



U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Pesticide Programs
Antimicrobials Division (7510W)
401 "M" St., S.W.
Washington, D.C. 20460

EPA Reg.
Number:

5382-46

Date of Issuance:

DEC 26 2000

NOTICE OF PESTICIDE:

Registration
 Reregistration

(under FIFRA, as amended)

Term of Issuance:

Conditional

Name of Pesticide Product:

Chlorite PLUS CD-2

Name and Address of Registrant (include ZIP Code):

Vulcan Chemicals
P.O. Box 385015
Birmingham, AL 35238-5015

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/reregistered 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 is conditionally registered in accordance with FIFRA sec. 3(c)(7)(A) provided that you:

1. Submit and/or cite all data required for registration/reregistration 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 reregistration of your product under FIFRA section 4.
2. Make the following label changes:
 - a. Revise the EPA Registration Number to read, "EPA Reg. No. 5382-46"
3. Under the "Activation" directions for use section only **citric acid** has been accepted as an activator for this product. Remove all references to alternative activators from the label.
4. The heading "To inhibit buildup of slime-forming bacteria in cooling systems should be revised to read: To inhibit bacterial slime forming bacterial buildup in cooling water systems.

See page 2

Signature of Approving Official:

Robert S. Brennis, Product Manager 32

Date:

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5. Revise the Precautionary Statement under "First Aid" to read:

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

- If in Eyes
 - 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 on skin or clothing
 - 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.

6. The Confidential Statement of Formula, dated August 24, 2000, is acceptable.

7. Submit two copies of the revised final printed label for the record.

As per your December 21, 2000 letter the non-public health sections of the label do not require the citric acid mixing instructions. Specifically, this would only include sections: 3,4,5,8,9,11,13,14,17,21,22,23,25 and 26.

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.

A stamped copy of the label is enclosed for your records.

3 7 17

Chlorite PLUS CD-2

FOR INSTITUTIONAL OR INDUSTRIAL USE ONLY

| | |
|--|---------------|
| ACTIVE INGREDIENT: Sodium Chlorite | 2.8% |
| INERT INGREDIENTS: | 97.2% |
| TOTAL | <u>100.0%</u> |

Equivalent to 2% Aqueous Stabilized Chlorine Dioxide

KEEP OUT OF REACH OF CHILDREN

CAUTION

FIRST AID

| | |
|----------------------|---|
| If on skin- | Flush skin with cold water for at least 15 minutes. Call physician. |
| If Swallowed- | Give large amounts of water. Call a physician. |
| If in Eyes- | Flush with cold water for at least 15 minutes. Call a physician. |

SEE SIDE PANELS FOR ADDITIONAL PRECAUTIONS

Manufactured By:

ACCEPTED
with COMMENTS
in EPA Letter Dated:
DEC 26 2000

Vulcan
CHEMICALS

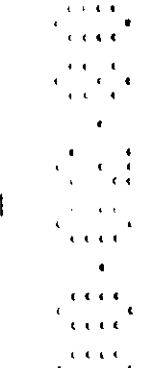
5382-46

A Business Group of Vulcan Materials Company
P O Box 385015, Birmingham Alabama 35238-5015

EPA Reg. No. 5382-_____

EPA Est. 5382-KS-1

_____ Gals. Net (_____)



VMC-8700
(8/00)

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS & DOMESTIC ANIMALS

CAUTION. Harmful if swallowed. May cause skin and eye irritation. Avoid contact with eyes, skin, or clothing. Remove and wash contaminated clothing to avoid fire.

ENVIRONMENTAL HAZARDS

This product is toxic to fish. 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

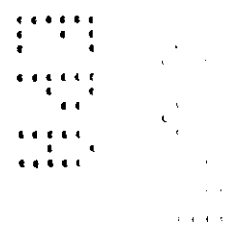
STORAGE: Do not contaminate water, food or feed by storage or disposal. Keep product in tightly closed container when not in use. Do not drop, roll or skid drum. Keep upright. Always replace cover. Store in a cool, dry well-ventilated area away from heat or open flame.

EMERGENCY HANDLING: 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 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 instructions, 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 container. 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.

