266-20001 07/28/2008 1/11

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**
**WASHINGTON, DC 20460**

EPA United States Environmental Protection Agency **Office of Pesticide Programs**

***July 28, 2008***

**FILE COPY**

Richard Hill
Hill Brothers Chemical Company
1675 North Main Street
Orange, CA 92867

Subject: **Sodium Hypochlorite Solutions- 12.5% (End Use)**
EPA Registration Number: 266-20001
Application Dated: July 01, 2008
Receipt Date: July 02, 2008

Dear Ms. Stuart:

This acknowledges receipt of your notification, Submitted under the provision of PR Notice 98-10, FIFRA Section 3(c) 9.

**Proposed Notification**

- Additional generic uses allowed by sodium/calcium RED.
- Additional container size and modification of storage and disposal instructions

**General Comment**

Based on a review of the material submitted, the following comments apply:

This notification is accepted with comments. The term for ounces appears in, capitol letters please change to lower case letters. And a copy has been place in your file for future references.

Should you have any questions concerning this letter, please contact Wanda Henson at (703) 308-6345.

Sincerely,

Wanda Henson
Product Reviewer (32)
Regulatory Management Branch II
Antimicrobials Division (7510P)

HILL BROTHERS Chemical Co.

1675 NORTH MAIN STREET • ORANGE, CALIFORNIA 92867-3499
(714) 998-8800 • FAX: (714) 998-6310
http://hillbrothers.com

July 1, 2008

Front End Processing Unit (7502-P)
U.S. Environmental Protection Agency – Antimicrobial Division
PM Team 32 (7510-P)
1200 Pennsylvania Avenue, N.W.
Washington, D.C. 20460

Re: Notification of Changes to Previous Registration of
Sodium Hypochlorite Solutions 12.5% (End Use)
Pesticide - EPA Registration No. 266-20001

Dear Sirs and Mesdames:

I have enclosed Hill Brothers Chemical Co.'s application package for a Notification to Hill Brothers' previous registration for its sodium hypochlorite solutions 12.5% pesticide for end use. Your agency previously issued Hill Brothers EPA Registration No. 266-20001 for this pesticide. The enclosed application package consists of the completed, signed application form for the proposed Notification, one copy of the proposed labels with changes clearly marked so that they can be photocopied and two copies of the final proposed revised labels referenced in the application for this pesticide product.

As you will see from the application form, Hill Brothers' proposed Notification to its existing registration is for revised labels and one new package size only. Hill Brothers is not proposing any change in the pesticide's previously registered formula.

If you have any questions or need any additional materials, please contact me or Patricia Santana, our company's environmental specialist, at 714/998-8800.

Sincerely,

HILL BROTHERS CHEMICAL COMPANY

Rick Hill

Rick Hill
Director of Safety & Compliance

Please read instructions on reverse before completing form. Form Approved. OMB No. 2070-0060 Print Form 3/11

United States Environmental Protection Agency Washington, DC 20460

☐ Registration ☐ Amendment ☒ Other

OPP Identifier Number

## Application for Pesticide - Section I

1. Company/Product Number: Hill Brothers Chemical Company/266-20001

2. EPA Product Manager: Emily H Mitchell

3. Proposed Classification: ☒ None ☐ Restricted

4. Company/Product (Name): Sodium Hypochlorite Solutions - 12.5% (End Use)

PM#: PM Team 32

5. Name and Address of Applicant (Include ZIP Code)

Hill Brothers Chemical Company
1675 North Main Street
Orange, CA 92867

☐ Check if this is a new address

6. Expedited Review. In accordance with FIFRA Section 3(c)(3)(b)(i), my product is similar or identical in composition and labeling to:

EPA Reg. No. _____

Product Name _____

## Section - II

☐ Amendment - Explain below.

☐ Resubmission in response to Agency letter dated _____

☒ Notification - Explain below.

☐ Final printed labels in response to Agency letter dated _____

☐ "Me Too" Application.

☐ Other - Explain below.

**Explanation:** Use additional page(s) if necessary. (For section I and Section II.)

Notification of additional uses, additional container size and modification of storage and disposal instructions. This notification is consistent with the provisions of PR Notice 98-10, 2007-4 and EPA regulations at 40 CFR 152.46, 156.10, 156.140, 156.144, 156.146, and 156.156. (See attached)

## Section - III

1. Material This Product Will Be Packaged In:

| Child-Resistant Packaging | Unit Packaging | Water Soluble Packaging | 2. Type of Container |
|---|---|---|---|
| ☐ Yes* ☒ No | ☐ Yes ☒ No | ☐ Yes ☒ No | ☐ Metal ☒ Plastic ☐ Glass ☐ Paper ☒ Other (Specify) Bulk |
| * Certification must be submitted | If "Yes" Unit Packaging wgt. / No. per container | If "Yes" Package wgt / No. per container | |

