9804-6 5/28/2014 1/3

U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Pesticide Programs
Antimicrobials Division (7510C)
1200 Pennsylvania Avenue NW
Washington, D.C. 20460

EPA Reg. Number:	Date of Issuance:
9804-6	MAY 28 2014

Term of Issuance: Unconditional

NOTICE OF PESTICIDE:
x Registration
__ Reregistration

(under FIFRA, as amended)

OXIFLO®

Name and Address of Registrant (include ZIP Code):

Bio-Cide International Inc.
P.O. Box 722170
Norman, OK 73070-8644

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration 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 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 product (OPP Decision Number: D-488289) is unconditionally registered in accordance with FIFRA sec 3(c)(5) provided that you:

1. Submit and/or cite all data required for registration of your product under FIFRA sec. 3(c)(5) when the Agency requires all registrants of similar products to submit such data; and submit acceptable responses required for re-registration of your product under FIFRA section 4.

2. Make the labeling changes listed below before you release the product for shipment:

Revise the EPA Registration Number to read, "EPA Reg. No. 9804-6.

Signature of Approving Official:	Date:
Dennson Fuller Product Manager Team 32 Regulatory Management Branch II Antimicrobials Division (7510P)	MAY 28 2014

EPA Form 8570-6

A stamped label with comments is enclosed for your records. Submit one (1) copy of your final printed labeling prior to release of this product for shipment.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

Should you have any questions concerning this letter, please contact me by telephone at (703) 308-8062 or by email at fuller.demson@epa.gov.

Sincerely,

Demson Fuller
Product Manager 32
Regulatory Management Branch II
Antimicrobials Division (7510P)

Enclosures: (Stamped Label)

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS & DOMESTIC ANIMALS DANGER.
Corrosive. Causes irreversible eye damage and skin burns. Harmful if swallowed. Irritating to nose and throat. Do not get in eyes, on skin or on clothing. Wear protective eyewear (splashproof goggles). Wear protective clothing and rubber gloves when handling this product. Avoid breathing mists or fumes. Wash throughly with soap and water after handling. Remove contaminated clothing and wash before reuse to avoid fire.

ENVIRONMENTAL HAZARDS
This product is toxic to fish and aquatic organisms. 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 the 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 EPA.

CHEMICAL HAZARDS
Dry sodium chlorite is a strong oxidizing agent. This product *becomes a fire or* explosive hazard if allowed to dry. Mix only into water. Contamination may start a chemical reaction with generation of heat, liberation of hazardous gases (chlorine dioxide a poisonous, explosive gas), and possible fire and explosion. Do not contaminate with garbage, dirt, organic matter, household products, chemicals, soap products, paint products, solvents, acids, vinegar, beverages, oils, pine oil, dirty rags, or any other foreign matter.

STORAGE AND DISPOSAL

STORAGE:
Do not contaminate water, food, or feed by storage or disposal. Keep product in tightly closed container when not in use. Don't drop, roll or skid drum. Keep upright. Always replace cover. Store in a cool, dry, well-ventilated area away from heat or open flame.

EMERGENCY DISPOSAL:
In case of contamination or decomposition, do not reseal container. If possible, isolate container in open and well ventilated area. Flood with large volumes of water. If fire occurs, extinguish fire by applying large quantities of water. Any unopened drums near the fire should be cooled by spraying with water.

PESTICIDE HANDLING:
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 of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL: Refillable Container:
Refill this container with OXIFLO only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty *the remaining contents from this container in the application equipment of mix* tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this procedure two more times.

DIRECTIONS FOR USE

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

Directions for Controlling the growth of Algae in Recirculating Cooling Water Towers

1. Clean badly fouled systems before starting treatment. 2. When algae are visible, add an initial dosage of 14 fluid ounces of Sodium Chlorite per 1,000 gals. of water in the system. Repeat if necessary until control is evident. 3. Where algae control is evident, use a subsequent dose of 7 fluid ounces of Sodium Chlorite solution per 1,000 gals. of water in the system twice a week or as needed to maintain control. 4. Add *Sodium Chlorite directly to the cooling tower drip pan* (cold water basin) near the inlet to the recirculating pump.

OXIFLO®

ACTIVE INGREDIENT: Sodium Chlorite* 15%
OTHER INGREDIENTS:..... 85%
Total: 100%

KEEP OUT OF REACH OF CHILDREN

DANGER

FIRST AID

[redacted]

For emergency information call [redacted]

NOTE TO PHYSICIAN:

[redacted]

CHEMTREC Emergency No: 1-800-424-9300

EPA Reg. No. 9804- RR EPA Est. 9804-OK-1
BIO-CIDE INTERNATIONAL, INC.
Norman, Oklahoma 73069

Net Contents: 330 Gallons

Directions for Use in the Mechanical Generation of Chlorine Dioxide as a Disinfectant, or for Microorganism or Mollusk Control and as a Chemical Oxidant in Aquatic Systems.

FEED REQUIREMENTS: Feed rates of OXIFLO will depend on the severity of contamination and the degree of control desired. The exact dosage will depend on the size of the system and residual necessary for effective control.

Some examples of industrial applications of chlorine dioxide include:
- Potable water disinfection and removal of sulfide.
- Control of bacterial slime and algae and mollusks in industrial recirculating and one-pass cooling systems.
- Biocontrol in food processing flumes, water-using equipment, cooling water and recycled waters.
- Disinfection of sewage and plant wastes.
- Destruction of phenolics, simple cyanides and sulfides by chemical oxidation.
- Bacterial slime control in white water paper mill systems.
- Bacterial control in oil well and petroleum systems.

