and continue treatments on five to seven day intervals.

Spray Treatments for newly harvested potatoes before storage –

Crops	Disease	Dilution Rate	Application Rate	Directions
Potatoes	Fusarium Tuber Rot Bacteria Soft Rot Silver Scurf	1: 50 – 1: 100	2.5 – 1.25 oz. Oxidate per gallon of water.	Spray diluted solution on tuber to runoff to achieve full and even coverage. Additional surfactant can be added as needed 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	Dilution Rate	Application Rate	Directions
Potatoes	Fusarium Tuber Rot Bacteria Soft Rot Silver Scurf	1:100 – 1:300	2.25 – 1.5 oz. Oxidate per gallon of water.	Inject concentrate into makeup water used in humidification of postharvest potatoes in storage.

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 can 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.
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 any necessary adjustments should the need arise.

Specific Requirements:

1) 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.
6) 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 may 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) Oxidate should not be applied in conjunction with any other pesticides or fertilizers; this may cause reduced performance of the product and should be avoided.

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.

Oxidate Broad Spectrum Bactericide/Fungicide
Last revised January 28, 1999