



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

August 9, 2017

Wayne E. Bartling  
New Haven Chlor-Alkali LLC  
P.O. Box 9433  
New Haven, CT 06534

Subject: Notification per PRN 98-10 – Addition of optional statements and graphics  
Product Name: Hypochlorite Solution  
EPA Registration Number: 52483-1  
Application Date: June 28, 2017  
Decision Number: 531572

Dear Mr. Bartling:

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10 for the above referenced product. The Antimicrobials Division (AD) has conducted a review of this request for its applicability under PRN 98-10 and finds that the action requested falls within the scope of PRN 98-10.

The label submitted with the application has been stamped "Notification" and will be placed in our records.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

If you have any questions, you may contact Wanda Henson at (703) 308-6345 or via email at [henson.wanda@epa.gov](mailto:henson.wanda@epa.gov)

Sincerely,

A handwritten signature in blue ink that reads "Wanda G. Fuller, for".

Demson Fuller, Product Manager 32  
Regulatory Management Branch II  
Antimicrobials Division (7510P)  
Office of Pesticide Programs

**Note: Bold, italicized text is information for the reader; it is not part of the label.** [Bracketed information is optional text.] **Highlighted text is new.** Strike-through text means removed.

# HYPOCHLORITE SOLUTION

## NOTIFICATION

52483-1

The applicant has certified that no changes, other than those reported to the Agency have been made to the labeling. The Agency acknowledges this notification by letter dated:

08/09/2017

[



NSF/ANSI 60

The maximum allowable dose is: 84 mg/Liter (or 315 mg/gallon)

**Active Ingredient:****Sodium Hypochlorite.....12.50%****Inert Ingredients.....87.50%****Total.....100.00%**

# [UN 1791]

## HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**DANGER:** Corrosive. Causes eye damage and skin burns. Do not get in eyes, on skin or on clothing. Wear goggles or safety glasses and rubber gloves when handling this product. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse. Avoid breathing vapors. Vacate poorly ventilated area as soon as possible. Do not return until strong odors have dissipated.

**ENVIRONMENTAL HAZARDS:**

This pesticide 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 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 into sewer systems without previously notifying the 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 only with water according to label directions. Mixing this product with gross filth such as feces, urine, etc. or with ammonia, acids, detergents or other chemicals may release hazardous gases irritating to eyes, lungs and mucous membranes.

Manufactured with pride and care by:

**New Haven Chlor-Alkali LLC**P.O. BOX 9433 -or- **73 Welton Street**

New Haven, CT

06534-0433 -or- **06511**

Tel: 1-203-772-3350

E.P.A. REG. NO. 52483-1

E.P.A. EST. NO. 52483-CT-001

# DANGER

## KEEP OUT OF REACH OF CHILDREN

**Note:** *Bold, italicized text is information for the reader; it is not part of the label.* [Bracketed information is optional text.] **Highlighted text is new.** Strike-through text means removed.

## 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 further **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 further treatment advice**.

### IF SWALLOWED

- Call a poison control center or doctor for further **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**.
- Do not give anything by mouth to an **unconscious person**.

### 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) 222-1222 for emergency medical treatment information.

**Note to Physician:** Probable mucosal damage may contraindicate the use of gastric lavage.

**STORAGE AND DISPOSAL:** Do not contaminate water, food, or feed by storage, disposal, or cleaning of equipment. 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 that cannot be used should be managed as hazardous waste (households should call your local solid waste agency for disposal instructions). Container rinsates that cannot be used should be diluted with water before disposal in a sanitary sewer.

## For Refillable Containers only:

This is a REFILLABLE CONTAINER. Return clean and in good condition for refund of deposit. Refill only with sodium hypochlorite. Do not use this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. Before disposal, use water to rinse the inside of the container. Clean container promptly after emptying. Triple rinse as follows: Fill the container about 1/4 full with water and recap; shake a small container for about ten seconds or roll a drum back and forth while on its side for about 30 seconds to rinse completely. Drain for ten seconds after the flow begins to drip. Follow Pesticide Disposal instructions for rinsate disposal. Repeat two more times. [It is very dangerous and unlawful to put any chemical into this container other than that which it is labeled for. Violators of this warning may face fines and a reporting to the U.S. Department of Transportation and/or The U.S. Environmental Protection Agency. Container samples may be analyzed. Before a container can be returned, it must be clean of all foreign residues, and all caps must be installed and tightened. Deposit refunds are only issued after successful inspection of the returned containers, and only on containers that are being returned within 1 year.]

