

69151-2

10-13-2004

1/6



U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Pesticide Programs
Antimicrobials Division (7510C)
1200 Pennsylvania Avenue, NW
Washington, D.C. 20460

EPA Reg. Number:

Date of Issuance:

69151-2

OCT 13 2004

Term of Issuance:

Conditional

Name of Pesticide Product:

Steritech BD-20

NOTICE OF PESTICIDE:

Reregistration
 Registration

(under FIFRA, as amended)

Name and Address of Registrant (include ZIP Code):

Steritech, Inc.
4610 N.Ash Street
Suite 101
Spokane, WA 99205

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 change:
 - a. Revise the EPA Registration Number to read, "EPA Reg. No. 69151-2."
 - b. Revise the first sentence of second paragraph to read "In all cases, generated chlorine dioxide solution should be applied in such a manner to ensure adequate mixing and minimal volatilization.

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

Signature of Approving Official:

Date:

Wanda G. Mitchell, for

OCT 13 2004

Emily H. Mitchell, PM-32 - Antimicrobials Division (7510C)

210
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.

3/6

STERITECH BD-20

CHLORINE DIOXIDE PRECURSOR FOR MICROBIAL CONTROL IN WATER AND WASTEWATER AND ON HARD SURFACES

ACTIVE INGREDIENT:

Sodium Chlorite.....	7.5%
OTHER INGREDIENTS.....	92.5%
TOTAL.....	100.0%

ACCEPTED with COMMENTS - EPA Letter Dated:

OCT 13 2004

KEEP OUT OF REACH OF CHILDREN
DANGER

See Side Panels for Additional Precautions

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide, registered under EPA Reg. No. 69151-2

FIRST AID

- 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 if burning or irritation of skin persists.~~
- If Swallowed:** Have person drink a glass of water immediately if able to swallow.
Call poison control center or doctor immediately for treatment advice.
Do not induce vomiting unless told to do so by the poison control center or doctor.
Do not give anything by mouth to an unconscious person.
- If inhaled:** Move person to fresh air and monitor for respiratory distress.
If cough or difficulty breathing develops, consult a physician immediately.
If person is not breathing, call 911 or an ambulance, then give artificial respiration.
Call a poison control center or doctor for further treatment advice.

NOTE TO PHYSICIAN

Probable mucosal damage may contraindicate the use of gastric lavage.

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.

EPA EST.

Manufactured by:
STERITECH LLC
4610 Ash St., Suite 101
Spokane, Washington 99205

NET CONTENTS:

PRECAUTIONARY STATEMENTS

4/10

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER: CORROSIVE. CAUSES EYE AND SKIN DAMAGE. Harmful if swallowed. Irritating to nose and throat. Avoid breathing vapor. Do not get in eyes, on skin or clothing. Wear goggles or face shield and rubber gloves and protective clothing when handling. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash thoroughly before reuse.

ENVIRONMENTAL HAZARDS

This product is toxic to fish and aquatic organisms. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to 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

DO NOT mix 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.

DIRECTIONS FOR USE

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

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal

Storage: Store this product in a cool, dry area, away from direct sunlight and heat to avoid deterioration. In case of spill, flood the area with large quantities of water.

Pesticide Wastes: 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 (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.

Directions for use in the Sanitization of Food-Contact Surfaces:

Use **STERITECH BD-20** in combination with **FOAM ADD 10** to generate a chlorine dioxide containing foam solution for use as a terminal no-rinse sanitizer for food-contact surfaces, food-processing equipment and utensils. Prior to application of the sanitizing foam, remove gross food particles and soil by a pre-flush, or pre-scrape, and when necessary, pre-soak treatment. Then thoroughly wash all equipment, surfaces and utensils with a suitable detergent or cleaner, followed by a potable water rinse.

Application of the foam sanitizing solution can be accomplished by manually combining 15 oz. of **FOAM ADD 10** with 2.5 oz. of **STERITECH BD-20**, gently mixing for ten minutes and then

immediately diluting with water to ten gallons. Alternatively, use the *Rio Linda Chemical Potable Foamer* or a centrally located installed system to mix the components, at the use levels noted above.

5/6

Cover the entire area being treated with the foam sanitizer to a depth of $\frac{1}{4}$ -1". A contact time of at least one minute is required for sanitization. Allow the foam sanitizer to thoroughly drain and dry from all equipment and surfaces prior to recontact of the sanitized surface with food or feed items.

The efficacy of STERITECH BD-20 was demonstrated to be equivalent to or >200 ppm NaOCl when tested against *Salmonella typhi*.

