



Oxyleaf

(ANTIMICROBIAL SOLUTION)

Oxyleaf is a peroxyacetic acid-based microbiocide developed for bacteria, slime, odor and algae control in agricultural waters.

ACTIVE INGREDIENT:

Peroxyacetic Acid	5.6%
Hydrogen Peroxide	26.5%

INERT INGREDIENTS:

	<u>67.9%</u>
TOTAL	100.0%

EPA Registration No: 63838-1-81811

EPA Est. No. 63838-CA-01: 63838-AR-001

Before Using This Product, Please Read This Entire Label Carefully.

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.

KEEP OUT OF REACH OF CHILDREN

DANGER PELIGRO

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 SWALLOWED:	<ul style="list-style-type: none"> Call a 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 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 INHALED	<ul style="list-style-type: none"> Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for treatment advice.
QUESTIONS? 1-209-581-9576	Have the product 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.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER CORROSIVE: Do not enter an enclosed area without proper respiratory protection. Causes irreversible eye damage and skin burns. May be fatal if inhaled or absorbed through skin. Harmful if swallowed. Do not breathe vapors or spray mist. Do not get in eyes, on skin, or on clothing. Wear goggles and face shield and rubber gloves when handling. Wash thoroughly with soap and water after handling and before eating, drinking or using tobacco. Remove contaminated clothing and wash before reuse.

PHYSICAL OR CHEMICAL HAZARDS

STRONG OXIDIZING AGENT. CORROSIVE: Mix only with water below 140° F. Product must be diluted in accordance with label directions prior to use. This product is not combustible; however, at temperatures exceeding 156°F, decomposition occurs releasing oxygen. The oxygen released could initiate combustion.

PERSONAL PROTECTIVE EQUIPMENT

Handlers who may be exposed to the undiluted product through mixing, loading, application, or other tasks must wear: coveralls over long-sleeved shirt and long pants, rubber gloves, chemical resistant footwear plus socks, and protective eyewear (goggles or face shield). Handlers who may be exposed to the diluted product through application or other tasks must wear: long-sleeved shirt and long pants, and shoes plus socks. Follow manufacturer's instructions for cleaning/maintaining PPE. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product. Do not reuse them. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

USER SAFETY RECOMMENDATIONS

Users should 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, fish and aquatic invertebrates. Caution must be used when applying indoors because pets may be at risk. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of the National Pollution Discharge System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product into sewer systems without previously notifying the local sewage plant authority.

STORAGE AND DISPOSAL

Storage: Never return this product to the original container after it has been removed. Avoid all contaminants, especially dirt, caustic, reducing agents, and metals. Contamination and impurities will reduce shelf life and can induce decomposition. In case of a decomposition, isolate container, spray container with cool water and dilute this product with large volumes of water. Avoid damage to containers. Keep container closed at all times when not in use. Keep container out of direct sunlight. To maintain product quality, store at temperatures below 86°F.

Procedure for Leak or Spill: Stop leak if this can be done without risk. Shut off ignition sources: no flames, smoking, flares, or spark producing tools. Keep combustible and organic materials away. Flush spilled material with large quantities of water. Undiluted material must not enter confined spaces.

Pesticide Disposal: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or Hazardous Waste representative at the nearest EPA Regional Office for guidance. If material has been spilled, an acceptable method of disposal is to dilute with at least 20 volumes of water followed by discharge into suitable treatment system in accordance with all local, state and Federal environmental laws, rules, regulations, standards, and other requirements. Because acceptable methods of disposal may vary by location, regulatory agencies must be contacted prior to disposal. This product which is to be discarded, must be disposed of as hazardous waste after contacting the appropriate local State or Federal agency to determine proper procedures.

Container Disposal: Nonrefillable container. Do not reuse or refill this container. Clean container promptly after emptying. Offer for recycling, if available. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

Container Handling: (Containers equal to or less than 5 gallons): Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat the procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration. Do not burn, unless allowed by state and local ordinances.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application.

For any requirements specific to your state or tribe, consult the state or tribal agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about Personal Protective Equipment (PPE) and Restricted-Entry Interval (REI). The requirements in this box only apply to the uses of this product that are covered by the Workers Protection Standard. There is a restricted entry of zero (0) hours for this product.

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.

Note: All volumes given in ounces are fluid ounces.

