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US ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF PESTICIDES PROGRAMS
REGISTRATION DIVISION (75-767)
WASHINGTON, DC 20460

EPA REGISTRATION NO.

DATE OF ISSUANCE

9804-9

FEB 12 1998

TERM OF ISSUANCE

NAME OF PESTICIDE PRODUCT

ProOxine

NOTICE OF PESTICIDE: REGISTRATION
 REREGISTRATION

(Under the Federal Insecticide, Fungicide,
and Rodenticide Act, as amended)

NAME AND ADDRESS OF REGISTRANT (Include ZIP code)

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

NOTE: Changes in labeling formula 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 U.S. 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.

A copy of the labeling accepted in connection with this Registration/Reregistration is returned herewith.

Registration is in no way to be construed as an indorsement or approval of this product by this 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 is conditionally registered in accordance with FIFRA section 3(c)(7)(A) provided that you:

1. Submit and/or cite all data required for registration/reregistration of your product under FIFRA section 3(c)(5) and section 4 when the Agency requires all registrants to similar products to submit such data.
2. Add the phrase "EPA Registration No. 9804-9" to your label before you release the product for shipment.
3. Submit one copy of your 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.

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

Robert S. Brennis
Product Manager (32)
Antimicrobial Program Branch
Regulatory Division (7504C)

ATTACHMENT IS APPLICABLE

SIGNATURE OF APPROVING OFFICIAL

DATE

STORAGE AND DISPOSAL

Storage: Store in a cool dark area in original container. Avoid storage in direct sunlight. In case of spill, flood with water before discarding to drain. Do not contaminate water, food or feed by storage or disposal.

Container Disposal: Triple rinse. Then offer for recycling or reconditioning; or puncture and dispose of in a sanitary landfill, or by incineration; or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Pesticide Disposal: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

PRECAUTIONARY STATEMENTS

Hazards to Humans & Domestic Animals: Harmful if swallowed. Harmful if inhaled. Avoid breathing vapor or spray mist. Remove contaminated clothing and wash clothing before reuse. Causes moderate eye irritation. Avoid contact with eyes and clothing. Wash thoroughly with soap and water after handling.

STATEMENT OF PRACTICAL TREATMENT

If Swallowed: Call a physician or Poison Control Center. Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger. If person is unconscious, do not give anything by mouth and do not induce vomiting.

If Inhaled: Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth to mouth. Get medical attention.

If in Eyes: Flush with plenty of water. Call a physician if irritation persists.

ENVIRONMENTAL HAZARDS

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 EPA.

NOTE: Chemical feed pumps and injectors must be chlorine resistant for best operation. Available ClO₂ levels should be confirmed using a Bio-Cide Test Kit, available from your local ProOxine® distributor.

ACTIVATION

The active biocidal component of the ProOxine® system is free chlorine dioxide. Unactivated ProOxine® in the neutral to mildly alkaline pH range is bacteriostatic. For higher level microbial control, such as disinfection and sanitation, activation of ProOxine® is required to generate free chlorine dioxide. The use of citric acid as an activator is specified in most ProOxine® label applications. Alternatives to citric acid for activation include organic acids, such as acetic acid, and inorganic acids such as phosphoric, hydrochloric, and sulfuric acids. Activation equivalent to that of citric acid may be achieved by adjusting the ProOxine® solution to pH 2-3 with an alternative acid. The activated ProOxine® is then diluted to the required use concentration in accordance with label instructions. For food processing applications only food grade activator acids may be used. Bio-Cide International, Inc. or your ProOxine® distributor can guide you in proper activation techniques.

IN FOOD PROCESSING PLANTS SUCH AS POULTRY, FISH & MEAT AND IN RESTAURANTS, DAIRIES, BOTTLING PLANTS AND BREWERIES;

AS A TERMINAL SANITIZING RINSE FOR STAINLESS STEEL AND OTHER HARD NONPOROUS FOOD CONTACT SURFACES SUCH AS TANKS, TRANSFER LINES AND OTHER FOOD PROCESSING EQUIPMENT.

DIRECTIONS FOR USE:

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

- 1) All gross food particles and soil should be removed prior to sanitizing by use of a pre-flush, pre-scrape or pre-soak treatment.
- 2) Clean tank, line or surface thoroughly using a suitable detergent and rinse with clean potable water before sanitizing.
- 3) Preparation of sanitizing solution: Place 1 1/3 fl. oz. of ProOxine® concentrate into a clean plastic pail or container and add 10 grams (1 Tablespoon) of Bio-Cide Activator Crystals or food grade citric acid of no less than 99% purity. Prepare in a well ventilated area. Avoid breathing any fumes which may be produced while crystals are dissolving. Allow five (5) minutes reaction time for crystals to dissolve completely. To this solution, add five (5) gallons of clean, potable water. This will yield a working solution containing 100 ppm available chlorine dioxide.
- 3) To apply: Fill, flush, immerse or spray tank, line, equipment or food contact surface with active solution making sure surface area is thoroughly wet for at least one (1) minute. After sanitizing, drain tank, line or equipment and allow to air dry. Fresh sanitizing solution should be made up daily or more often if solution becomes diluted or soiled.

TO DISINFECT WALLS, CEILINGS, AND FLOORS.

