

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

AUG 10 1994

Mr. Lee R. Zimmerli
Great Western Chemical Co.
808 SW 15th Avenue
Portland, OR 97205

Dear Mr. Zimmerli:

Subject: G. W. Sani-Clean
EPA Registration No. 33003-1
Your Amendment Dated April 27, 1994

This is in response to your amendment of additional use directions (from the Registration Standard) for Sewage and Wastewater Effluent Treatment and Cooling Tower/Evaporative Condenser Water for the subject product.

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is acceptable subject to the following comments.

1. The first statement in the "Environmental Hazard" section should read:
"This pesticide is toxic to fish and aquatic organisms."
2. The headings Active Ingredients and Inert Ingredients should be aligned to the same margin.

A stamped copy is enclosed for your records. Submit five copies of the final printed.

According to our records, we have not received a revised Confidential Statement of Formula as requested in our letter dated January 26, 1994. The Confidential Statement of Formula must be submitted within 30 days from receipt of this letter.

CONCURRENCES

SYMBOL							
SURNAME							
DATE							

If you have any questions please call Marianne Clark at
(703) 305-7879.

Sincerely yours,



Ruth Douglas
Product Manager (32)
Antimicrobial Program Branch
Registration Division (7505C)

G.W. SANI-CLEAN

ACTIVE INGREDIENT

SODIUM HYPOCHLORITE.....12.5%

INERT INGREDIENTS.....87.5%

TOTAL.....100.0%

KEEP OUT OF REACH OF CHILDREN

DANGER

See other precautions on side panel

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS & DOMESTIC ANIMALS

DANGER: Corrosive, causes eye damage. May cause severe skin irritation or chemical burns to broken skin. Do not get in eyes, on skin or on clothing. Wear chemical goggles and rubber gloves when handling this product. Wash thoroughly after handling. Do not breathe vapors. Vacate poorly ventilated areas as soon as possible. Do not return until odors have dissipated.

ENVIRONMENTAL HAZARDS: This pesticide 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 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.

PHYSICAL AND CHEMICAL HAZARDS: STRONG OXIDIZING AGENT. Mix G.W. Sani-Clean only with water according to the label directions. Do not mix this product with chemicals (e.g. ammonia, acids, detergents, etc.) or organic matter (e.g. urine, feces, etc.) which will release chlorine and other hazardous gases which are irritating to eyes, lungs and mucous membranes.

STATEMENT OF PRACTICAL TREATMENT (FIRST AID): If in eyes, flush eyes with plenty of clean water for at least 15 minutes lifting the upper and lower lids occasionally. Call a physician immediately. If on skin, flush with plenty of clean water and wash with soap and water. If irritation occurs, get medical attention. If swallowed, do NOT induce vomiting. Immediately give a large quantity of water to drink. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately.

BEST AVAILABLE COPY

DIRECTIONS FOR USE

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

DIRECTIONS FOR SWIMMING POOL CHLORINATION

For a new pool or spring start-up, superchlorinate with 52 to 104 oz. of product for each 10,000 gallons of water to yield 5 to 10 ppm available chlorine by weight. Check the level of available chlorine with a test kit. Adjust and maintain pool water pH to between 7.2 to 7.6. Adjust and maintain the alkalinity of the pool to between 50 and 100 ppm.

To maintain the pool, add manually or by a feeder device 10 oz. of G.W. Sani-Clean for each 10,000 gallons of water to yield an available chlorine residual between 0.6 to 1.0 ppm by weight. Stabilized pools should maintain a residual of 1.0 to 1.5 ppm available chlorine. Test the pH, available chlorine residual and alkalinity of water frequently with appropriate test kits. Frequency of water treatment will depend upon temperature and number of swimmers.

Every seven days, or as necessary, superchlorinate the pool with 52 to 104 oz. of G.W. Sani-Clean for each 10,000 gallons of water to yield 5 to 10 ppm available chlorine by weight. Check the level of available chlorine with a test kit. Do not reenter pool until the chlorine residual is between 1.0 to 3.0 ppm.

At the end of the swimming pool season or when water is to be drained from the pool, chlorine must be allowed to dissipate from treated pool water before discharge. Do not chlorinate the pool within 24 hours prior to discharge.

DIRECTIONS FOR DISINFECTION OF POTABLE WATER FOR HOME WELL WATER SYSTEMS

Dilute this sodium hypochlorite solution in the ratio of one part sodium hypochlorite solution to 11 parts softened water. Mix sodium hypochlorite solution and water thoroughly and begin feeding of solution with a hypochlorinator (metering pump). Maintain a free available chlorine residual of at least 0.2 ppm and no more than 0.6 ppm throughout the distribution system, as determined by a DPD chlorine test kit. Bacteriological sampling must be conducted at a frequency no less than that prescribed by the National Interim Primary Drinking Water Regulations.* Check water frequently with a DPD chlorine test kit. *Contact your local Health Department for further details.