See product bulletins or technical data sheets for specific application instructions. Your BCI representative can guide you in the application techniques.

METHOD OF FEED: Large amounts of chlorine dioxide can be generated by two common methods, including:
1. The acid method which utilizes a Sodium Chlorite solution and an acid, or
2. The hypochlorite method which utilizes a Sodium Chlorite solution, a hypochlorite solution, and an acid.

Your Bio-Cide representative can guide you in the selection, installation and operation for feed systems. Consult product bulletin and also the instructions on the chlorine dioxide generation system before using OXIFLO. User is responsible for compliance with applicable Federal, state and local laws regarding proper use and disposal of *the chlorine dioxide generated.*

Directions for Use in Controlling Microbial Population in Poultry Processing Water

Chlorine Dioxide generated from OXIFLO may be used as an antimicrobial agent in water used in poultry processing, provided that the residual concentration of chlorine dioxide does not exceed 3 ppm, as determined by an appropriate method in accordance with 21CFR§173.300. For treatment of poultry chill water, apply OXIFLO as necessary through a chlorine dioxide generation system to maintain a residual concentration of up to 3 parts per million (ppm) chlorine dioxide in the chiller water.

Food Plant Process Water Treatment

Chlorine Dioxide generated from sodium chlorite is effective for use in controlling microbiological growth in flume water and other food processing water systems *such as chill water systems and hydrocoolers.* The required dosages will vary with process conditions and the degree of contamination present. *Depending on* the requirements of the specific water system, sodium chlorite should be applied continuously or intermittently through a chlorine dioxide generating system to achieve a chlorine dioxide residual concentration between 0.25 and 5.0 ppm. Water, containing up to 3 ppm residual chlorine dioxide may be used for washing fruits and vegetables that are not raw agricultural commodities in accordance with 21CFR§173.300. Treatment of the fruits *and vegetables with chlorine dioxide must be followed by* a potable water rinse, or by blanching, cooking or canning.

Industrial Cooling Water Treatment

For control of bacterial slime and algae in industrial recirculating and one-pass cooling systems, the required dosages will vary depending *on the exact application and the degree of contamination present.* The required chlorine dioxide residual concentrations range between 0.1 and 5.0 ppm. Chlorine dioxide may be applied either continuously or intermittently. The typical chlorine dioxide residual concentration range is 0.1-1.0 ppm for continuous doses, and 0.1-5.0 ppm for intermittent doses. the minimum acceptable residual concentration of chlorine dioxide is 0.1 ppm for a minimum one minute contact time.

Potable Water Treatment

Chlorine dioxide (ClO_2) is used as both an oxidant and a disinfectant in drinking water treatment. The required dosages will vary with source water conditions and the degree of contamination present. For most municipal and public potable water systems, a chlorine dioxide residual concentration of up to 2 ppm is sufficient to provide adequate disinfection. Residual disinfectant and disinfection byproducts must be monitored as required by the National Primary Drinking Water Regulations (40 CFR part 141) and state drinking water standards.

Bacterial Slime Control in Paper Mills

Chlorine dioxide generated from sodium chlorite is effective for use in controlling microbiological growth in white water paper mill systems. The required dosages will vary with the degree of microbiological and process contamination present. Depending on the specific *requirements of the system, sodium chlorite should be applied* continuously or intermittently through a chlorine dioxide generating system to achieve a chlorine dioxide residual concentration between 0.1 and 5.0 ppm. Intermittent treatments should be repeated as often as necessary to maintain control.

Bacterial Control in Oil Wells and Petroleum Systems

Chlorine dioxide is effective in the remediation of bacterial and sulfide contamination commonly found in oilfield production, injection, and disposal fluids. The required dosages will vary with process conditions. Sodium chlorite may be applied either continuously or intermittently through a chlorine dioxide generating system to oil well production water as it is separated from the oil, and before it is re-injected into the well. For continuous feeds, chlorine dioxide may be applied at dosages slightly higher than sulfide's oxidative demand as determined by a demand study. For intermittent treatment, chlorine dioxide should be applied at a shock dosage of 200-3000 ppm.

Mollusk Control in Water Systems

Chlorine dioxide generated from sodium chlorite may be used for mollusk control in commercial and industrial recirculating and one-pass cooling water systems. The required dosages will vary with the system type, system conditions, the degree of water contamination present and the desired level of control. Depending on the extent of the infestation, sodium chlorite may be applied either continuously or intermittently through a chlorine dioxide generating system to achieve the necessary chlorine dioxide residual concentration.

Veliger Control: Maintain a continuous chlorine dioxide residual of 0.1 - 0.5 ppm.

Intermittent Dose: Apply chlorine dioxide to obtain a chlorine dioxide residual concentration of 0.2 - 25 ppm. Repeat as necessary to maintain control.

Continuous Dose: Maintain a chlorine dioxide residual concentration of up to 2 ppm.

Wastewater Treatment

Chlorine dioxide (ClO_2) is effective as both a disinfectant and an oxidant in wastewater treatment. The required dosages will vary with water conditions and the degree of contamination present. For *most municipal and other wastewater systems, a chlorine dioxide* residual concentration of up to 5 ppm is sufficient to provide adequate disinfection. For sulfide odor control, between pH 5-9, a minimum of 5.2 ppm (wt) of chlorine dioxide should be applied to oxidize 1 ppm of sulfide (measured as sulfide ion). For phenol destruction, at pH less than 8, 1.5 ppm chlorine dioxide will oxidize 1 ppm phenol; at pH greater than 10, 3.3 ppm chlorine dioxide will oxidize 1 ppm phenol.