

FIRST AID

If in eyes: Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call poison control center or doctor for treatment advice.

If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. Call poison control center or doctor for treatment advice.

If swallowed: 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. Call poison control center or doctor for treatment advice.

If inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

Note to Physician: Probable mucosal damage may contraindicate the use of gastric lavage.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

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

PHYSICAL AND CHEMICAL HAZARDS

STRONG OXIDIZING AGENT. Corrosive. Mix only with water. Product must be diluted in accordance with label directions prior to use. **Jet-Oxide® 5** is not combustible; however, at temperatures exceeding 156°F, decomposition occurs releasing oxygen. The oxygen released could initiate combustion.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to birds, fish, and aquatic invertebrates. Caution should 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 a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the US Environmental Protection Agency.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Handlers who may be exposed to the undiluted product through mixing, loading, application, or other tasks must wear: coveralls over long-sleeved shirt and long pants, rubber gloves, chemical resistant footwear plus socks, and protective eyewear (goggles or face shield). Handlers who may be exposed to the 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 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.

DIRECTIONS FOR USE

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

PRE-TREATMENT PRIOR TO SANITIZATION OF FOOD-CONTACT SURFACES*

Jet-Oxide® 5 can be used as a pre-treatment on food contact prior to sanitization. For use dilute 3.5-17.5 fl. oz of **Jet-Oxide® 5** in 5 gallons of water, this will provide 300-1500 ppm peroxyacetic acid. Let soak for 15 minutes and follow with a potable water rinse.

SANITIZATION

NOTE: FOR MECHANICAL OPERATIONS prepared use solution may not be used for subsequent sanitizing but may be reused for other purposes such as cleaning.

FOR MANUAL OPERATIONS fresh sanitizing solutions should be prepared at least daily or more often if the solution becomes diluted or soiled.

Jet-Oxide® 5 peroxyacetic acid sanitizer is recommended for use on pre-cleaned surfaces such as equipment, pipelines, tanks, vats, fillers, evaporators, pasteurizers and aseptic equipment in dairies, breweries, wineries, beverage and food processing/ packing plants, egg processing/ packing equipment surfaces, and eating establishments. This product is effective as a sanitizer when solution is prepared in water of up to 400 ppm hardness as CaCO3. This product has demonstrated greater than a 99.999% reduction of survivors after a 60 second exposure period in the AOAC Germicidal and Detergent Sanitizing Action of Disinfectants study.

SANITIZING FOOD CONTACT SURFACES

Effective against *Staphylococcus aureus* [(ATCC 6538)] and *Escherichia coli* [(ATCC11229)], *Pseudomonas Aeruginosa* [(ATCC 15442)], *Salmonella typhimurium* [(ATCC 23564)].

Prior to sanitizing, remove gross food particles, then wash with a detergent solution, followed by a potable water rinse. Sanitize with a concentration of 1.0 to 1.5 fl. oz. **Jet-Oxide® 5** dissolved in 5 gallons of water (0.16 to 0.22% v/v concentration). This will provide 88 to 130 ppm of peroxyacetic acid. At this dilution **Jet-Oxide® 5** is effective against *Staphylococcus aureus* and *Escherichia coli* and *Salmonella typhimurium* [(ATCC 23564)]. For use against *Pseudomonas aeruginosa* prepare a sanitizing solution by adding 2.1 to 2.3 fl. oz. **Jet-Oxide® 5** dissolved in 5 gallons of water. This will provide 180-200 ppm of peroxyacetic acid. Use immersion, coarse spray or circulation techniques as appropriate to the equipment. All surfaces should be exposed to the sanitizing solution for a period of at least 60 seconds or more if specified by governing sanitary code. Allow sanitized surfaces to adequately drain before contact with food so that little or no residue remains. Do not rinse.

SANITIZING, EATING, DRINKING, AND FOOD PREP UTENSILS

Remove gross food particles by a pre-scrape, a pre-flush and, when necessary, a presoak treatment. Wash with a recommended detergent. Rinse with clean water. Sanitize in a solution of 1.0 to 1.5 fl. oz. **Jet-Oxide® 5** dissolved in 5 gallons of water. Immerse all utensils for at least 60 seconds or contact time specified by governing sanitary code. Drain and air dry.

SANITIZING TABLEWARE

For sanitizing tableware in low temperature warewashing machines, inject **Jet-Oxide® 5** into the final rinse water at a concentration of 1.0 to 1.5 fl. oz. **Jet-Oxide® 5** dissolved in 5 gallons of water. Do not exceed 0.16 to 0.22% v/v. Air dry. This will provide 88 to 130 ppm of peroxyacetic acid. To insure that the **Jet-Oxide® 5** sanitizer concentration does not fall below 48 ppm peroxyacetic acid, periodically test the rinse solution with a suitable test kit and adjust the dispensing rate accordingly. Consult your technical service representative for assistance and further information on sanitizing tableware in warewashing machines.