ACCEPTED
with COMMENTS
in EPA Letter Dated:
DEC 26 2000



Under the Federal Insecticide,
Fungicide, and Rodenticide Act as
amended for the purpose of
the Federal Insecticide, Fungicide, and Rodenticide Act 5382-46

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DIRECTIONS FOR USE

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

ACTIVATION

The active biocidal component of the Chlorite PLUS CD-2 system is free chlorine dioxide. Unactivated Chlorite PLUS CD-2 in the neutral to mildly alkaline pH range is bacteriostatic. For higher levels of microbial control, such as sanitation and disinfection, activation of Chlorite PLUS CD-2 is required to generate free chlorine dioxide. The use of citric acid as an activator is specified in the Chlorite PLUS CD-2 label applications. Alternates 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 Chlorite PLUS CD-2 solution to pH 2-3 with an alternative acid. For food processing applications, only food grade activator acids should be used.

ACCEPTED
with COMMENTS
in EPA Letter Dated

IN FOOD PROCESSING PLANTS, POULTRY, MEAT, FISH, DAIRIES AND BOTTLING PLANTS, CANNERIES, BREWERIES, AND RESTAURANTS.

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide, registered under FIFRA No.

[1]

As a terminal sanitizing rinse for stainless steel and other hard nonporous food contact surfaces such as tanks, transfer lines and other food process equipment.

5382-46

- 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 3¼ fl. oz. (97.5 mls) of Chlorite PLUS CD-2 concentrate into a clean plastic pail or container and add 10 grams of citric acid crystals. Prepare in a well-ventilated area. Avoid breathing any fumes which may be produced while crystals are dissolving. Allow 5 minutes reaction time for crystals to dissolve, completely. To this solution, add 5 gallons-of clean potable water (100 ppm available chlorine dioxide).
- 4) 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 minute. After sanitizing drain the 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.

[2]

To disinfect walls, ceilings and floors.

- 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) Place 3¼ fl. oz. (97.5 mls) of Chlorite PLUS CD-2 concentrate into a clean, plastic pail and add 10 grams of citric acid crystals. Prepare in a well-ventilated area, avoid breathing any fumes which may be produced while crystals are dissolving. Allow 5 minutes reaction time and for crystals to dissolve completely. To this solution, add one (1) gallon of clean, potable water (500 ppm of available chlorine dioxide).

6 7 17

- 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 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 re-use activated solutions.

[3]

To control mold and mildew, odor and slime- forming bacteria on walls, floors, and ceilings.

- 1) Before treatment, all soil and gross filth must be removed from areas to be treated and cleaned with detergent followed by a potable water rinse.
- 2) Preparation of solution: Place 6 1/2 fl. oz. of Chlorite PLUS CD-2 concentrate per gallon of working solution (1,000 ppm available ClO2) into a clean, plastic pail or drum and dilute with clean, potable water.
- 3) To apply: spray solutions onto walls, floors, and ceilings using a suitable spraying, device and making sure all surface areas are damp. Avoid breathing solution mist by use of an applicable NIOSH/MSHA approved respirator appropriate for chlorine dioxide. Avoid contact with food or food contact surfaces. Allow to air dry.
- 4) Repeat application as needed.

[4]

To control the buildup of odor and slime and control taste in ice plants and poultry and meat processing plant water.

- 1) Ice-making machinery should be disassembled and thoroughly cleaned with a detergent solution followed by a potable water rinse.
- 2) Meter to the incoming water to the ice plant potable water system one (1) gallon of Chlorite PLUS CD-2 per 1000 gallons of water (20 ppm available chlorine dioxide).
- 3) As an additive to potable water in meat and poultry processing plants to inhibit bacterial slime and improve taste and odor, add one (1) gallon of Chlorite PLUS CD-2 per 1000 gallons of water.

[5]

To control the buildup of odor and slime forming bacteria in process waters for vegetable rinses and associated tanks, flumes, and lines.

- 1) All tanks, flumes, and lines etc., should be thoroughly cleaned, when possible, with suitable detergent and completely rinsed using clean potable water prior to treatment.