DIRECTIONS FOR USE IN THE MECHANICAL OR ELECTROLYTIC GENERATION OF CHLORINE DIOXIDE AS A DISINFECTANT, OR FOR MICROORGANISM CONTROL IN WATER AND WASTEWATER SYSTEMS

STERITECH BD-20 may be used in the mechanical generation of chlorine dioxide for use in controlling microorganisms in water and wastewater systems. STERITECH BD-20 is fed to chlorine dioxide generation equipment, which produces an aqueous solution of chlorine dioxide by one of the following methods of generation:

- (1) The chlorine method, which uses STERITECH BD-20 and chlorine gas;
- (2) The hypochlorite method, which uses STERITECH BD-20 and a combination of a hypochlorite solution, and an acid,
- (3) The acid-chlorite method, which uses STERITECH BD-20 and an acid as the activating agent; or,
- (4) The electrolytic method which uses STERITECH BD-20, with sodium chloride added as needed.

Your STERITECH LCC representative can guide you in the selection, installation and operation of generation systems. Consult the instructions on the chlorine dioxide generation system before using STERITECH BD-20.

Feed Requirements

In all cases, generated chlorine dioxide solutions should be applied in such a manner to ensure adequate mixing and minimal volatilization. Feed rates of STERITECH BD-20 will depend on the severity of contamination and the degree of control desired. The exact dosage will depend on the size of the system and residual necessary for the effective control. Depending on the generator type, STERITECH BD-20 may be diluted at the point of use to prepare a 3% to 7.5% active aqueous solution for use in chlorine dioxide generators.

minimal In all cases, generated chlorine dioxide solution should be applied in such a manner to ensure *adequate mixing and* volatilization. The water stream to be treated may either be passed directly through the chlorine dioxide generator or treated via side stream injection point. The generation system employed should be in good working order and capable of achieving chlorine dioxide solutions free from chlorine contamination.

Because of the variability of demand in water and process systems, the dosage of chlorine dioxide required to achieve the target residuals is normally lower for continuous feed systems than for slug or timed feed applications. The minimum acceptable residual for the chlorine dioxide, as determined by a verified procedure, is 0.1 ppm for a minimum one minute contact time.

Residual determination procedures should be substantiated methods and should also be specific for chlorine dioxide or used in systems where no chlorine contamination is possible. Do not add STERITECH BD-20 directly to process water. e/c

APPLICATIONS

POTABLE WATER AND WASTE TREATMENT DISINFECTION

For most municipal and potable water systems, a chlorine dioxide residual concentration up to 2.0 ppm is sufficient to provide adequate disinfection. Residual disinfectant and disinfection byproducts must be monitored as required by the National Primary Drinking Water Regulations (40 CFR Part 141) and state drinking water standards. For wastewater and sewage applications, residual chlorine dioxide concentrations up to 5.0 ppm are generally adequate.

Food Processing Plants, Dairies, Bottling Plants, and Breweries

For Microbial control in typical food processing water systems, such as flume transport, chill water systems, hydrocoolers, beverage and brewery pasteurizers, apply STERITECH BD-20 through a chlorine dioxide generation system to achieve a chlorine dioxide residual concentration ranging from 0.25 to 5.0 ppm.

~~Water, containing up to 3 ppm residual chlorine dioxide may be used for washing fruits and vegetables that are not raw agricultural commodities in accordance with 21CFR § 173.300. Treatment of the fruits and vegetables with chlorine dioxide must be followed by a potable water rinse, or by blanching, cooking or canning.~~

Poultry Processing Water

Use STERITECH BD-20 to generate chlorine dioxide for use as an antimicrobial agent in water used in poultry processing in an amount not to exceed 3.0 ppm residual chlorine dioxide as determined by an appropriate method in accordance with 21CFR § 173.300.

Aqueous Disinfection Systems for CIP Cleaning:

If the concentration of chlorine dioxide generated from STERITECH BD-20 exceeds 5.0 ppm, a potable water rinse should follow treatment. Care should be taken to ensure the biological and chemical quality of the potable water.

General Industrial Process Water Treatment (Oilfield Injection Water, White Water Paper Mill Systems, and Recirculating Cooling Towers):

For control of microbial slimes, these systems will require a chlorine dioxide residual concentration ranging between 0.25 and 5.0 ppm. The STERITECH BD-20 dosage needed to achieve these levels will vary widely depending on the exact application.

Please contact your authorized STERITECH LLC representative for assistance in determining the correct dosage level.