## For Nonrefillable Containers only:

This is a NONREFILLABLE CONTAINER. Do not reuse or refill this container. Offer for recycling if available. Cleaning the container before final disposal is the responsibility of the person disposing of the container.

[WARRANTY: This product is guaranteed to be the chemical as labeled and manufactured in the strength as specified. The manufacturer furthermore, assumes only limited liability, and is no way responsible for the improper use, transportation, handling or storage of the product.]

**DIRECTIONS FOR USE:** It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

*This statement only to be used on institutional labels with medical use sites and/or bloodborne pathogens.*

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

**Note:** *Bold, italicized text is information for the reader; it is not part of the label.* [Bracketed information is optional text.] **Highlighted text is new.** Strike-through text means removed.

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

**SWIMMING POOL WATER DISINFECTION:** FOR A NEW POOL OR SPRING START-UP - superchlorinate with 52 to 104 oz. of this product for each ten thousand gallons of pool water to yield 5 to 10 ppm available chlorine by weight. Check level of available chlorine with a test kit. Adjust and maintain water pH between 7.2 and 7.6. Adjust and maintain the alkalinity of the pool to between 50 to 100 ppm. TO MAINTAIN THE POOL - add manually or by feeder device 11oz. of this product for each ten thousand gallons of pool water to yield an available chlorine residual between 0.6 and 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 the 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 52 to 104 oz. of this product for each ten thousand gallons of pool 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 with a chlorine residual above 4 ppm due to risk of bodily harm.** AT THE END OF THE SWIMMING POOL SEASON - or whenever 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. WINTERIZING POOLS - While water is still clear and clean, add 3.0 oz. of this product per one thousand gallons of pool water, while the filter is running, to obtain a 3 ppm available chlorine residual, as determined by a suitable test kit. Cover pool, prepare heater, filter and heater components for winter by following manufacturers' instructions.

**SPAS, HOT TUBS, IMMERSION TANKS, ETC.:** SPAS/HOT TUBS - Apply 5 oz. of product per 1000 gallons of water to obtain a free available chlorine residual of 5 ppm, as determined by a suitable chlorine test kit. Adjust and maintain pool water pH to between 7.2 and 7.8. Some oils, lotions, fragrances, cleaners, etc. may cause foaming or cloudy water as well as reduce the efficiency of the product. Reentry into treated pools is prohibited at levels above 5 ppm due to risk of bodily harm.

**LAUNDRY SANITIZERS:** Household Laundry Sanitizers. IN SOAKING SUDS - Thoroughly mix 2 oz. of this product into 10 gallons of wash water to provide 200 ppm available chlorine. Wait 5 minutes then add soap or detergent. Immerse laundry for at least 11 minutes prior to starting wash/rinse cycle. IN WASHING SUDS - Thoroughly mix 2 oz. of this product into 10 gallons of wash water containing clothes to provide 200 ppm available chlorine. Wait 5 minutes then add soap or detergent and start the wash/rinse cycle. Commercial Laundry Sanitizers: Wet fabrics or clothes should be spun dry prior to sanitization. thoroughly mix 2 oz. of this product into 10 gallons of wash water to provide 200 ppm available chlorine. Promptly after mixing the sanitizer, add the solution into the prewash prior to washing fabrics/clothes in the regular wash cycle with a good detergent. Test the level of available chlorine, if solution has been allowed to stand. Add more of this product if the available chlorine level has dropped below 200 ppm. This product used according to these laundry sanitizer directions is effective against *Staphylococcus aureus*, *Pseudomonas aeruginosa*, *Klebsiella pneumoniae*, and Methicillin Resistant *Staphylococcus aureus* [(MRSA)].

**TABLEWARE SANITIZER AND DESTAINER FOR MECHANICAL SPRAY WAREWASHING MACHINES:** For sanitizing tableware in low-temperature warewashing machines, inject this product into the final rinse water at a concentration of 100 ppm available chlorine. Do not exceed 200 ppm. Air dry or follow with a potable water rinse. To ensure that available chlorine concentration does not fall below 50 ppm, periodically test the rinse solution with a suitable test kit and adjust the dispensing rate accordingly. **DO NOT USE ON SILVER AND SILVER PLATE.**

**DIRECTIONS FOR SANITIZING AND DEODORIZING FOOD PROCESSING, DAIRY FARM, HOTEL, RESTAURANT AND TAVERN EQUIPMENT:** IMMERSION METHOD - Prepare a sanitizing solution by thoroughly mixing, in an immersion tank, 2 oz. of this product with 10 gallons of water to provide approximately 200 ppm of 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. Do not rinse equipment in water after treatment.