3. Location of Net Contents Information: ☒ Label ☐ Container

4. Size(s) Retail Container: Whlsale 6, 13, 50, 250, 300gl

5. Location of Label Directions: ☐ On Label ☒ On Labeling accompanying product

6. Manner in Which Label is Affixed to Product: ☐ Lithograph ☐ Paper glued ☐ Stenciled ☒ Other UV Resistant Adhesive Label

## Section - IV

1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)

| Name | Title | Telephone No. (Include Area Code) |
|---|---|---|
| Patricia Santana | Environmental Specialist | 714-998-8800 |

### Certification

I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.

6. Date Application Received (Stamped)

| 2. Signature | 3. Title | 4. Typed Name | 5. Date |
|---|---|---|---|
| Richard Hill | Director of Safety & Compliance | Richard Hill | 7/1/08 |

EPA Form 8570-1 (Rev. 8-94) Previous editions are obsolete. White - EPA File Copy (original) Yellow - Applicant Copy

Section – II
Explanation Continued…

No other changes have been made to the labeling or the confidential statement of formula of this product. I understand that it is a violation of 18 U.S.C. Sec. 1001 to willfully make any false statement to EPA. I further understand that if this notification is not consistent with the terms of PR Notice 98-10, 2007-4 and EPA regulations at 40 CFR 152.46, 156.10, 156.140, 156.144, 156.146, and 156.156, this product may be in violation of FIFRA and I may be subject to enforcement action and penalties under sections 12 and 14 of FIFRA.

## PRECAUTIONARY STATEMENTS
## HAZARDS TO HUMANS AND DOMESTIC ANIMALS

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

ENVIRONMENTAL HAZARDS: This pesticide is toxic to fish and aquatic organisms. Do not discharge effluent containing this product into lakes, streams, estuaries, oceans, or public waters unless in accordance with the requirements of the National Pollutant Discharge Elimination Systems (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 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 will release hazardous gases irritating to eyes, lungs and mucous membranes.

**NET CONTENTS:**

- ☐ **300 GALLONS**
- ☐ **250 GALLONS**
- ☐ **50 GALLONS**
- ☐ **13 GALLONS**
- ☐ **6 GALLONS (Not for use in swimming pools, spas, hot-tubs, immersion tanks, or any other residential use)**

The product in this container has been packaged and labeled in strict compliance with applicable federal and local laws and regulations in effect at the time of packaging and it may not be repackaged in any container without prior written permission from the administrative office of Hill Brothers. Repackaging without permission places responsibility for any subsequent loss and/or claim solely on the re-packager. The information contained hereon is based on data considered accurate, but no warranty is expressed or implied regarding the accuracy of these data or the results to be obtained from the use thereof. User of the product assumes the risk in his use of this material.


Manufactured by:
HILL BROTHERS CHEMICAL COMPANY
4450 N. 42nd Ave., Phoenix, AZ 85019 (602) 272-9363
FOR 24 HOUR EMERGENCY INFORMATION CALL CHEMTREC: (800) 424-9300
Branch Locations: Industry, San Jose, CA; Phoenix, Tucson, AZ; Salt Lake, UT


# SODIUM HYPOCHLORITE
SANITIZER, DISINFECTANT

| ACTIVE INGREDIENTS; | % BY WT. |
|---|---|
| SODIUM HYPOCHLORITE | 12.5% |
| INERT INGREDIENTS | 87.5% |
| TOTAL | 100% |

## KEEP OUT OF REACH OF CHILDREN

# DANGER

| FIRST AID | |
|---|---|
| If in eyes | • Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.<br>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing.<br>• Call a Poison Control Center or Doctor for advice. |
| If on skin or clothing | • Remove contaminated clothing<br>• Rinse immediately with water for 15-20 minutes |
| If swallowed | • Call poison control or doctor immediately for treament or advice.<br>• Have person sip a glass of water if able to swallow.<br>• Do not induce vomiting unless told to do so by the poison control center or doctor.<br>• Do not give anything by mouth to an unconscious person. |
| If inhaled | • Move person to fresh air.<br>• If breathing has stopped, call 911 or an ambulance, start artificial respiration, preferably mouth-to-mouth if possible. |
| NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage. | |

**Reg. No. 266-20001**
**EPA EST. NO. 266-AZ-1**

## DIRECTIONS FOR USE

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

**FOR SWIMMING POOL SANITATION AND INDUSTRIAL DISINFECTION AND SANITATION**

**For additional directions and uses, refer to Hill Brothers' Supplemental Sodium Hypochlorite Usage Bulletin.**

STORAGE AND DISPOSAL:

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. Refillable Container. Refill this container with Sodium Hypochlorite only. Do not reuse this container for any other purpose.