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 with COMMENTS
 in EPA Letter Dated:
DEC 26 2000

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- 2) Preparation of solution: Chill tanks or vegetable rinse tanks may be batch loaded at start up with 1/3 fl. oz. (10 ml) non-activated working solution of Chlorite PLUS CD-2 per 10 gallons of potable water (5.0 ppm available chlorine dioxide). Make-up waters should be treated using a chemical feed pump or injector system and applied at the rate of 1/3 fl. oz. per 10 gallons potable water. Make new Chlorite PLUS CD-2 solutions daily.

[6]

Optional activated solution may be used if heavy use of rinse water is expected or if slime buildup is extreme. An additional activation step may be used in preparation of solution.

- 1) Preparation of activated solution: Prepare in a well-ventilated area, avoid breathing any fumes which may be produced while crystals are dissolving. Measure 1/3 oz. (10 ml) of Chlorite PLUS CD-2 and pour into a clean plastic container containing one (1) gallon of water. Activate the solution by adding one (1) gram of citric acid crystals.
- 2) Allow this solution to stand for 15 minutes and then add to 9 gallons of water (5 ppm chlorine dioxide). Chill tanks or vegetable rinse tanks may be batch loaded at start up with activated Chlorite PLUS CD-2 solution with 1/3 fl. oz. (10 ml) per 10 gallons of potable water (5.0 ppm available chlorine dioxide). Make-up waters should be treated using a chemical feed pump. In order to insure the accurate delivery, a 1:10 dilution of the active concentration should be made and a feed rate of 3 1/3 fl. oz. per 10 gallons should be maintained. Make up fresh Chlorite PLUS CD-2 solutions daily.

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in EPA Letter Dated:
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[7]

For use in the preparation of fruits and vegetables to extend freshness and shelf life.

Pretreatment for uncut unpeeled fruits and vegetables.

of the Federal Insecticide,
Fungicide, and Rodenticide Act as
amended, for the pesticide,
registered under EPA Reg. No.

- 1) Before treatment, whole fruits and vegetables should be washed and thoroughly rinsed with clean potable water.
- 2) To one (1) gallon of water, add 1/3 fl. oz. (10 ml) of Chlorite PLUS CD-2 and add one (1) gram of citric acid crystals to adjust the pH to 2-3. Allow to stand for 15 minutes then add to 9 gallons of water (5.0 ppm of available chlorine dioxide).
- 3) Dip produce in treatment solution for about 10 to 20 seconds, then follow with a potable water rinse.

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[8]

To control the build-up of odor and slime forming bacteria in stainless steel transfer lines and on-line equipment such as hydrocoolers, pasteurizers and the like overnight and over weekends.

- 1) Clean equipment or line thoroughly using a suitable detergent followed by a clean potable water rinse before treatment.
- 2) Preparation and application of solution: For each 10 gallons of volume in lines and/or equipment, add 1 1/4 fl. oz. (37.5 mls), of Chlorite PLUS CD-2 (20 ppm available chlorine dioxide) to potable make-up water. Mix the solution, fill lines and equipment, and let stand overnight. Drain and allow to air dry just prior to next start-up.

[9]

To control odor and slime forming bacteria in cooling and warming waters such as canning retort and pasteurizer cooling water used to decrease or increase packaged product temperature by immersion in or by spraying with the treated process waters.

- 1) All tanks, tunnels, conveyor chains, heat exchanges, 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 one (1) quart (950 mls) Chlorite PLUS CD-2 per one 1000 gallons of potable water (5.0 ppm available chlorine dioxide). To maintain the 5.0 ppm available chlorine dioxide 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 Chlorite PLUS CD-2 solutions daily.

[10]

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.

- 1) Preparation of activated solution: Prepare in a well-ventilated area, avoid breathing any fumes which may be produced while crystals are dissolving. For each 1000 gallons of water to be treated, measure one (1) quart (950 mls) of Chlorite PLUS CD-2 and pour into a clean plastic container, pail, or drum. To this amount, add citric acid crystals, at the rate of 95 grams of crystals per quart of Chlorite PLUS CD-2. Allow 5 minutes reaction time for crystals to dissolve. Dilute to 1000 gallons for a working solution (5.0 ppm available chlorine dioxide). Cooling or warming water systems may be batch loaded at start up using one (1) quart of the prepared solution per 1000 gallons of potable water (5.0 ppm available chlorine dioxide). 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 chlorine dioxide. Make up new Chlorite PLUS CD-2 solutions daily.