FOAM SANITATION

Jet-Oxide® 5 can be applied as a foam for sanitization for previously clean, hard non-porous food contact surfaces and general environmental (non-food contact) hard non-porous surfaces such as floors, walls, ceilings, drains, and boots. Foam applications can be used where penetration and retention of product for required times is difficult to achieve. For example, uses that include operating conveyor belts and vertical or uneven surfaces.

1. Prepare a dilute **Jet-Oxide® 5** solution by adding 1.5 to 2.3 fl. oz. per 5 gallons of potable water.
2. After preparing the **Jet-Oxide® 5** solution add 1.5 to 10.0 fl. oz. of AGRHO FM-2011. AGRHO FM-2011 is the only approved foam-generating additive for use with **Jet-Oxide® 5**
3. Apply the sanitizing solution as a foam using commercially available foam generating equipment. Allow foam to contact surfaces at least one minute. For foot bath application, allow foam to remain on boot surface for one minute upon exiting the bath.
4. Drain items and or surfaces thoroughly.

HARD SURFACE DISINFECTION

Jet-Oxide® 5 disinfects as it cleans in one operation. **Jet-Oxide® 5** can be used to disinfect floors, walls and other hard nonporous surfaces such as tables, chairs, countertops, bathroom fixtures, sinks, bed frames, shelves, racks, carts, refrigerators, coolers, tile and use sites on the label made from linoleum, vinyl, non-porous glazed porcelain, plastic (such as polypropylene and polyethylene), stainless steel, or glass.

JET-Oxide® 5%

(Peroxyacetic Acid Solution)

Jet-Oxide® 5 is a Peroxyacetic acid-based sanitizer/disinfectant developed for the following uses:

Sanitizing of Previously Cleaned Non-Porous Food Contact Surfaces in Dairies, Wineries, Breweries, Food and Beverage Plants, Disinfecting Poultry Premises, Poultry Hatcheries, and Animal Housing Facilities. Hard Surface Disinfection in Industrial Facilities, Office Buildings, Recreational Facilities, and Retail and Wholesale Establishments.

Active Ingredients:

Hydrogen Peroxide 26.5%

Peroxyacetic Acid..... 4.9%

Inert Ingredients:68.6%

Total:100.0%

KEEP OUT OF REACH OF CHILDREN DANGER

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

Net Contents:

2.5 gallons

5 gallons

30 gallons

55 gallons

265 gallons

330 gallons

Volume stated on container

Marrone® Bio Innovations

Marrone Bio Innovations, Inc.
1540 Drew Ave.
Davis, CA 95618

1-877-664-4476; info@marronebio.com

*not approved in the State of California

Batch: stated on container

COMBINATION DISINFECTION AND CLEANING

Jet-Oxide® 5 is effective against *Staphylococcus aureus*, *Salmonella choleraesuis* [(ATCC10708)], *Trichophyton mentagrophytes* [(ATCC 9533)], and *Escherichia coli* 0157:H7[(ATCC 35150)] at 0.23% (1.5 fl. oz./5 gal.) in hard water (400 ppm as CaCO3) and 5% fetal bovine serum on hard nonporous surfaces. For heavily soiled areas a pre-cleaning step is required. Apply solution with mop, cloth, sponge, brush, scrubber, or coarse spray device, or by soaking so as to wet all surfaces thoroughly. Allow to remain wet for 10 minutes, then remove solution and entrapped soil with a clean wet mop, cloth, or wet vacuum pickup. Prepare a fresh solution daily or when it becomes soiled or diluted.

When used as directed, **Jet-Oxide® 5** is specifically designed to disinfect, deodorize and clean inanimate, hard, surfaces such as walls, floors, sink tops, and furniture. In addition **Jet-Oxide® 5** will deodorize those areas which are generally hard to keep smelling fresh such as, garbage storage areas, empty garbage bins and cans, and any other areas which are prone to odors caused by microorganisms.

All treated equipment that will contact food, feed, or drinking water must be rinsed with potable water before reuse. For heavily soiled areas, a pre-cleaning step is required. Prepare a fresh solution for each use.

DISINFECTION OF POULTRY PREMISES, TRUCKS, COOPS, AND CRATES POULTRY HATCHERY DISINFECTION*

Remove all poultry and feeds from premises, trucks, coops and crates. Remove all litter and droppings from floors, walls and surfaces of facilities occupied or traversed by poultry. Empty all troughs, racks and other feeding and watering appliances. Thoroughly clean all surfaces with a detergent and rinse with water. Saturate surfaces with a 0.23% (1.5 fl. oz./5 gal.) solution of **Jet-Oxide® 5** for a period of 10 minutes. Ventilate buildings, coops and other closed spaces. Do not house poultry or employ equipment until treatment has been absorbed, set or dried. Thoroughly scrub treated feed racks, troughs, automatic feeders, fountains and waterers with a detergent and rinse with potable water before reuse. See your technical representative for specific recommendations for all cleaning and rinsing requirements.

