

US ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF PESTICIDES PROGRAMS
REGISTRATION DIVISION (TS-767)
WASHINGTON, DC 20460

EPA REGISTRATION NO.
53257-6

DATE OF ISSUANCE
November 24, 1992

TERM OF ISSUANCE

NOTICE OF PESTICIDE: REGISTRATION
 REREISTRATION
(Under the Federal Insecticide, Fungicide,
and Rodenticide Act, as amended)

NAME OF PESTICIDE PRODUCT
Sodium Hypochlorite Solution
10.5% By Weight

NAME AND ADDRESS OF REGISTRANT (Include ZIP code)

Clearwater Chemical Corporation
1575 Sunshine Drive
Clearwater, FL 34625

NOTE: Changes in labeling formula 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 U.S. 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.

A copy of the labeling accepted in connection with this Registration/Reregistration is returned herewith.

Registration is in no way to be construed as an indorsement or approval of this product by this 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/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.
2. Add the phrase, "EPA Registration No. 53257-6" to your label before you release the product for shipment.
3. Submit five (5) copies of your final printed labeling before you release the product for shipment. Refer to the A-79 enclosure for a further description of final printed labeling.

ATTACHMENT IS APPLICABLE

SIGNATURE OF APPROVING OFFICIAL

DATE

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.

Sincerely,

A handwritten signature in black ink, appearing to be 'R. Douglas', enclosed within a circular scribble.

Ruth G. Douglas
Product Manager (32)
Antimicrobial Program Branch
Registration Division (H7504C)

Enclosures

PM 32 53257-6 0 3

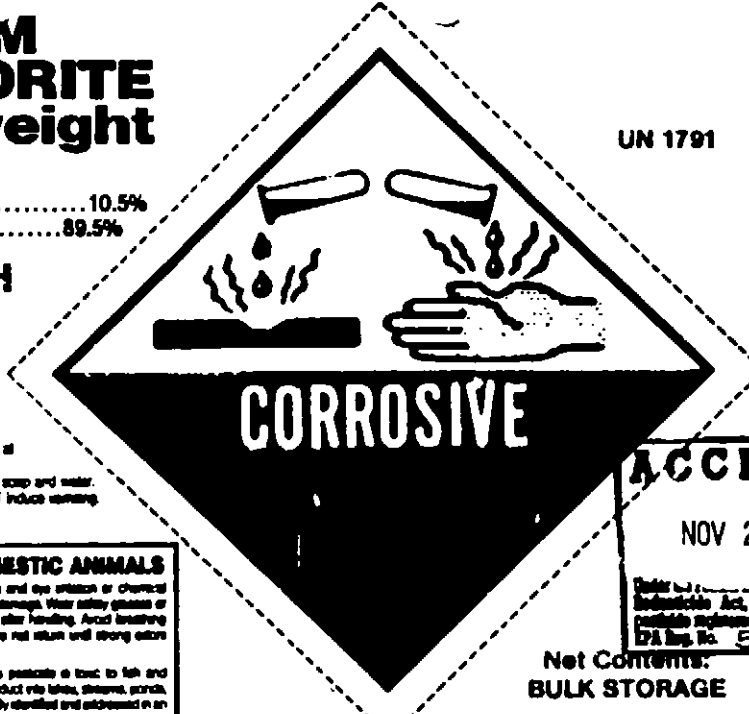
SODIUM HYPOCHLORITE 10.5% by weight

ACTIVE INGREDIENT:
SODIUM HYPOCHLORITE 10.5%
INERT INGREDIENTS 89.5%

KEEP OUT OF REACH OF CHILDREN DANGER

STATEMENT OF PRACTICAL TREATMENT (FIRST AID)

IF CONTACT WITH EYES OCCURS, flush with water for at least 15 minutes. Get prompt medical attention.
IF CONTACT WITH SKIN OCCURS, wash with plenty of soap and water.
IF SWALLOWED, drink large amounts of water. DO NOT induce vomiting. Call a physician or poison control center immediately.