[11]

To inhibit buildup of slime-forming bacteria in cooling water systems.

- 1) Add 2½ gallons of Chlorite PLUS CD-2 per 10,000 gallons (5.0 ppm available chlorine dioxide) 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.

ACCEPTED
with COMMENTS
in EPA Letter Dated:
DEC 26 2000

Under the Federal Insecticide
Fungicide, and Rodenticide Act as
amended for the purpose of
registered and

5393-46

IN WATER TREATMENT AND WATER STORAGE SYSTEMS.

[12]

To disinfect water storage systems aboard aircraft, boats, RV's, offshore oil rigs, etc.

- 1) Prior to disinfection, tanks should be cleaned using a suitable detergent and thoroughly flushed with clean, potable water. There is both a 10 minute and a one (1) hour disinfection procedure to choose from.
- 2) Preparation of active solution: For 10 minute procedure: Place 3¼ fl. oz. (97.5 mls) of Chlorite PLUS CD-2 concentrate into a clean plastic container and add 10 grams of citric acid crystals. Prepare in a well-ventilated area. Avoid breathing any fumes which may be produced while crystals are dissolving. Allow 5 minutes reaction time and for crystals to dissolve completely. Pour activated solution into tank and dilute with clean potable water filling the tank completely at the rate of one (1) gallon for each 3¼ fl. oz. Chlorite PLUS CD-2 (500 ppm available chlorine dioxide). Bleed air out of lines and allow to stand at least 10 minutes. Drain tank and lines and flush with potable water.
- 3) For one (1) hour procedure: Place 3¼ fl. oz. of Chlorite PLUS CD-2 concentrate into a clean plastic container and add 10 grams of citric acid crystals. Prepare in a well-ventilated area. Avoid breathing any fumes which may be produced while crystals are dissolving. Allow 5 minutes reaction time and for crystals to dissolve completely. Pour activated solution into tank and dilute with clean, potable water filling the tank completely, at the rate of 10 gallons for each 3¼ fl. oz. Chlorite PLUS CD-2 (50 ppm available chlorine dioxide). Bleed air out of lines and allow to stand at least one (1) hour. Drain tank and lines, then fill with potable water.

[13]

To control build-up of slime and odor causing bacteria and enhance the taste of stored potable water.

- 1) Prior to treatment of potable water, thoroughly clean and disinfect the water storage system. Thoroughly rinse with clean, potable water.
- 2) Potable water should be treated at a rate of one (1) fl. oz. (30 mls) Chlorite PLUS CD-2 per 30 gallons potable water (5 ppm available chlorine dioxide) and may be injected or batch treated.
- 3) The water storage tank should be sufficiently sealed to prevent outside contamination and kept out of direct sunlight.
- 4) Using a chlorite test kit, confirm the chlorite concentration to be 5 ppm and check to see this amount does not fall below 1 ppm.

ACCEPTED
WITH COMMENTS
in EPA Letter Dated:

DEC 26 2000

Under the Federal Insecticide,
Fungicide and Rodenticide Act as
amended, and the pesticide
laws of the State of California

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[14]

To help remove off odors and tastes from municipal well waters.

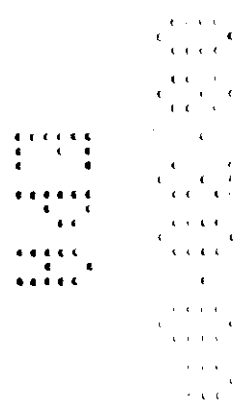
- 1) Chlorite PLUS CD-2 should be injected into the incoming water main using a chemical proportioning pump or injector at a rate of one (1) fl. oz. (30 mls) Chlorite PLUS CD-2 per 150 gallons water (1.0 ppm available chlorine dioxide).
- 2) Confirm pump or injector accuracy using a chlorite test kit and adjust accordingly.
- 3) Chlorite PLUS CD-2 levels should be checked weekly.

