

U.S. Environmental Protection Agency
Office of Chemical Safety and
Pollution Prevention
Antimicrobials Division (7510P)
1200 Pennsylvania Avenue NW
Washington, D.C. 20460

NOTICE OF PESTICIDE:

x Registration Reregistration

Number: JUL 14 2010

Term of Issuance:

Conditional

Name of Pesticide Product:

SC-8

(under FIFRA, as amended)

Name and Address of Registrant (include ZIP Code):

FILE COPY

CHL, LLC P.O. Box 481

Leominster, MA 01453

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 (OPP Decision No. 425821) is registered in accordance with FIFRA sec 3(c)(7)(A) 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. Change EPA File Symbol 87134-E to EPA Registration Number 87134-2.
- 3. Move the Storage and Disposal instructions to the end of the use directions.
- 4. On page 2, revise the Environmental Hazards statement by changing "...public waters..." to "...other waters..." and "...Pollution.." to "...Pollutant...".
- 5. On page 4, change "...soil should be removed..." to "...soil must be removed...".
- 6. On page 11, change '124.79 mls' to '13.30 mls' and "...nozzles should be..." to "...nozzles must be...".
- 7. On page 12, change the second heading to "...sealed tile floors, painted walls and painted ceilings...".
- 8. On page 14, change "...prepared solution should be..." to "...prepared solution must be...".

Signature of Approving Official:

Wanda Y. Hensbri

Acting Product Manager Team 32 Regulatory Management Branch II Antimicrobials Division (7510P) Date:

JUL 1 4 2010

Submit one (1) copy group final printed label prior to releasing group product for sale.

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.

ACCEPTED with COMMENTS in EPA Letter Dated:

SC-8

JUL 14 2010

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

ACTIVE INGREDIENT:

Sodium Chlorite*......8.3%

KEEP OUT OF REACH OF CHILDREN **CAUTION**

See Side Panels for Additional Precautions

FIRST AID

If on skin or

Take off contaminated clothing.

Clothing:

Rinse skin immediately with plenty of water for 15-20 minutes.

Call a poison control center or doctor immediately for treatment advice.

If swallowed:

Call a poison control center or doctor immediately for treatment advice.

Have a person sip a glass of water if able to swallow.

Do not induce vomiting unless told to do so by the poison control center

or doctor.

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.

Do not give anything mouth to an unconscious person.

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.

NOTE TO PHYSICIAN:

Probable mucosal damage may contraindicate the use of gastric lavage.

HOT LINE NUMBER

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-858-7378 for emergency medical treatment information.

EPA REG. NO. 87134-XX

EPA EST. 87134-WY-001

Manufactured by:	NET CONTENTS:	gal
CHL, LLC.		liters
P.O. Box 481		<u> </u>
Leominster, MA 01453		

PRECAUTIONARY STATEMENTS CAUTION

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

IRRITANT. Harmful if swallowed. Causes eye irritation. Avoid contact with skin, eyes or clothing. Irritating to nose and throat. Avoid breathing spray mist. In case of contact, immediately flush eyes and skin with plenty of water. Get medical attention if irritation persists.

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 public waters unless in accordance with the requirements of a National Pollution 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 sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA.

PHYSICAL OR CHEMICAL HAZARDS

DO NOT mix SC-8 with acids or other chemicals except water. Mixing with acid or other chemicals may cause evolution of chlorine dioxide gas, which is poisonous and explosive.

DO NOT let spilled solution evaporate to dryness. If resultant residue contacts oxidizable or combustible materials, the mixture is easily ignited by heat or friction. This results in a fiercely burning fire, or in a confined space, a possible explosion. Examples of such materials are cloth, paper, wood, sawdust, hydrocarbons such as greases, oils, and solvents, rubber, leather, plastics, and organic substances in general; also sulfur, sulfides, powdered metals, phosphorous and ammonium compounds.