UN 1791

ACCEPTED
NOV 24 1992
17A Reg. No. 53257-6

Net Contents:
BULK STORAGE

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER: Corrosive. May cause severe skin and eye irritation or chemical burns to broken skin. Causes eye damage. Wear safety glasses or goggles and rubber gloves when handling the product. When after handling, avoid breathing vapors. Vapors easily condensed areas as soon as possible. Do not return and strong odors have dissipated.

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

PHYSICAL OR CHEMICAL HAZARDS:
STRONG OXIDIZING AGENT: Mix only with water according to label directions. Mixing this product with chemicals (e.g., amines, acids, detergents, etc.) or organic matter (e.g., urea, feces, etc.) will release chlorine gas which is irritating to eyes, lungs and mucous membranes.

DIRECTIONS FOR USE

IT IS A VIOLATION OF FEDERAL LAW TO USE THIS PRODUCT IN A MANNER INCONSISTENT WITH ITS LABELING

Formulators using this product are responsible for obtaining EPA registration of their formulated products.

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: Store the 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 residue which 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.

SWIMMING POOL WATER DISINFECTION

For a new pool or spring start-up, superchlorinate with 53% to 107 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 7.8. Adjust and maintain the stability of the pool to between 50 to 100 ppm.

To maintain the pool, add manually or 1/2 a feeder device 1 1/4 oz. of the product for each 10,000 gallons of water to yield an available chlorine residual between 0.8 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 stability of the water frequently with appropriate test kits. Frequency of water treatment will depend upon temperature and number of swimmers.

Every 7 days, or as necessary, superchlorinate the pool with 53% to 107 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. Do not reenter pool until the chlorine residual is between 1.0 to 1.5 ppm.

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

SPAS, HOT-TUBS

SPAS/HOT TUBS: Apply 5 oz. of product per 1000 gallons of water to obtain a free available chlorine concentration of 5 ppm, as determined by a suitable chlorine test kit. Adjust and maintain pool water pH to between 7.2 and 7.8. Remove oils, lotions, fragrances, cosmetics, etc. may cause foaming or cloudy water as well as reduce the efficiency of the product. To maintain the water, apply 5 oz. of product to 1000 gallons of water over the surface to maintain a chlorine concentration of 5 ppm. After each use, shock treat with 8 oz. of this product per 500 gallons of water to control odor and algae. During extended periods of absence, add 4 oz. of product daily per 1000 gallons of water to maintain a 5 ppm chlorine concentration.

SANITIZATION OF NONPOROUS FOOD CONTACT SURFACES

FOOD SERVICE: A solution of 100 ppm available chlorine may be used to sanitize nonporous food contact surfaces. Add 1 oz. of product to 10 gallons of water to obtain a concentration of 100 ppm available chlorine. Thoroughly wash and sanitize nonporous food contact surfaces with this solution. Do not use this solution on porous surfaces. Prepare a 100 ppm available chlorine solution by thoroughly mixing 1 1/4 oz. of the product

with 8 1/4 oz. product with 10 gallons of water. Use spray of fogging equipment which can meet hypochlorite solutions. Always empty and rinse spraying equipment with potable water after use. Thoroughly spray or fog all surfaces until wet allowing excess sanitizer to drain. Vapors may be at least 2 hours. Prior to using equipment, treat all surfaces treated with a 600 ppm solution with a 200 ppm solution.

SEWAGE & WASTEWATER EFFLUENT TREATMENT

The action of sewage effluent 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 intermittently and completely flush mixed to ensure reaction with every chemically active soluble and particulate component of the wastewater.
2. **CHLORINE USE:** When using the low pH/high pH 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.

DISINFECTION OF DRINKING WATER (PUBLIC/INDIVIDUAL SYSTEMS)

PUBLIC SYSTEMS: Mix a ratio of 2 oz. of this product to 100 gallons of water. Begin feeding this solution with a hypochlorinator until a free available chlorine residual of at least 0.2 ppm and no more than 2.0 ppm is obtained throughout the distribution system. Check water frequently with a chlorine test kit. Bacteriological sampling must be conducted at a frequency no less than that prescribed by the National Interim Primary Drinking Water Regulations. Contact your local Health Department for further details.