DISINFECTION AND DEODORIZING OF ANIMAL HOUSING FACILITIES (BARN, KENNELS, HUTCHES, ETC.)*

Do not use in milking stalls, milking parlors, or milk houses (for phenolics, cresylic acid, and pine oils). Remove animals and feed from premises, vehicles, and enclosures. Remove litter, waste matter, and gross soils from floors, walls and surfaces of barns, pens, stalls, chutes and other facilities and fixtures occupied or traversed by animals. Empty all troughs, racks and other feeding and watering equipment. Thoroughly clean all surfaces with detergent and rinse with water. Saturate surfaces with a 0.23% (1.5 fl. oz./5 gal.) solution of **Jet-Oxide® 5** for a period of 10 minutes.

Immerse all halters, ropes, and other types of equipment used in handling and restraining animals, as well as forks, shovels, and scrapers used for removing litter and manure. Ventilate buildings, cars, boats, and other closed spaces. Do not house livestock or employ equipment until treatment has been absorbed, set, or dried. Thoroughly scrub all treated feed racks, mangers, troughs, automatic feeders, fountains, and waterers with soap or detergent, and rinse with potable water before reuse.

POST HARVEST SPRAY TREATMENTS ON PROCESS AND PACKING LINES*

Inject **Jet-Oxide® 5** into spray, misting, humidification, fogging and spray bar system make up water on process and packing lines to prevent bacterial and fungal diseases on postharvest fruits and vegetables. Inject at a rate of .06-0.23 fl. oz of concentrate per gallon of clean water. This will provide 24-100.0 ppm of peroxyacetic acid in the use solution. For best results, where dump tanks are used, make post harvest spray treatment as produce is leaving dump tanks. Applicable for use on all types of post harvest commodities.

FOR TREATMENT OF RAW, UNPROCESSED FRUIT AND VEGETABLE SURFACES*

Jet-Oxide® 5 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.

1. 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.
2. Fog areas using one quart of a .02% solution (3.5 fl. oz. per 16 gallons of water) per 1,000 cu. ft. of room volume. Allow surfaces to drain thoroughly before operations are resumed.

FRUIT AND VEGETABLE WATER TREATMENT*

This product may be used to help control spoilage or decay-causing bacteria and fungi in water or in ice that contacts raw, unprocessed fruits and vegetables in commercial operations and packinghouses.

Jet-Oxide® 5 can be applied as a dip or spray 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. This product can be applied during physical cleaning processes, including at the roller spreader, washer manifold, dip tank, on the brushes or elsewhere in the post-harvest process prior to, simultaneously with or after detergent wash.

1. Prepare treating solution by diluting 1.12 to 3.5 fl. oz. per 16 gallons of water. This will provide 30 to 100 ppm of peroxyacetic acid.
2. Apply the diluted sanitizer solution using a spray directed at the fruits or vegetables, or by soaking the fruits or vegetables in the solution. Allow a contact time of at least 45 seconds.
3. The treated produce can be drain dried without a potable water rinse.

SURFACES TREATED TO CONTROL SPREAD OF CITRUS CANCKER

Jet-Oxide® 5 can be used to control the spread of citrus canker between inanimate surfaces and inanimate surfaces to plants. This product is for sanitizing surfaces such as packing house conveyors and harvesting equipment and containers. This product is not for treatment of infected plants.

Jet-Oxide® 5 is an effective sanitizer against microorganisms such as *Xanthomonas campestris* (axonopodis) pathovars *circumelo* (citrus canker surrogate)

1. Remove gross contamination with a cleaner or suitable detergent and rinse with potable water.
2. Use **Jet-Oxide® 5** at a dilution of 9.9 to 16.0 fl. oz. per 50 gallons of water (85-137.2 ppm peroxyacetic acid and 460-742 ppm of hydrogen peroxide) as a general sanitizing course spray.
3. Allow Sanitizer to contact surface for at least one minute.
4. Allow to air dry, do not rinse.

STORAGE AND DISPOSAL

Storage and Disposal: Do not contaminate water, food, or feed by storage and 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: Non-refillable container. Do not reuse or refill this container unless the directions for use allow a different (concentrated) product to be diluted in the container.

Containers 5 gallons or greater: Triple rinse (or equivalent) promptly after emptying. Triple rinse as follows: Empty remaining contents into application equipment or mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip the container on its side and roll it back and forth ensuring at least 1 complete revolution, for 30 seconds. Stand container on its end and tip back and forth several times. Empty rinsate into application equipment, mix tank, or store for disposal. Then offer for recycling, or dispose in a sanitary landfill, or incineration if allowed by state and local authorities by burning.