**ACCEPTED
with COMMENTS
in EPA Letter Dated:**

DEC 26 2000

Under the Federal Insecticide,
Fungicide, and Rodenticide Act as
amended, and Executive Order
13735, 61 FR 59237, 10/11/96, No.

5382-46



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IN MUSHROOM FACILITIES SUCH AS MUSHROOM PRODUCTION, SPAWN PRODUCTION, MUSHROOM PRODUCTION AND CANNERY OPERATIONS.

[15]

As a terminal sanitizing rinse for stainless steel tanks, transfer lines, on-line equipment, picking baskets, picking utensils and other food contact surfaces.

- 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 picking baskets, line equipment or other surfaces thoroughly using a suitable detergent and rinse with clean potable water before sanitizing.
- 3) Preparation of sanitizing solution: Place 3¼ fl. oz. (97.5 mls) of Chlorite PLUS CD-2 concentrate into a clean plastic pail or drum and add 10 grams of citric acid crystals. Prepare in well-ventilated area. Avoid breathing any fumes which may be produced while crystals are dissolving. Allow 5 minutes reaction time for crystals to dissolve completely. To this solution, add 5 gallons of clean potable water (100 ppm available chlorine dioxide).
- 4) To apply: Flush picking baskets, line equipment or other food contact surface with active solution making sure surface area is thoroughly wet for at least one (1) minute. After sanitizing, drain baskets or equipment and allow to air dry. Treat after each use or production run. Discard solution after each use.

[16]

To disinfect walls, ceilings, and floors.

- 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: Place 3¼ fl. oz. (97.5 mls) of Chlorite PLUS CD-2 concentrate into a clean, plastic pail and add 10 grams of citric acid crystals. Prepare in well-ventilated area, avoid breathing any fumes which may be produced while crystals are dissolving. Allow 5 minutes reaction time for crystals to dissolve completely. To this solution, add one (1) gallon of clean, potable water (500 ppm of available chlorine dioxide).
- 3) To apply: Spray disinfectant solution onto surface using a suitable spraying device and making sure that the area is thoroughly wet for at least 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 re-use activated solutions.

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Under the Federal Insecticide,
Fungicide, and Rodenticide Act as
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registered under EPA Reg. No. 5382-46

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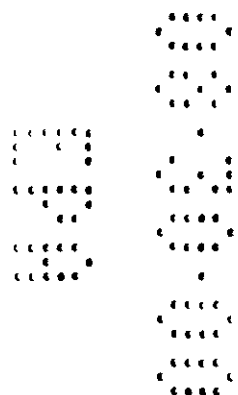
[17]

To control mold and slime forming bacteria on walls, floors, ceilings, and post-crop mushroom growing surfaces.

- 1) Before treatment, all soil and gross filth must be removed from areas to be treated and cleaned with detergent followed by a potable water rinse.
- 2) Preparation of solution: Place 6½ fl. oz. (195 mls) of Chlorite PLUS CD-2 concentrate per gallon of working solution (1000 ppm available chlorine dioxide) into a clean, plastic pail or drum and dilute with clean, potable water.
- 3) To apply: Drench, spray or fog solution onto walls, floors, ceilings and post-crop mushroom growing surfaces using a suitable watering, spraying or fogging device and making sure all surface areas are wet. During application, area must be closed as tightly as possible and sealed. After spraying or fogging, the area should be opened and aired for one (1) hour before re-populating. Avoid breathing solution mist by use of an applicable NIOSH/MSHA approved respirator appropriate for chlorine dioxide. Avoid contact with food or food contact surfaces. Allow to air dry.
- 4) Repeat application as needed.

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registered under EPA Reg. No. 5382-46



IN LABORATORIES, HOSPITALS, MORGUES, AND INSTITUTIONS.

This product is not to be used as a terminal sterilant/high level disinfectant on any surface or instrument that (1) is introduced directly into the human body, either into or in contact with the bloodstream or normally sterile areas of the body, or (2) contacts intact mucous membranes but which does not ordinarily penetrate the blood barrier or otherwise enter normally sterile areas of the body. This product may be used to pre-clean or decontaminate critical or semi-critical medical devices prior to sterilization or high level disinfection.