EMERGENCY HANDLING

In case of contamination or decomposition, do not reseal container. Isolate in an open, well-ventilated location. Flood with large volumes of water.

STORAGE AND DISPOSAL DO NOT CONTAMINATE WATER, FOOD OR FEED BY STORAGE OR DISPOSAL.

Storage: Do not store this product with oxidizers, acids, reducing agents, or combustible materials. Store in a cool, dry well-ventilated location away from direct sunlight. Protect from freezing. Store upright and do not stack over two drums per pallet. A drum pump is recommended for transferring this material. Keep drums tightly closed when not in use. Store only in the original containers or approved storage containers and guard against cross-contamination with other pesticides, fertilizers, food and feed. Do not reuse containers.

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

Container Disposal: Triple rinse (or equivalent) all containers and offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Spills: In case of spills, dilute with large quantities of water and flush to a designated sewer in accordance with all applicable federal, state and local regulations. Alternatively, this product may be flushed to a collection basin or container for disposal. Comply with all applicable federal, state and local regulations regarding spill notification requirements.

IN WATER TREATMENT AND WATER STORAGE SYSTEMS.

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

- 1) Prior to disinfection, tanks should be cleaned using 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 1.20 fl. oz (35.4 mls) of SC-8 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 filing the tank completely at the rate of one (1) gallon for each 1.20 fl. oz. (35.4 mls) SC-8 (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 1.20 fl. oz. (35.4 mls) Of SC-8 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 filing the tank completely, at the rate of 10 gallons for each 1.20 fl. oz. (35.4 mls) SC-8 (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.

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 ½ fl. oz. (13.30 mls) of SC-8 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 chlorine dioxide test kit, confirm the chlorine dioxide concentration to be 5 ppm and check to see this amount does not fall below 1 ppm.

[3]

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

- 1) SC-8 should be injected into the incoming water main using a chemical proportioning pump or injector at a rate of ½ fl. oz. (13.30 mls) of SC-8 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) SC-8 levels should be checked weekly.

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

[4]

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 1.20 fl. oz. (35.4 mls) of SC-8 concentrate into 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: 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.

[5]

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 1.20 fl. oz. (35.4 mls) of SC-8 concentrate into a clean, plastic pail and add 10 grams of citric acid crystals. Prepare in well-ventilated area, avoid breathing 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 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.

[6] To control mold and slime forming bacteria on walls, floors, ceilings, and postcrop 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 2 ¼ fl. oz. (66.54 mls) of SC-8 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.

IN ANIMAL REARING AND CONFINEMENT FACILITIES

[7] 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 1.20 fl. oz. (35.4 mls) SC-8 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 SC-8 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 when solution dried.
- 8) Thoroughly scrub treated feed racks, troughs, automatic feeders, fountains and waterers with soap or detergent and rinse with potable water before use.

[8] To control the buildup 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 2 ¼ fl. oz. (66.54 mls.) SC-8 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 SC-8 solution. When spraying SC-8 solutions, always use an applicable NIOSH/MSHA approved respirator appropriate for chlorine dioxide to avoid breathing mist.

[9] **To control animal odors on carpets**

1) Add 1.20 fl. oz. (35.4 mls) of SC-8 per gallon (500 ppm available chlorine dioxide) of either rug shampoo mix or 1.20 fl. oz. (35.4 mls) of SC-8 per each gallon of rinse water. Shampoo carpet. Allow to air dry. CAUTION: SC-8 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.

[10]

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.

- 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 1.20 fl. oz. (35.4 mls) of SC-8 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 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.

[11]

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 1.20 fl. oz. (35.4 mls) of SC-8 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).
- 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.

[12]

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 2 ¼ fl. oz (66.54 mls) of SC-8 concentrate per gallon of working solution (1,000 ppm available Cl02) 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 surfaces. Allow to air dry.

4) Repeat application as needed.