FRUIT AND VEGETABLE WATER TREATMENT

This product may be used to help control spoilage or decay-causing bacteria and fungi in water or ice that contacts raw, unprocessed fruits and vegetables in commercial operations and packinghouses. For the target commodity, use continuous spray (coarse spray) or submerge using a solution containing 4 oz. of this product per 20 gallons of water (100 ppm peroxyacetic acid). Adjust dose as necessary to obtain satisfactory efficacy. Remove excess water or allow to drain. If using the submersion method, replace with a fresh solution as necessary, or when it becomes visibly soiled. A final potable water rinse is not necessary.

Fogging in Filling, Packaging, and Dispensing Rooms or Areas (Not for use in California): This product can be applied by fogging to control the growth of non-public health microorganisms that may cause decay and/or spoilage on raw, post-harvest fruits and vegetables during the post-harvest process.

Ensure room is properly ventilated. Vacate all personnel from room during fogging and for a minimum of 2 hours after fogging. Ensure there is no strong odor characteristic of acetic acid before having personnel return to work area. Do not enter room until hydrogen peroxide concentrations are correctly tested and are below 1 ppm on a time weighted average.

Fog area using one quart of a 0.13% solution of this product (1 fl. oz. of this product per 6 gallons of water) per 1,000 cu. ft. of room volume. Allow surfaces to drain thoroughly before operations are resumed.

AGRICULTURAL or HORTICULTURAL USES

Upon soil contact, this product decomposes rapidly to oxygen, carbon dioxide and water. This product may be harmful to fish if exposed on a continuous basis at concentrations of 0.5 ppm or more of active peroxyacetic acid. Meter this product into pressurized pipes using a plastic or

stainless steel injection/backflow device installed far enough upstream from the target equipment to ensure thorough mixing. For open flowing bodies of water, apply this product as far upstream as possible to allow adequate mixing prior to the flow entering any larger body of water. If open pouring of this product is required pour product as close to the surface of the water as possible to reduce odor exposure. Spray lines, hoses and tank must be clean before using this product. Make sure no iron or yellow metals are in contact with the spray solution at any time. Only stainless steel or plastic contact materials may be used in your spray rig.

Treatment of Irrigation Water Systems (sand filters, humidification systems, storage tanks, ponds, reservoirs, canals): For the control of odor, sulfides, slime and algae in water systems, apply this product at 2 oz. per 100 gal of water (10 ppm peroxyacetic acid). This feed rate equals 1.5 gal per 10,000 gallons of water. Repeat dose as necessary to maintain control, which will vary with seasonal conditions. For prevention of algae some systems may require continuous low level dosing during warm sunny periods.

Drip Irrigation System Cleaning: To clean slime and algae from drip system tapes and emitters, meter this product upstream from pumps or filters at the rate of 1-2 oz. per 50 gallons of water (10-20 ppm peroxyacetic acid). This feed rate equals 1.5-3 gal per 10,000 gallons of dilution water. When required, during normal irrigation cycles, use this product at the recommended dose for a minimum of 30 minutes. After an irrigation cycle do not flush the lines.

Greenhouses: This product can be used to suppress/control algae and slime formations in and around greenhouses.

For normal use in various process, irrigation or sprinkler watering systems, this product may be used at 1:15,000 to 1:1,900 dilutions (4-33 ppm as peroxyacetic acid). Heavily fouled systems, such as evaporative coolers or irrigation/drip lines, may need shock doses of up to 100 ppm as peroxyacetic acid (1:630 dilution).

NOTE: This product at its use dilution is compatible with stainless steel and aluminum surfaces. If product is intended to be used on any other surface, it is recommended that you apply product to a small test area to determine compatibility before proceeding with its use.

Soil Applications: This product is effective in the control of the following soil-borne plant pathogens: *Fusarium* (root-rot, leaf spot, Pink Snow Mold) – *Phytophthora* (blights, rots) – *Pythium* (root rot) – *Rhizoctonia* (blight, stem rot) – *Verticillium* (wilt).

Use this product as a direct soil treatment, as a pre-plant application, at seeding or transplanting, and as a periodic soil treatment throughout the plant's life up to the day of harvest.

The performance of this product is not affected by fumigation. Use this product on fumigated and unfumigated soil.