[18]

To disinfect non-porous, hard surfaces such as tile floors, walls and ceilings and stainless steel cold rooms and walk-in incubators.

- 1) Clean all surfaces thoroughly with a suitable detergent and rinse with water prior to disinfection.
- 2) Preparation of active disinfecting solution: Place 3¼ fl. oz. (97.5 mls) of Chlorite PLUS CD-2 concentrate into a clean, plastic pail and add 10 grams of citric acid crystals. Prepare in a well-ventilated area, avoid breathing any fumes which may be produced while crystals are dissolving. Allow 5 minutes reaction time and for crystals to dissolve completely. To this solution add one (1) gallon of clean, potable water (500 ppm available chlorine dioxide).
- 3) To apply: Activated solutions may be sprayed, mopped or sponged onto surfaces to be disinfected. All surfaces must be thoroughly wetted for at least 10 minutes. When spraying disinfectant solutions, use an appropriate spraying device. 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 re-use activated solutions.

[19]

To disinfect bench tops, biological hoods, incubators, stainless steel equipment and instruments.

- 1) Clean all surfaces thoroughly with a suitable detergent and rinse with water prior to disinfection.
- 2) Preparation of active disinfectant solution: Place 25 ml of Chlorite PLUS CD-2 concentrate into a clean, plastic pail or glass beaker and add 2½ grams of citric acid crystals. Prepare in a well-ventilated area, avoid breathing any fumes which may be produced while crystals are dissolving. Allow 5 minutes reaction time and for crystals to dissolve completely. Then add activated Chlorite PLUS CD-2 solution to one (1) liter of clean, potable water (500 ppm available chlorine dioxide).
- 3) To apply: Activated solutions may be squirted directly onto surfaces from a plastic squeeze bottle or may be used as a soak solution. All contact surfaces must be thoroughly damp for at least 10 minutes. Allow to air dry. Activated solutions of Chlorite PLUS CD-2, stored in plastic squirt bottles, may be held up to one (1) week before replacement with fresh solution. Soak solutions of Chlorite PLUS CD-2 should be changed daily.

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[20]

To disinfect water bath incubators.

- 1) Prior to disinfection, thoroughly clean the reservoir with a suitable detergent and rinse with clean water.
- 2) Preparation of active solution: Place 1/3 fl. oz. (10 mls) of Chlorite PLUS CD-2 into a clean glass or plastic container. Add one (1) gram of citric acid crystals per each 1/3 fl. oz. Chlorite PLUS CD-2. Prepare in a well-ventilated area, avoid breathing any fumes which may be produced while crystals are dissolving. Allow 5 minutes reaction time and for crystals to dissolve completely. Add activated Chlorite PLUS CD-2 solution to one (1) gallon of clean, potable water (50 ppm available chlorine dioxide).
- 3) To apply: Activated solution should be poured into waterbath reservoir and allowed to stand one (1) hour at room temperature. Drain reservoir and fill with fresh water.

[21]

To control odor and slime forming bacteria in waterbath incubators.

- 1) When using Chlorite PLUS CD-2 in waterbath incubators, always begin with a freshly cleaned and disinfected reservoir.
- 2) To apply: Fill waterbath with clean, potable water to near capacity. For each gallon of water add 1/3 fl. oz. (10 mls) of Chlorite PLUS CD-2 (50 ppm available chlorine dioxide) or 2 1/2 ml of Chlorite PLUS CD-2 per liter of water. When water becomes cloudy, discard water and repeat procedure.

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in EPA Letter Dated:

DEC 26 2000

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

5382-46

[22]

To control odors resulting from the sterilization of spent biologicals in steam autoclaves.

- 1) To reduce autoclave odors of used biologicals, prepared solution should be sprayed or poured directly into the stainless steel autoclave buckets.
- 2) Preparation of solution: Place 6 1/2 fl. oz. (195 mls) of Chlorite PLUS CD-2 concentrate into a clean glass or plastic container. Dilute concentrate to one (1) gallon clean, potable water per each 6 1/2 fl. oz. (1000 ppm available chlorine dioxide).
- 3) To apply: Spray or pour Chlorite PLUS CD-2 solution into or onto the, autoclave buckets just prior to autoclaving.

