D511

ICF1
PM32
9.50-2

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION: Harmful if swallowed. Avoid contact with skin, eyes or clothing.

STATEMENT OF PRACTICAL TREATMENT

If Swallowed: Drink promptly a large quantity of water. Do not induce vomiting. Avoid alcohol. Get medical attention.

If In Eyes: Flush with plenty of water for 15 minutes. Get medical attention.

If On Skin: Wash with plenty of soap and water. Get medical attention if irritation persists.

NOTE TO PHYSICIAN

Probable mucosal damage may contraindicate the use of gastric lavage.

ENVIRONMENTAL HAZARD

This product is toxic to fish. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or public waters unless this product is specifically identified and addressed in an NPDES permit. Do not discharge effluent containing this product to sewer systems without previously notifying the sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

CHEMICAL AND PHYSICAL HAZARDS

Stabilized Chlorine Dioxide is a strong oxidizing agent. Contamination with other materials such as acids, toxic chlorine, organic chemicals etc., may cause a chemical reaction, resulting in evolution of chlorine dioxide gases and heat. Explosion and/or fire could result. Chlorine dioxide is a poisonous explosive gas. Keep all chemical and foreign materials away from this solution.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. Before using this product in the generation of chlorine dioxide for biological control in paper mills, food processing flumes, water treatment equipment, petroleum recovery, hospital cutting aids, disinfection, cooling towers, hard surface disinfection or sanitization of food processing equipment etc. see product data.

STORAGE AND DISPOSAL

Do not store with easily oxidizable materials, acids, reducers and combustible material. Avoid heat or freezing conditions. Store upright and do not stack drums over 2 high on pallets or partially filled drums. Use of a drum pump is suggested. Keep drum tightly closed when not withdrawing liquid. In case of spills, dilute with large quantities of water. Do not allow liquid to dry because this could present a fire hazard. Store only in the original container and take care to prevent cross contamination with other pesticides, fertilizer, food and feed.

EMERGENCY HANDLING: In case of contamination or decomposition, do not reseal container. Isolate in an open well ventilated area. Flood with large volumes of water. Cool unopened drums in vicinity by water spray.

PESTICIDE DISPOSAL: Do not contaminate water, food or feed by storage or 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 of by use 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 rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill or incineration or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

NOTICE: Seller expressly warrants that the product conforms to its chemical description. There are no warranties associated with the sale of this product, either express or implied, including but not limited to the warranties of fitness for a particular purpose or use.

PRODUCT DATA - ANTHIUM DIOXCIDE

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

TO DISINFECT WALLS, CEILINGS, FLOORS, DRAINS, PIPE LINES AND EQUIPMENT SURFACES

Directions for Use:

1) Before disinfection all gross filth must be removed. Then clean areas to be disinfected with a detergent solution followed by a potable water rinse.

2) Add 1 fl. oz. of ANTHIUM DIOXCIDE per gallon of solution to be used. (1:128 dilution). Adjust the pH of the solution to 4.8 with acetic acid (vinegar), citric acid, phosphoric acid or add 2.5 grams of ACTIVATOR K to each gallon of solution. Allow to stand for 15 minutes.

3) Spray or fog the above solution onto surface to be disinfected. Allow to remain for at least 20 minutes but preferably longer and allow to air dry. Use suitable protective breathing apparatus when fogging or spraying, then allow solutions to air dry. Always apply freshly prepared solutions.

4) For sink soaking of previously cleaned utensils, heavily stained dishes and glasses, equipment parts, prepare the solution as described above. Fill and hold for 20 minutes. Drain and air dry.

TO CONTROL THE BUILDUP OF ODOR AND SLIME AND IMPROVE TASTE IN ICE PLANTS AND POULTRY AND MEAT PROCESSING PLANT WATER

Directions for Use:

1) Thoroughly clean the ice making machinery with a detergent solution followed by a potable water rinse.

2) Meter into the incoming water to the ice plant potable water system, 0.4 gal. of ANTHIUM DIOXCIDE per 1,000 gal. of water (20 ppm available ClO_2).

3) As an additive to potable water in meat and poultry processing plants to inhibit bacterial slime and improve taste and odor, add 0.4 gallons of ANTHIUM DIOXCIDE per 1,000 gallons of water.

TO CONTROL ODOR AND SLIME FORMING BACTERIA, MOLD AND MILDEW ON WALLS, FLOORS AND CEILINGS

Directions for Use:

1) Before treatment remove all gross filth, wash with detergent and rinse with potable water.

2) Spray or soak the walls, floors and ceilings with a solution of 1 gal. of ANTHIUM DIOXCIDE diluted to 20 gal. with water. (2500 ppm available ClO_2). Avoid breathing the mists with suitable respiratory protection. Avoid contact with food. Allow to air dry and repeat as necessary.

TO INHIBIT BACTERIAL SLIME FORMING BACTERIAL BUILDUP IN COMMERCIAL WATER FILTRATION SYSTEMS, SAND BEDS, GRAVEL BEDS, CHARCOAL FILTERS AND COOLING WATER SYSTEMS.

Directions for Use:

FILTERS

1) Carefully back flush filters with potable water where possible to remove any accumulated solid residue and contamination.

2) Fill system with potable water and adjust the pH to 6.0 with citric acid, phosphoric acid or acetic acid (vinegar) or equivalent.

3) Add 0.8 fl. oz. of ANTHIUM DIOXCIDE per gallon of filter system volume to the access hatch and circulate the system for 1 hour. Check the pH and bring back to 6.0 if it has drifted. Bring the ClO_2 concentration back to 300 ppm.