Soil Treatment Prior to Seeding or Transplanting: Cultivate the soil prior to treatment. Break-up compacted soil and clods to loosen soil completely. Mix 102 fl. oz. of this product per 100 gallons of water to yield approximately 500 ppm PAA. Make banded or broadcast applications of 25 to 100 gallons of solution per acre-row either prior to planting or at the time of planting. This product will not harm seedlings or plants when applied at labeled rates. In fields with a history of disease pressure, use the 100 gallons of mixed solution per acre-row rate.

Soil Treatment with Established Plants or Seedlings: Apply this product at any stage of plant growth as a soil treatment up to the day of harvest. Make applications using soil drench, flood or drip irrigation. Ensure that soil moisture of the beds is at or near field capacity prior to application.

Soil Drench: Apply 20-41 fl. oz. of this product per 200 gallons of water per 1,000 square feet of soil to be treated to yield approximately 50-100 ppm PAA.

Flood Irrigation: Inject this product through a metered system using 100 fl. oz. of this product per 1,000 gallons of water used to yield approximately 50 ppm PAA.

Drip Irrigation: Apply this product through the drip tape at a rate of 10.7-24 fl. oz. per 1,000 feet of row. Inject this product through a metered system using 20 fl. oz. of this product per 1,000 gallons of water used to yield approximately 50 ppm PAA. Apply first treatment during the first drip irrigation cycle. Apply two additional treatments at 7-14 day intervals. Under severe disease conditions, apply at 7-day intervals using the highest rate. Under severe disease conditions and during periods of rainy weather, apply this product immediately following rain to suppress the spread of disease and help oxygenate the soil. Combine lower rates of this product with other non-metal based fungicides.

Row Center Spacing	Rate of This Product	Application Instructions
5.5-6 ft.	100-134 fl. oz. per acre	<ul style="list-style-type: none"> Apply through irrigation systems using a 45 to 90 minute run time Repeat applications at 7 to 14 day intervals

Foliar Applications: Use this product as a fungicide/bactericide to treat/control plant diseases on all flowering plants, ornamentals, house plants, vegetable, berry and fruit plants, trees and shrubs.

This product works immediately on contact with any plant surfaces for the control/suppression of fungi and bacteria: Downy Mildew, Powdery Mildew, Leaf Blight, *Anthraco*se. Apply this product to ornamentals, bedding plants, vegetable plants, flowering plants, shrubs, and trees. To ensure that this contact fungicide is effective, thorough coverage and wetting of the foliage is necessary. Care should be taken when using this product for curative control of obligate organisms living on the plant tissue (such as downy and powdery mildew). These treatments may result in lesions on plant tissue. This product will oxidize parasitic organisms living in plant tissue that are not always visible to the naked eye. Resulting oxidative effects may include spotting, or drying of the plant tissue where organisms inhabited tissue.

Initial, Curative or Rescue Application:

Use 18.4-41 fl. oz. of this product to 100 gallons of water to yield approximately 90-200 ppm PAA. Do not reuse already mixed solution, make fresh daily.

- Thoroughly wet all surfaces of plant, upper and lower foliage, including stems, branches and stalks to ensure full contact with the plant and flower tissue.
- Spray, mist or fog plants in early morning, evening or night.
- For most tree nut and fruit crops, apply at ¼ - ½ inch green tip through bloom.
- Apply consecutive applications until control is achieved and then follow directions for preventative treatment.

Preventative Treatment:

- Use 13.9 fl. oz. of this product to 100 gallons of water to yield approximately 68 ppm PAA. Do not reuse already mixed solution, make fresh daily.
- Thoroughly wet all surfaces of plant, upper and lower foliage, including stems, branches and stalks to ensure full contact with the plant and flower tissue.
- Spray, mist or fog plants in early morning, evening or night.
- For most tree nut and fruit crops, apply at ¼ - ½ inch green tip through bloom.
- Spray every five to seven days as a preventative treatment.

Apply solution at 50-100 gallons per treated acre, depending on spray method used.

A nonionic spreader (surfactant) adjuvant may be used for better results. Contact your local supplier or farm supply.

Manufactured for: Meras Engineering, Inc. 601 Van Ness Ave. #E3-725 San Francisco, CA 94102.

(415) 240-4918. www.meras.com. 24 hr Emergency ChemTrec. No.: 800-424-9300

DOT: UN3098, Oxidizing liquid, corrosive, n.o.s. (contains hydrogen peroxide and peroxyacetic acid mixture, stabilized), 5.1(8), PG II

LOT #: _____ Net contents: _____ Product Code 065 Ver 13a