SEWAGE AND WASTEWATER EFFLUENT TREATMENT

The disinfection of sewage must be evaluated by determining the total number of coliform bacteria and/or fecal coliform bacteria, as determined by the Most Probable Number (MPN) procedure, of the chlorinated effluent has been reduced to or below the maximum permitted by the controlling regulatory jurisdiction.

On the average, satisfactory disinfection of secondary wastewater effluent can be obtained when the chlorine residual is 0.5 ppm after 15 minutes contact. Although the chlorine residual is the critical factor in disinfection, the importance of correlating chlorine residual with bacterial kill must be emphasized. The MPN of the effluent, which is directly related to the water quality standards requirements, should be the final and primary standard and the chlorine residual should be considered an operating standard valid only to the extent verified by the coliform quality of the effluent.

The following are critical factors affecting wastewater disinfection.

1. **Mixing:** It is imperative that the product and the wastewater be instantaneously and completely flash mixed to assure reaction with every chemically active soluble and particulate component of the wastewater.
2. **Contacting:** Upon flash mixing, the flow through the system must be maintained.
3. **Dosage/Residual Control:** Successful disinfection is extremely dependent on response to fluctuating chlorine demand to maintain a predetermined, desirable chlorine level. Secondary effluent should contain 0.2 to 1.0 ppm chlorine residual after a 15 to 30 minute contact time. A reasonable average of residual chlorine is 0.5 ppm after 15 minutes contact time

SEWAGE AND WASTEWATER TREATMENT

EFFLUENT SLIME CONTROL

Apply a 100 to 1000 ppm available chlorine solution at a location which will allow complete mixing. Prepare this solution by mixing 10 to 100 oz. of this product with 100 gallons of water. Once control is evident, apply a 15 ppm available chlorine solution. Prepare this solution by mixing 3 oz. of this product with 100 gallons of water.

FILTER BEDS -- SLIME CONTROL

Remove filter from service, drain to a depth of 1 ft. above filter sand, and add 80 oz. of product per 20 sq/ft evenly over the surface. Wait 30 minutes before draining water to a level that is even with the top of the filter. Wait for 4 to 6 hours before completely draining and backwashing filter.

PULP AND PAPER MILL PROCESS WATER SYSTEMS

SLUG FEED METHOD

Initial Dose: When system is noticeably fouled, apply 52 to 104 oz. of this product per 10,000 gallons of water in the system to obtain from 5 to 10 ppm available chlorine. Repeat until control is achieved.

Subsequent Dose: When microbial control is evident, add 11 oz. of this product per 10,000 gallons of water in the system daily, or as needed to maintain control and keep the chlorine residual at 1 ppm. Badly fouled systems must be cleaned before treatment is begun.

INTERMITTENT FEED METHOD

Initial Dose: When system is noticeably fouled, apply 52 to 104 oz. of this product per 10,000 gallons of water in the system to obtain 5 to 10 ppm available chlorine. Apply half (or 1/3, 1/4, or 1/5) of this initial dose when half (or 1/3, 1/4, or 1/5) of the water in the system has been lost by blowdown.

Subsequent Dose: When microbial control is evident, add 11 oz. of this product per 10,000 gallons of water in the system to obtain a 1 ppm residual. Apply half (or 1/3, 1/4, or 1/5) of this initial dose when half (1/3, 1/4, or 1/5) of the water in the system has been lost by blowdown. Badly fouled systems must be cleaned before treatment is begun.

CONTINUOUS FEED METHOD

Initial Dose: When system is noticeably fouled, apply 52 to 104 oz. of this product per 10,000 gallons of water in the system to obtain 5 to 10 ppm available chlorine.

Subsequent Dose: Maintain this treatment level by starting a continuous feed of 1 oz. of this product per 1,000 gallons of water lost by blowdown to maintain a 1 ppm residual. Badly fouled systems must be cleaned before treatment is begun.

COOLING TOWER/EVAPORATIVE CONDENSER WATER

SLUG FEED METHOD

Initial Dose: When system is noticeably fouled, apply 52 to 104 oz. of this product per 10,000 gallons of water in the system to obtain from 5 to 10 ppm available chlorine. Repeat until control is achieved.

Subsequent Dose: When microbial control is evident, add 11 oz. of this product per 10,000 gallons of water in the system daily, or as needed to maintain control and keep the chlorine residual at 1 ppm. Badly fouled systems must be cleaned before treatment is begun.

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INTERMITTENT FEED METHOD

Initial Dose: When system is noticeably fouled, apply 52 to 104 oz. of this product per 10,000 gallons of water in the system to obtain 5 to 10 ppm available chlorine. Apply half (or 1/3, 1/4, or 1/5) of this initial dose when half (or 1/3, 1/4, or 1/5) of the water in the system has been lost by blowdown.