4) Circulate the solution for 1 additional hour, discharge and then water wash for 30 minutes with potable water to remove the chlorine dioxide.

COOLING WATER SYSTEMS

1) Add 1 gallon of ANTHIUM DIOXCIDE per 10 000 gallons of cooling water every week.

2) Depending on the degree and type of contamination, addition frequency may be reduced to every 2 - 3 weeks when contamination is under control.

IN INDUSTRIAL APPLICATIONS — TO INHIBIT THE GROWTH OF SLIME AND ODOR CAUSING BACTERIA IN WATER BASED CUTTING OILS

Directions for Use:

1) **Batch Method** - add 32 fl. oz. of ANTHIUM DIOXCIDE per thousand gallons to fresh system and repeat weekly or on first indication of increased bacterial count (odor, slime, bacterial count) attacking systems. Try equal fluorine concentration of ANTHIUM DIOXCIDE.

2) **Continuous Method** - Proportion in 2 gallons of ANTHIUM DIOXCIDE per million gallons per day used in the system. Alkaline systems may require higher concentration.

3) **Badly Contaminated Systems** - Slug dose system with 10 gallons of ANTHIUM DIOXCIDE per million gal. of cutting oil. Then start the continuous procedure described above.

Adjust quantities in any of the above systems to compensate for levels of contamination, pH, type of contamination, etc. as necessary.

TO PREVENT CORROSION AND SLIME BACTERIA IN OIL WELLS DURING SECONDARY RECOVERY OPERATIONS

Directions for Use:

1) Prepare a working solution of 5,000 ppm stabilized chlorine dioxide by diluting each gallon of ANTHIUM DIOXCIDE used to 10 gals. solution with the injection water.

2) Proportion 1 part of the above solution into each 150 parts of reinjected acidified (3.0 - 4.0 pH) water.

3) Monitor microbial content of the water and increase or decrease the addition rate of the working solution as necessary.

IN FOOD PROCESSING PLANTS, (POULTRY, MEAT, FISH), DAIRIES AND BOTTLING PLANTS

For use as a terminal food contact surface sanitizing rinse conforming to 21 CFR 178.1010 paragraph b, 34 and c, 29 not requiring a subsequent potable water rinse.

Directions for Use:

1) This solution is intended for use as a food contact surface sanitizer for dairies, ice cream factories and food processing plants.

2) This solution may be used on hard surfaces such as tables, trays, bins, etc. and the interior or exterior of food processing equipment.

3) All equipment should be thoroughly cleaned to remove gross food particles and soil by pre-flush or pre-scrape and where necessary, a pre-soak treatment. The surfaces or objects should then be cleaned with a detergent or cleaner followed by a potable water rinse before application of the sanitizing solution.

4) The active biocide in the system is free ClO_2 even though the stabilized chlorine dioxide at pH 8.5 is mildly bacteriostatic. Free ClO_2 is released by addition of an activator and/or acidulant. A solution containing 1,000 ppm of total available chlorine dioxide is prepared by adding 1 fl. oz. of ANTHIUM DIOXCIDE per 50 gallons of water and then adding 700 grams (1.71 lbs.) of ACTIVATOR K per 50 gallons of solution. Allow to stand for 15 minutes after addition for 5 minutes. As an alternate, this solution can be activated by addition of food grade citric acid, phosphoric acid or acetic acid (vinegar) to the pH to 4.8. Then dilute one part of this solution with 4 parts of water to give 200 ppm of total chlorine dioxide and about 125 ppm free ClO_2 (30 - 40 ppm free ClO_2 when acid activation is used.)

5) This solution should be allowed to contact all food processing equipment for at least 1 minute but preferably longer by immersing and/or spraying onto each food processing vessel. It is essential that the sanitizing solution contact all surfaces to be sanitized. Thus, hard to reach internal equipment, pipes, closed vessels, etc. should be filled with the solution to ensure contact of all surfaces with the sanitizing solution. Use suitable protective breathing apparatus when spraying this solution on external equipment.

6) After the required contact time or longer, the solutions are allowed to drain from all surfaces and air dried.

7) The above solution may not be reused for sanitizing but may be diluted to 1:5 with water and used for cleaning of walls, floors and drains of the plant.

AS A BLEACHING IN PAPER MILLS TO PREVENT SLIME, TAR SPOTS, AND PITCH SPOTS IN WHITE WATER SYSTEMS

By maintaining a ClO_2 atmosphere in the white water, the microorganisms cannot produce the nodules which result in slime.

Directions for Use:

1) If the pH of the white water is below 7.0, add 6-1/2 gallons of ANTHIUM DIOXCIDE per hundred tons of paper produced.

2) If the pH of the white water is above 7.0 then add 1/2 gallon of 50% sodium hypochlorite as an activator (with each 6-1/2 gallons of ANTHIUM DIOXCIDE.

Continuous proportioning of the ANTHIUM DIOXCIDE feed is recommended for best results. In many cases, the catalyst can be reduced after the system is clean.

ANTHIUM DIOXCIDE®

5% AQUEOUS STABILIZED CHLORINE DIOXIDE

FOR INSTITUTIONAL OR INDUSTRIAL USE ONLY

Active Ingredients:

Chlorine Dioxide:	5%
Inert Ingredients:	95%
	100%

KEEP OUT OF REACH OF CHILDREN

CAUTION

SEE SIDE PANELS FOR ADDITIONAL PRECAUTIONARY STATEMENTS

E.P.A. REG. NO. 9150-2 E.P.A. EST. NO. 9150-NJ-01

RECEIVED
20 JUL 1983

Registered under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 9150-2

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