[13]

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 could be disassembled and thoroughly cleaned with a detergent solution followed by a potable rinse.
- 2) Meter to the incoming water to the ice plant potable water system 46 fl. Oz. (1,357 mls) of SC-8 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 46 fl. Oz. (1,357 mls) of SC-8 per 1000 gallons of water.

[14]

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.
- 2) Preparation of solution: Chill tanks or vegetable rinse tanks may be batch loaded at the start up with 0.11 fl. oz. (3.33 ml) non-activated working solution of SC-8 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 0.11 fl. oz. (3.33 mls) per 10 gallons potable water. Make new SC-8 solutions daily.

[15]

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 0.11 fl. oz. (3.33 mls) of SC-8 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 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 SC-8 solution with 0.11 fl. oz. (3.33 mls) 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 1.20 fl. oz. (35.40 mls) per 10 gallons should be maintained. Make up fresh SC-8 solutions daily.

[16]

For use in the preparation of fruits and vegetables to extend freshness and shelf life. Pretreatment for uncut unpeeled fruits and vegetables.

- 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 0.11 fl. oz. (3.33 mls) of SC-8 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.

[17]

To control the build-up of odor and slime forming bacteria in stainless steel transfer lines and online 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 ½ fl. oz. (124.79 mls), of SC-8 (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.

[18]

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, conveyer 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 11.70 fl. oz. (346 mls) of SC-8 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 SC-8 solutions daily.

[19]

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 11.70 fl. oz. (346 mls) of SC-8 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 SC-8. Allow 5 minutes reaction time for crystals to dissolve. Dilute 1000 gallons of 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 (1,000) 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 SC-8 solutions daily.

[20]

To inhibit bacterial slime forming bacterial buildup in cooling water systems.

- 1) Add 115 fl. oz. (3,407 mls) of SC-8 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.

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 blood stream 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.

[21]

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 1.20 fl. oz. (35.4) mls) of SC-8 concentrate into a clean, plastic pail and add 10 grams of citric acid crystals. Prepare in a well-ventilated area, avoid breathing 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.

[22]

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 0.45 fl. oz. (13.30 mls) of SC-8 concentrate into a clean, plastic pail or glass beaker and add 2 ½ 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 SC-8 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 SC-8, stored in plastic squirt bottles, may be held up top one (1) week before replacement with fresh solution. Soak solutions of SC-8 should be changed daily.

[23]

To disinfect water bath incubators.

- 1) Prior to disinfection, thoroughly clean reservoir with a suitable detergent and rinse with clean water.
- 2) Preparation of active solution: Place 0.11 fl. oz. (3.33 mls) of SC-8 into a clean glass or plastic container. Add one (1) gram of citric acid crystals per each 0.11 fl. oz. (3.33 mls) of SC-8. 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 SC-8 solution to one (1) gallon of clean, potable water (50 ppm available chlorine dioxide).
- 3) To apply: Activated solution should be poured into a water bath reservoir and allowed to stand one (1) hour at room temperature. Drain reservoir and fill with fresh water.

1420

[24]

To control odor and slime forming bacteria in water bath incubators.

- 1) When using SC-8 in water bath incubators, always begin with a freshly cleaned and disinfected reservoir.
- 2) To apply: Fill water bath with a clean, potable water near capacity. For each gallon of water add 0.11 fl. oz. (3.33 mls) of SC-8 (50 ppm available chlorine dioxide). When water becomes cloudy, discard water and repeat procedure.

[25]

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 2 ¼ fl. oz. (66.54 mls) of SC-8 concentrate into a clean glass or plastic container. Dilute concentrate to one (1) gallon clean, potable water per each 2 ¼ fl. oz. (66.54 mls) (1000 ppm available chlorine dioxide).
- 3) To apply: Spray or pour SC-8 solution into or onto the, autoclave buckets just prior to autoclaving.

[26]

To deodorize animal holding rooms, morgues and work rooms.