[23]

To deodorize animal holding rooms, sick rooms, morgues and work rooms.

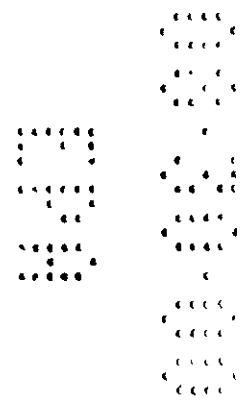
- 1) Rooms to be deodorized should be in a clean condition prior to Chlorite PLUS CD-2 application.
- 2) Preparation of solution: Place 6 1/2 fl. oz. (195 mls) Chlorite PLUS CD-2 concentrate per one (1) gallon of working solution or 50 ml per one (1) liter working solution (1000 ppm available chlorine dioxide) into a clean glass or plastic container.

15 3 17

- 3) To apply: Spray solution using a suitable spraying device, onto walls, ceilings and floors; lightly dampening all surfaces. Avoid breathing mist of solutions by using an applicable NIOSH/MSHA approved respirator appropriate for chlorine dioxide. Allow to air dry, then ventilate the area. Treat as required.

ACCEPTED
 with COMMENTS
 in EPA Letter Dated:
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70 3 17

IN ANIMAL REARING AND CONFINEMENT FACILITIES.

[24]

To disinfect commercial animal confinement facilities such as poultry houses, swine pens, calf barns and kennels.

- 1) Remove all animals and feed from premises, vehicles, enclosures, coops and crates.
- 2) Remove all litter and manure from floors, walls and surfaces of barns, pens, stalls, chutes and other facilities and fixtures occupied or traversed by animals.
- 3) Empty all troughs, racks and other feeding and watering appliances.
- 4) Thoroughly clean all surfaces with soap or detergent and rinse with water.
- 5) Preparation of active disinfectant solution: Place 3¼ fl. oz. (97.5 mls) Chlorite PLUS CD-2 concentrate into a clean, plastic pail and add 10 grams of citric acid crystals. Prepare in a well-ventilated area. Avoid breathing any fumes, which may be produced while crystals are dissolving. Allow 5 minutes reaction time and for crystals to dissolve completely. To this solution, add one (1) gallon of clean, potable water (500 ppm of available chlorine dioxide).
- 6) To apply: Using commercial sprayer, saturate all surfaces with the activated Chlorite PLUS CD-2 solution for a period of 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. 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.
- 7) After treatment, ventilate buildings, coops or other enclosed spaces and allow to air dry. Repopulate when solution has dried.
- 8) Thoroughly scrub treated feed racks, troughs, automatic feeders, fountains and waterers with soap or detergent and rinse with potable water before use.

[25]

To control the build-up of odor and slime forming bacteria in animal confinement areas.

- 1) Remove all litter and manure from floors, walls and surfaces of barns, pens, stalls, chutes, cases and other facilities and fixtures occupied or traversed by animals. Thoroughly clean all surfaces with soap or detergent and rinse with clean water.
- 2) Preparation of solution: Place 6½ fl. oz. (195 mls.) Chlorite PLUS CD-2 concentrate per gallon of working solution (1000 ppm available chlorine dioxide) into a clean, plastic pail.
- 3) To apply: Using a commercial sprayer, saturate all surfaces with the Chlorite PLUS CD-2 solution. When spraying Chlorite PLUS CD-2 solutions, always use an applicable NIOSH/MSHA approved respirator appropriate for chlorine dioxide to avoid breathing mist.

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[26]

To control animal odors on carpets

Add 3 oz. Chlorite PLUS CD-2 per gallon (500 ppm available chlorine dioxide) of either rug shampoo mix or 3 oz. Chlorite PLUS CD-2 per each gallon of rinse water. Shampoo carpet. Allow to air dry. CAUTION: Chlorite PLUS CD-2 may bleach some carpets and fabrics, especially if applied on top of another chemical agent. Do not apply until a sample test has been tried and observed for at least 24 hours.

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