INDIVIDUAL SYSTEMS: BUG WELLS: Upon completion of the casing (bring) wash the interior of the casing (bring) with a 100 ppm available chlorine solution using a well brush. This solution can be made by thoroughly mixing 2 oz. of this product into 10 gallons of water. After covering the well, pour the sanitizing solution into the well through both the stainless steel cap and the pressure. Wash the exterior of the pump cylinder also with the sanitizing solution. Start pump and pump water until the strong odor of chlorine in water is noted. Stop pump and wait at least 24 hours. After 24 hours flush well until all traces of chlorine have been removed from the water. Contact your local Health Department for further details.

INDIVIDUAL WATER SYSTEMS: DRILLED, DRIVEN & BORED WELLS: Run pump until water is as free from turbidity as possible. Pour a 100 ppm available chlorine sanitizing solution into the well. This solution can be made by thoroughly mixing 2 oz. of this product into 10 gallons of water. Add 5 to 10 gallons of clean, chlorinated water to the well in order to force the sanitizer into the rock formation. Wash the exterior of pump cylinder with the sanitizer. Drop plastic into well, start pump and pump water until strong odor of chlorine in water is noted. Stop pump and wait at least 24 hours. After 24 hours flush well until all traces of chlorine have been removed from the water. Clean wells with high water levels may necessitate the use of special methods for introduction of sanitizer into the well. Contact your local Health Department for further details.

INDIVIDUAL WATER SYSTEMS: FLOWING ARTESIAN WELLS: Artesian wells generally do not require disinfection. If analysis indicate potential contamination, the well should be disinfected. Contact your local Health Department for further details.

SWIMMING POOL WATER CHLORINATION

For a new pool or spring start-up, superchlorinate with 53% to 107 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 7.8. Adjust and maintain the alkalinity of the pool to between 50 to 100 ppm.

To maintain the pool, add manually or by a feeder device 1 1/2 oz. of product for each 10,000 gallons of water to yield an available chlorine residual between 0.8 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 the water frequently with appropriate test kits. Frequency of water treatment will depend upon temperature and number of swimmers.

Every 7 days, or as necessary, superchlorinate the pool with 53% to 107 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. 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.

SPAS, HOT-TUBS

SPAS/HOT TUBS - Apply 5 oz. of product per 1000 gallons of water to obtain a free available chlorine concentration of 5 ppm, as determined by a suitable chlorine test kit. Adjust and maintain pool water pH to between 7.2 and 7.4. Some oils, lotions, fragrances, cleaners, etc. may cause burning or cloudy water as well as reduce the efficiency of the product. To maintain the water, apply 5 oz. of product per 1000 gallons of water over the surface to maintain a chlorine concentration of 5 ppm. After each use, shock treat with 8 oz. of this product per 500 gallons of water to control odor and algae. During extended periods of closure, add 4 oz. of product daily per 1000 gallons of water to maintain a 3 ppm chlorine concentration.

SANITIZATION OF NONPOROUS FOOD CONTACT SURFACES

RINSE METHOD - A solution of 100 ppm available chlorine may be used in the sanitizing solution if a chlorine test kit is available. Solutions containing an initial concentration of 100 ppm available chlorine must be tested and adjusted periodically to insure that the available chlorine does not drop below 50 ppm. Prepare a 100 ppm sanitizing solution by thoroughly mixing 1 1/2 oz. of the product with 10 gallons of water. If no test kit is available, prepare a sanitizing solution by thoroughly mixing 3 oz. of this product with 10 gallons of water to provide approximately 200 ppm available chlorine by weight.

Clean equipment surfaces in the normal manner. Prior to use, rinse all surfaces thoroughly with the sanitizing solution, maintaining contact with the sanitizer for at least 2 minutes. If solution contains less than 50 ppm available chlorine, as determined by a suitable test kit, either discard the solution or add sufficient product to reestablish a 200 ppm residual. Do not rinse equipment with water after treatment and do not soak equipment overnight.