- 1) Rooms to deodorized should be in a clean condition prior to SC-8 application.
- 2) Preparation of solution: Place 2 ¼ fl. oz. (66.54 mls) SC-8 concentrate per one (1) gallon of working solution or 50 ml per one (1) liter of working solution (1000 ppm available chlorine dioxide) into a clean glass or plastic container.
- 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.

AS A PAPER PROCESSING SLIMICIDE IN WHITE WATER SYSTEMS:

This product has FDA GRAS status when used as a slimicide in the manufacture of paper and paperboard that contacts food (21 CFR 186.1750).

APPLICATION DIRECTIONS:

(1) Use 5 to 15 gallons of SC-8 per 100,000 gallons of white water to be treated, which corresponds to an active ingredient concentration of 3 to 9 ppm. Alternatively, use 2 to 4 gallons SC-8 per 100 tons of paper produced, which correlates to a dosage rate of 5 to 15 ppm active ingredient.

FOR ENCLOSED AND RECIRCULATING WATER SYSTEMS:

SC-8 should be injected at a point in the system where it will undergo uniform mixing. It is recommended that a slow feed rate be applied directly into the suction side of the system pump. Badly fouled systems should be cleaned prior to treatment.

INITIAL DOSE— When the system is noticeably fouled, apply 1 gallon of SC-8 per 10,000 gallons of water in the system. Repeat dosage every 24 hours until acceptable microbiological quality is achieved. Usually 3 to 6 applications will suffice.

SUBSEQUENT DOSE -- After acceptable microbiological quality is achieved, the system may be maintained by adding 3 doses of SC-8 every 14 to 24 days or as often as required for control. Each dose consists of 1 gallon of SC-8 per 10,000 gallons water in the system repeated every 24 hours for a total of 3 additions. Treatment may then be discontinued for another 14 to 24 days or until fouling again becomes evident.

SPECIFIC APPLICATIONS

SC-8 may be used to treat enclosed and recirculating systems in the following application.

- A. Dairy--Sweet water systems to reduce microbiological levels.
- B. Farming--Irrigation systems for slime reduction in tubing and piping.
- C. Papermills -- General water treatment to reduce microbiological growth.
- D. Oilfield--To improve secondary recovery process water quality.
- E. General Industrial Applications Including Food Processing To reduce microbiological growth in cooling towers and industrial process water, including wash water of uncut and unpeeled fruits and vegetables. (Note: Residual concentrations of up to 5 ppm chlorine dioxide in process water may be used for washing whole uncut fruits and vegetables although a final potable water rinse is required if the residual exceeds 1 ppm).

FOR FOGGING AND MISTING APPLICATIONS:

SC-8 may be added to the plant misting or fogging systems to deodorize and to control odor causing bacteria, mold and mildew in food processing plants, dairies, bottling plants, poultry, meat and fish plants and animal facilities such as poultry houses, swine pens, calf barns and kennels.

Application Directions:

When fogging rooms with SC-8, care should be taken not to exceed the TLV-TWA of 0.1 ppm (0.30 mg/m^3) . If the TLV-TWA is to be exceeded, turn off air handlers and vacate people and livestock from the rooms to be fogged or misted. Ventilate for 15 minutes prior to reentry.

- (1) Mix 1.5 ml to 30 ml of SC-8 per gallon of water. To this dilution, add a sufficient amount of 1 to 3% by weight of an aqueous food grade acid solution (phosphoric, citric, acetic, etc.) to lower the pH to 3.5 to 5.0.
- (2) Allow this diluted mixture to react for at least 15 minutes before adding to the plant fogging or misting system.
- (3) For best result, fogging or misting with diluted, acidified SC-8 should be done as close to the ceiling as possible.

NOTE -- Be careful not to add concentrated acid solutions to undiluted SC-8 as high concentrations of chlorine dioxide gas may evolve. The concentration of chlorine dioxide in the diluted SC-8 solution should not be allowed to exceed 0.5 ppm as determined by the Hach DPD method for chlorine dioxide detection. Please consult your CHL representative for exact testing procedures before adding any acid to SC-8. The use of SC-8 in fogging or misting should be accompanied by a regular air monitoring program.