**DIRECTIONS FOR DISINFECTION OF POTABLE WATER PUBLIC SYSTEMS:** Mix a ratio of 1 oz. of this product to 100 gallons of water. Begin feeding this solution with a hypochlorinator until free available chlorine residual of at least 0.2 ppm and no more than 0.6 ppm is attained throughout the distribution system. Check water frequently with a chlorine test kit. Bacteriological sampling must be conducted at a frequency of no less than that prescribed by the National Primary Drinking Water Regulations. Contact your local Health Department for further details.

**FOOD EGG SANITIZATION:** Thoroughly clean all eggs. Thoroughly mix 2 fl oz of this product per 10 gallons of warm water to produce 200 ppm available chlorine solution. The sanitized 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 reused to sanitize eggs.

**FRUIT AND VEGETABLE WASHING:** Thoroughly clean all fruits and vegetables in a wash tank. Thoroughly mix 5 fl oz of this product in 100 gallons of water to make a sanitizing solution of 25 ppm available chlorine. After draining the tank, submerge fruit or vegetables for 2 minutes in a second wash tank containing the recirculating sanitizing solution. Spray rinse vegetables with the sanitizing solution prior to packaging. Rinse fruit with potable water only prior to packaging.

**SEWAGE AND WASTEWATER TREATMENT:** Effluent Slime Control: Apply a 100 to 1000 ppm available chlorine solution to a location which will allow complete mixing. Prepare this solution by mixing 10 to 100 oz. of this product with 100

**Note: Bold, italicized text is information for the reader; it is not part of the label.** [Bracketed information is optional text.] **Highlighted text is new.** Strike-through text means removed.

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 4-6 hours before completely draining and backwashing filter.

**DIRECTIONS FOR USE AS ZEBRA MUSSEL CONTROL AGENT:** Chemical treatment times and concentrations may vary because of the water temperature; the extent of contamination; and the design variations of systems. Using sodium hypochlorite in this manner may require revisions to existing federal, state, or local discharge permit(s) and/or the addition of dechlorination equipment. **SINGLE EXPOSURE** - To control zebra mussels, add this product to obtain from 0.25 to 2.0 ppm residual chlorine in the system. Typically 3 to 20 ounces of this product is added for every 10,000 gallons of water to obtain the 0.25 to 2.0 ppm residual chlorine concentration. **SEMI-CONTINUOUS EXPOSURE** - To control zebra mussels, add this product to obtain a residual chlorine concentration of 0.25 to 2.0 ppm water in the system. Typically, adding 3 - 20 fl. oz. of this product per 10,000 gallons obtains the 0.25 to 2.0 ppm residual chlorine concentration. **CONTINUOUS EXPOSURE** - To control zebra mussels, add this product to obtain a residual chlorine concentration of 0.25 to 2 ppm in the system. Typically 3 to 10 ounces of this product is added for every 10,000 gallons of water to obtain the 0.25 to 2 ppm residual chlorine concentration. **NOTES:** The published dosage rates are approximate; always test for residual chlorine to ensure proper dosage rates are achieved. For best results treat during the breeding season (June to September) or at the end of the season for at least 30 days.

**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. **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 from 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 from 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.

**DECORATIVE FOUNTAINS:** This product may be applied to the decorative fountain inlet or at a point where sufficient mixing will occur at a level to maintain 2- 4 ppm total chlorine in all parts of the fountain. (Do not use in fountains which contain fish or other aquatic fauna.)

**TO DISINFECT HARD, NONPOROUS SURFACES:** [First] Clean surface by removing gross filth (loose dirt, debris, food materials, etc.). Use 3 ounces of this product in one gallon of water to obtain a minimum 2400 ppm available chlorine solution. Thoroughly wet surface with the solution and allow it to remain on the surface for 5 minutes. Rinse with clean water and dry.

## Net Contents:

---

**General Statements – optional text, will only appear on certain labels**

[See additional precautions on back panel.]

[Shock treatment for salt water pools.]

[Meaning “Jewel of the Sea”, Cordelia offers a premium line of salt water pool treatments.]

[Cordelia™ is a trademark of New Haven Chlor-Alkali LLC, New Haven, CT 06511]

[Cordelia – designed for salt water bliss.]

**Note: *Bold, italicized text is information for the reader; it is not part of the label.*** [Bracketed information is optional text.] **Highlighted text is new.** Strike-through text means removed.

---

***Optional Graphics – will only appear on certain labels***