Sanitizers used in automated systems may be used for general cleaning but may not be re-used for sanitizing purposes.

IMMERSION METHOD - A solution of 100 ppm available chlorine may be used in the sanitizing solution if a chlorine test kit is available. Solutions containing an initial concentration of 100 ppm available chlorine must be tested and adjusted periodically to insure that the available chlorine does not drop below 50 ppm. Prepare a 100 ppm sanitizing solution by thoroughly mixing 1 1/2 oz. of the product with 10 gallons of water. If no test kit is available, prepare a sanitizing solution by thoroughly mixing 3 oz. of this product with 10 gallons of water to provide approximately 200 ppm available chlorine by weight.

Clean equipment in the normal manner. Prior to use, immerse equipment in the sanitizing solution for at least 2 minutes and allow the sanitizer to drain. If solution contains less than 50 ppm available chlorine, as determined by a suitable test kit, either discard the solution or add sufficient product to reestablish a 200 ppm residual. Do not rinse equipment with water after treatment.

Sanitizers used in automated systems may be used for general cleaning but may not be re-used for sanitizing purposes.

FLOW/PRESSURE METHOD - Disassemble equipment and thoroughly clean after use. Assemble equipment in operating position prior to use. Prepare a volume of a 200 ppm available chlorine sanitizing solution equal to 110% of volume capacity of the equipment by mixing the product in a ratio of 3 oz. product with 10 gallons of water. Pump solution through the system until full flow is obtained at all extremities, the system is completely filled with the sanitizer and all air is removed from the system. Close drain valves and hold under pressure for at least 2 minutes to insure contact with all internal surfaces. Remove some cleaning solution from drain valve and test with a chlorine test kit. Repeat entire cleaning/sanitizing process if effluent contains less than 50 ppm available chlorine.

CLEAN-IN-PLACE METHOD - Thoroughly clean equipment after use. Prepare a volume of a 200 ppm available chlorine sanitizing solution equal to 110% of volume capacity of the equipment by mixing the product in a ratio of 3 oz. product with 10 gallons of water. Pump solution through the system until full flow is obtained at all extremities, the system is completely filled with the sanitizer and all air is removed from the system. Close drain valves and hold under pressure for at least 10 minutes to insure contact with all internal surfaces. Remove some cleaning solution from drain valve and test with a chlorine test kit. Repeat entire cleaning/sanitizing process if effluent contains less than 50 ppm available chlorine.

SPRAY/FOG METHOD - Preclean all surfaces after use. Use a 200 ppm available chlorine solution to control bacteria, mold or fungi and a 600 ppm solution to control bacteriophage. Prepare a 200 ppm sanitizing solution of sufficient size by thoroughly mixing the product in a ratio of 3 oz. product with 10 gallons of water. Prepare a 600 ppm solution by thoroughly mixing the product in a

ratio of 10 oz. product with 10 gallons of water. Repeat until control is achieved. Subsequent Dose: When microbial control is evident, add 1 1/2 oz. of the product per 10,000 gallons of water in the system to obtain from 5 to 10 ppm available chlorine. Repeat until control is achieved.

DISINFECTION OF DRINKING WATER (PUBLIC/INDIVIDUAL SYSTEMS)

PUBLIC SYSTEMS: Mix a ratio of 2 oz. of the product to 100 gallons of water solution with a hypochlorinator until a free available chlorine residual of at least 0.5 to 0.8 ppm is obtained throughout the distribution system. Check water frequently with test kit. Bacteriological sampling must be conducted at a frequency no less than that of the National Interim Primary Drinking Water Regulations. Contact your local Health Department for further details.