TO PREVENT CORROSION AND SLIME FORMATION IN OIL FIELD SECONDARY RECOVERY OPERATIONS:

Application Directions:

- (1) Prepare a working solution by diluting each gallon of SC-8 to be used with 6 gallons injection water.
- (2) Proportion 1 part of the diluted SC-8 solution into 130 to 140 parts reinjection water acidified to a pH of 3.0 to 4.0.
- (3) Increase or decrease the dose rate of the SC-8 solution as indicated by monitoring the microbial quality of the water.

POULTRY PROCESSING:

Carcass sprays, dips, rinses: SC-8 may be used as an equipment rinse and carcass spray or dip at a use rate of 0.7 to 1.7 ounces per gallon (500 - 1200 ppm sodium chlorite) in combination with any GRAS acid at levels sufficient to achieve a solution pH of 2.5 to 2.9.

Chill water application: SC-8 is a source of sodium chlorite for treating poultry chill water and pre-chill water when used at a rate of 0.1 to 0.3 ounces per gallon in combination with any GRAS acid at levels sufficient to achieve a solution pH of 2.8 to 3.2.

TO DISINFECT AND SANITIZE AGAINST ODOR CAUSING BACTERIA ON HARD NON-POROUS SURFACES, SUCH AS WALLS, CEILINGS, FLOORS, DRAINS, PIPELINES, COUNTERS, SINKS, TILES:

- (1) Before disinfection or sanitization, remove gross debris, food and beverages from the surfaces to be cleaned.
- (2) Add 1 to 2 fluid ounces SC-8 per five (5) gallons of water to be used [100-200 ppm available chlorine dioxide; 21 CFR 178.1010 (b)(34), (c)(29)]
- (3) The SC-8 solution may be applied by spraying, misting, pouring, or wiping onto the surface to be treated. Allow the SC-8 solution to contact the surface for at least 5 minutes before wiping off.

TO CONTROL SLIME AND MOLD GROWTH ON FOOD PROCESS AND BEVERAGE CONVEYORS:

SC-8 may be sprayed on food process conveyors to control mold and slime build-up that leads to product contamination and possible belt slippage. Apply SC-8 at a rate of 1 to 2 fluid ounces per 5 gallons of water either by itself or in combination with a non-reactive water based lubricant.

FOR DEODORIZATION:

SC-8 effectively eliminates odors in the air and at their source.

- (1) Before deodorization, remove unopened and unwrapped food and beverages from the area to be treated.
- (2) Dilute a minimum of 0.5 fluid ounces of SC-8 per gallon of water to be used. For severe conditions, SC-8 may be used undiluted.

- (3) For room deodorization, spray, pour, or wipe the SC-8 solution as needed. For best results, apply the SC-8 as near to the center of the area to be treated as possible.
- (4) For surface deodorization, spray, pour, or wipe the SC-8 on the effected area as often as necessary. For best results, allow to air dry for 10 minutes after treatment and then rinse surfaces treated with potable water.

TO CONTROL MOLD AND MILDEW:

SC-8 is effective in controlling mold and mildew on bathroom surfaces, shower stalls, on curtains, in laundry rooms, hampers, and on other surfaces where mold and mildew may be present.

- (1) Before treatment, remove gross filth and debris from the affected surfaces. Remove all open and unwrapped food and beverages from the vicinity.
- (2) Dilute a minimum of 12 fl.oz. of SC-8 per gallon of water to be used. For several applications, SC-8 may be used undiluted.
- (3) Spray, mist, fog, pour or wipe the SC-8 solution onto the surface to be treated. Allow the SC-8 to contact the surface for at least 5 minutes. Allow surfaces to drain and air dry. After 30 minutes, rinse with water. Repeat as necessary.

DOT SHIPPING NAME: CHLORITE SOLUTION 8(Corrosive); UN 1908; PGIII