Subsequent Dose: When microbial control is evident, add 11 oz. of this product per 10,000 gallons of water in the system to obtain a 1 ppm residual. Apply half (or 1/3, 1/4, or 1/5) of this initial dose when half (or 1/3, 1/4, or 1/5) of the water in the system has been lost by blowdown. Badly fouled systems must be cleaned before treatment is begun.

CONTINUOUS FEED METHOD

Initial Dose: When system is noticeably fouled, apply 52 to 104 oz. of this product per 10,000 gallons of water in the system to obtain 5 to 10 ppm available chlorine.

Subsequent Dose: Maintain this treatment level by starting a continuous feed of 1 oz. of this product per 1,000 gallons of water lost by blowdown to maintain a 1 ppm residual. Badly fouled systems must be cleaned before treatment is begun.

BRIQUETTES OR TABLETS

Initially slug dose the system with 52 oz. of this product per 10,000 gallons of water in the system. Badly fouled systems must be cleaned before treatment is begun.

Subsequent Dose: When microbial control is evident, add 11 oz. of this product per 10,000 gallons of water in the system daily, or as needed to maintain control and keep the chlorine residual at 1 ppm. Badly fouled systems must be cleaned before treatment is begun.

DIRECTIONS FOR SANITIZING NONPOROUS SURFACES ON FOOD PROCESSING OR DAIRY EQUIPMENT

Prepare a sanitizing solution by thoroughly mixing 2 oz. of G.W. Sani-Clean per each 10 gallons of water to provide a sanitizing solution containing approximately 200 ppm available chlorine. Clean all equipment surfaces thoroughly in the normal manner and follow with a potable water rinse. Just prior to use, rinse or immerse all surfaces thoroughly with the sanitizing solution, maintaining surface contact with the sanitizing solution for at least two minutes. Allow to drain thoroughly before using the equipment. Do not rinse equipment with water after sanitizing treatment and do not soak equipment overnight. Fresh solution should be prepared at least daily or more often if the solution becomes diluted or soiled.

DIRECTIONS FOR SANITIZING POTABLE WATER IN FOOD PROCESSING PLANTS

G.W. Sani-Clean may be used to sanitize the process water of meat and poultry food processing plants by adding a maximum of one ounce of G.W. Sani-Clean per each 200 gallons of water (provides 5 ppm available chlorine maximum). The G.W. Sani-Clean must be dispersed at a constant and uniform level. The method or system of dispensing must be such that a controlled rate is maintained.

FOOD EGG SANITIZATION: Thoroughly clean all eggs. Thoroughly mix 2 oz. of this product with 10 gallons of warm water to produce a 200 ppm available chlorine solution. The sanitizer temperature should not exceed 130°F. Spray the warm sanitizer so that the eggs are thoroughly wetted. Allow the eggs to thoroughly dry before casing or breaking. Do not apply a potable water rinse. The solution should not be re-used to sanitize eggs.

Authorized by USDA for use in federally inspected meat, rabbit, shell egg grading, egg products and poultry plants.

OTHER NON-SANITIZING USES

CLEANING ADDITIVE: G.W. Sani-Clean can be added to alkaline cleaners or their cleaning solutions to enhance that products' cleaning action, especially for the removal of proteinaceous soils. G.W. Sani-Clean should be added in amounts sufficient to accomplish the intended purpose. After the cleaning operation is finished, rinse all surfaces thoroughly with potable water.

WASHING AND PEELING OF FRUITS AND VEGETABLES: G.W. Sani-Clean may be used to wash or to assist in the lye peeling of fruits and vegetables not to exceed 0.2% active ingredient in accordance with the regulations found in 21 CFR 173.315. Mix no more than 2 fluid oz. of G.W. Sani-Clean per gallon of water. Rinse food with potable water.

NOTE: This product degrades with age. Use a chlorine test kit and increase dosage, as necessary, to obtain the required level of available chlorine.

STORAGE AND DISPOSAL

STORAGE: Store this product in a cool dry area, away from direct sunlight and heat to avoid deterioration. In case of spill, flood areas with large quantities of water. Product or rinsates that cannot be used should be diluted with water before disposal in a sanitary sewer. Do not contaminate food or feed by storage, disposal or cleaning of equipment.

PESTICIDE DISPOSAL: Pesticide wastes are toxic. 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.

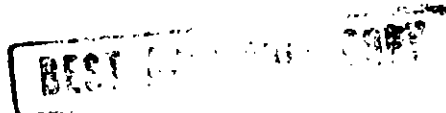
CONTAINER DISPOSAL: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

NET CONTENTS: 5, 15, 55 gallons

DOT SHIPPING NAME: Hypochlorite solution, 8, PGIII. UN-1791

CORPORATE ADDRESS: Great Western Chemical Company
808 SW 15th Avenue
Portland, Oregon 97205

EPA Reg. No. 33003-1 EPA Est. No. 65584-WA-1



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

AUG 10 1994

Under the Federal Insecticide,
Fungicide and Rodenticide Act as
amended for the pesticide
registered under EPA Reg. No. 330237