INDIVIDUAL SYSTEMS: DUG WELLS Upon completion of the casing (lining) the casing (lining) with a 100 ppm available chlorine solution using a stiff brush. made by thoroughly mixing 2 oz. of this product into 10 gallons of water. All pour the sanitizing solution into the well through both the pipe/casing opening and the exterior of the pump cylinder also with the sanitizing solution. Start pump and the strong odor of chlorine in water is noted. Stop pump and wait at least 24 hours. Flush well until all traces of chlorine have been removed from the water. Consult Department for further details.

INDIVIDUAL WATER SYSTEMS: DRILLED, DRIVEN & BORED WELLS Run as free from turbidity as possible. Pour a 100 ppm available chlorine sanitizing solution into 10 gallons of water. This solution can be made by thoroughly mixing 2 oz. of this product into 10 gallons of clean, chlorinated water to the well in order to force the sanitizing solution into the well. Wash the exterior of pump cylinder with the sanitizer. Drop pipe/casing and pump water until strong odor of chlorine in water is noted. Stop pump and wait 24 hours. Flush well until all traces of chlorine have been removed from the water. In wells with high water levels may necessitate the use of special methods for introducing the well. Consult your local Health Department for further details.

INDIVIDUAL WATER SYSTEMS: FLOWING ARTESIAN WELLS Artesian wells require disinfection. If analyses indicate persistent contamination, the well should be disinfected. Consult your local Health Department for further details.

COOLING TOWER/EVAPORATIVE CONDENSERS

SLUG FEED METHOD - Initial Dose: When system is noticeably fouled, apply 107 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 1 1/2 oz. of the product per 10,000 gallons of water in the system to obtain from 5 to 10 ppm available chlorine. Repeat until control is achieved.

INTERMITTENT FEED METHOD - Initial Dose: When system is noticeably fouled, apply 107 oz. of this product per 10,000 gallons of water in the system to obtain 5 ppm available chlorine. Apply half for 1/3, 1/4, or 1/5 of this initial dose when half for 1/3, 1/4, or 1/5 of the system has been lost by blowdown.

Subsequent Dose: When microbial control is evident, add 1 1/2 oz. of the product per 10,000 gallons of water in the system to obtain a 1 ppm residual. Apply half for 1/3, 1/4, or 1/5 of the system has been lost by blowdown. Fouled systems must be cleaned before treatment is begun.

CONTINUOUS FEED METHOD - Initial Dose: When system is noticeably fouled, apply 107 oz. of the product per 10,000 gallons of water in the system to obtain 5 ppm available chlorine.

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

LAUNDRY SANITIZERS

Household Laundry Sanitizers

IN SOAKING SUDS - Thoroughly mix 3 oz. of the product to 10 gallons of water to yield 200 ppm available chlorine. Wait 5 minutes, then add soap or detergent. Test with a chlorine test kit. Repeat entire cleaning/sanitizing process if effluent contains less than 50 ppm available chlorine.

IN WASHING SUDS - Thoroughly mix 3 oz. of the product to 10 gallons of water to yield 200 ppm available chlorine. Wait 5 minutes, then add soap or detergent. Test with a chlorine test kit. Repeat entire cleaning/sanitizing process if effluent contains less than 50 ppm available chlorine.

Commercial Laundry Sanitizers

Wet fabrics or clothes should be spun dry prior to sanitization. Thoroughly mix 3 oz. of the product to 10 gallons of water to yield 200 ppm available chlorine. Add the sanitizer, add the solution into the prewash prior to washing fabrics/clothes with a good detergent. Test the level of available chlorine. Allow to stand. Add more of the product if the available chlorine level is less than 200 ppm.

ASPHALT OR WOOD ROOFS AND SIDINGS

To control fungus and mildew, first remove all physical soil by brushing and hosing. Then apply a 5000 ppm available chlorine solution. Mix 7 oz. of the product per 100 gallons of water. Apply to roof or siding. After 30 minutes, rinse by hosing with clean water.

Manufactured by:

CLEARWATER CHEMICAL CORPORATION
1575 Sunshine Drive, Clearwater, Florida 34625

EPA REG. NO. 53257-000

EPA EST. NO.