DIRECTIONS FOR USE:

- 1) Before disinfection, all gross filth must be removed from areas to be disinfected and thoroughly cleaned with a suitable detergent followed by a clean, potable water rinse.
- 2) Preparation of active disinfecting solution (500 ppm ClO₂): Place 1 1/3 fl. oz. of ProOxine® concentrate per gallon of working solution into a clean, plastic pail and add ten (10) grams of Bio-Cide Activator Crystals or food grade citric acid of no less than 99% purity. Prepare in a well ventilated area, avoid breathing any fumes which may be produced while crystals are dissolving. Allow five (5) minutes reaction time for crystals to dissolve completely. To this solution, add one (1) gallon of clean, potable water. This will yield a working solution containing 500 ppm of available chlorine dioxide.
- 3) To apply: Spray disinfectant solution onto surface to be disinfected using a suitable spraying device and making sure that the area is thoroughly wet for at least ten (10) minutes. Active solutions may be irritating when breathed; therefore, always use an applicable NIOSH/MSHA approved respirator appropriate for chlorine dioxide when spraying these solutions. After application, allow to air dry. Treat as required. Always apply freshly made solutions. Never reuse activated solutions.

TO CONTROL THE BUILD-UP OF ODOR AND SLIME FORMING BACTERIA IN ICE MAKING PLANTS AND MACHINERY.

DIRECTIONS FOR USE:

- 1) Ice making machinery should be disassembled and thoroughly cleaned using a suitable detergent followed by a potable water rinse.
- 2) Preparation and application of solution: The ProOxine® solution should be applied to the incoming water line of the ice machine via a chemical feed pump or injector system and proportioned at the rate of 6 fl. oz. per 100 gallons of potable water (20 ppm available ClO₂).

PROOXINE® SANITIZER

- Active ProOxine -
DISINFECTANT
FUNGICIDAL-BACTERICIDAL
FOOD PROCESSING PLANTS
BOTTLING PLANTS • INDUSTRIAL USE

Active Ingredient: Chlorine Dioxide . . .	5%
Inert Ingredients	95%
TOTAL	100%

KEEP OUT OF REACH OF CHILDREN

CAUTION

SEE SIDE PANEL FOR ADDITIONAL
PRECAUTIONARY STATEMENTS

STORE IN COOL DARK PLACE • KEEP FROM FREEZING

E.P.A. Reg. No. 9804-9

E.P.A. Est. No. 9804-OK-1

BIO-CIDE International, Inc.
Norman, Oklahoma 73070

TO CONTROL ODOR AND SLIME FORMING BACTERIA IN COOLING AND WARMING WATERS, SUCH AS CANNING RETORT AND PASTEURIZER COOLING WATERS, USED TO DECREASE OR INCREASE PACKAGED PRODUCT TEMPERATURE BY IMMERSION IN OR BY SPRAYING WITH THE TREATED PROCESS WATERS.

DIRECTIONS FOR USE:

- 1) All tanks, tunnels, conveyor chains, heat exchangers, heat exchange towers, lines, spray bars and nozzles should be thoroughly cleaned, when possible, and completely rinsed using clean, potable water prior to treatment.
- 2) Preparation of solution: Water systems including the cooling or warming tanks or spray systems, towers, lines and all water containing parts of the system may be batch loaded at start up with 12.8 fl. oz. of ProOxine® per one thousand (1000) gallons of potable water (5.0 ppm available ClO₂). To maintain the 5.0 ppm available ClO₂ in the water system a timed or electronically controlled chemical feed pump or injector system can be used for additions to the system or for treating the make-up water. Make up new ProOxine® solutions daily. Optional activated solution: If heavy use of cooling or warming water, or introduction of additional bacteria loads is expected or if slime buildup is heavy, an additional activation step may be used in preparation of solution.
- 3) Preparation of activated solution: Prepare in a well ventilated area, avoid breathing any fumes which may be produced while crystals are dissolving. For each one thousand (1000) gallons of system water to be treated, measure out 12.8 fl. oz. of ProOxine® and pour into a clean plastic container, pail or drum. To this ProOxine® amount, add Bio-Cide Activator Crystals or food grade citric acid of no less than 99% purity, at the rate of 3.3 ounces (95 grams) crystals per 12.8 fl. oz. of ProOxine®. Allow five (5) minutes reaction time for crystals to dissolve. Cooling or warming water systems may be batch loaded at start up using 12.8 fl. oz. of the prepared solution per one thousand (1000) gallons of potable water (5.0 ppm available ClO₂). Batch or timed additions of the prepared solution can be made or an electronically controlled chemical feed pump or injector system can be used for additions of the prepared solution to the process water to maintain 5.0 ppm available ClO₂. Make up new ProOxine® solutions daily.

TO CONTROL ODOR AND SLIME FORMING BACTERIA BUILD-UP IN COMMERCIAL WATER FILTRATION SYSTEMS, SAND BEDS, GRAVEL BEDS AND CHARCOAL FILTERS WITH ACCESSIBLE SERVICE HATCHES.

DIRECTIONS FOR USE:

- 1) Drain all existing water from sand and carbon filters and rinse once with clean, potable water. Fill sand filter with potable water and adjust pH of water to 6.0 using citric acid or equivalent pH adjuster.
- 2) To prepare solution: Measure out eight (8) fl. oz. of Oxine® concentrate for each ten (10) gallons of filter system volume (300 PPM available ClO₂) and add to the sand filter through access hatch. Fill system with clean, potable water and circulate system 30 minutes. Allow system to soak two (2) to three (3) hours. After treatment, drain system and rinse with clean, potable water until residue is no longer detectable using the Bio-Cide Test Kit and when pH is normal.

ACCEPTED

FEB 12 1998

Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 9804-9