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# SODIUM HYPOCHLORITE

**Supplemental Usage Bulletin**

| ACTIVE INGREDIENT | % BY WT. |
|---|---|
| SODIUM HYPOCHLORITE | 12.5% |
| INERT INGREDIENTS | 87.5% |
| TOTAL | 100% |

***KEEP OUT OF REACH OF CHILDREN***

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| **If on skin or clothing** | • Remove contaminated clothing<br>• Rinse immediately with water for 15-20 minutes |
| **If swallowed** | • Call poison control or doctor immediately for treatment or advice.<br>• Have person sip a glass of water if able to swallow.<br>• Do not induce vomiting unless told to do so by the poison control center or doctor.<br>• Do not give anything by mouth to an unconscious person. |
| **If inhaled** | • Move person to fresh air.<br>• If breathing has stopped, call 911 or an ambulance, start artificial respiration, preferably mouth-to-mouth if possible. |
| **NOTE TO PHYSICIAN:**<br>**Probable mucosal damage may contraindicate the use of gastric lavage.** | |

## PRECAUTIONARY STATEMENTS
## HAZARDS TO HUMANS AND DOMESTIC ANIMALS

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

ENVIRONMENTAL HAZARDS: This pesticide is toxic to fish and aquatic organisms. Do not discharge effluent containing this product into lakes, streams, estuaries, oceans, or public waters unless in accordance with the requirements of the National Pollutant Discharge Elimination Systems (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 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 will release hazardous gases irritating to eyes, lungs and mucous membranes.

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# DIRECTIONS FOR USE

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

| To achieve available chlorine (By Weight) | Gallons Water | Add liquid ounces of 12.5% Sodium Hypochlorite |
|---|---|---|
| 5 PPM | 100 | .5 |
| 10 PPM | 100 | 1.0 |
| 15 PPM | 100 | 1.5 |
| 25 PPM | 100 | 2.5 |
| 35 PPM | 100 | 3.5 |
| 50 PPM | 100 | 5.0 |
| 100 PPM | 10 | 1.0 |
| 200 PPM | 10 | 2.0 |
| 500 PPM | 10 | 5.0 |
| 600 PPM | 10 | 6.0 |
| 1000 PPM | 10 | 10.5 |
| 5000 PPM | 10 | 51.0 |
| 10,000 PPM | 10 | 102.0 |

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, super-chlorinate with 50 to 100 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 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 a feeder device 11 oz. of this product 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 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, super-chlorinate the pool with 50 to 100 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.

WINTERIZING POOLS — While water is still clear & clean, apply 3 oz. of product per 1,000 gallons, while 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 manufacturer's instructions.

**SPAS, HOT-TUBS, IMMERSION TANKS, ETC.**

SPAS/HOT-TUBS – Apply 5 oz. of product per 1,000 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. Some oils, lotions, fragrances, cleaners, etc., may cause foaming or cloudy water as well as reduce the efficiency of the product. Reentry is prohibited above the level of 5 ppm chlorine due to risk of bodily injury.

To maintain the water, apply 5 oz. of product per 1,000 gallons of water over the surface to maintain a chlorine concentration of 5 ppm.

After each use, shock treat with 7.5 oz. of this product per 500 gallons of water to control odor and algae.

During extended periods of disuse, add 3 oz. of product daily per 1,000 gallons of water to maintain a 3 ppm chlorine concentration.

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**SANITIZATION OF POROUS FOOD CONTACT SURFACES SPRAY/FOG METHOD**
Pre-clean all surfaces after use. Prepare a 600 ppm available chlorine sanitizing solution of sufficient size by thoroughly mixing the product in a ratio of 6 oz. product with 10 gallons of water. Use spray or fogging equipment which can resist hypochlorite solutions. Always empty and rinse spray/fog equipment with potable water after use. Thoroughly spray or fog all surfaces until wet, allowing excess sanitizer to drain. Vacate area for at least 2 hours. Prior to using equipment, rinse all surfaces with a 200 ppm available chlorine solution. Prepare a 200 ppm sanitizing solution by thoroughly mixing 2 oz. of this product with 10 gallons of water.

**SANITIZATION OF NONPOROUS FOOD CONTACT SURFACES SPRAY/FOG METHOD**
Pre-clean 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 2 oz. product with 10 gallons of water. Prepare a 600 ppm solution by thoroughly mixing the product in a ratio of 6 oz. product with 10 gallons of water. Use spray or fogging equipment which can resist hypochlorite solutions. Always empty and rinse spray/fog equipment with potable water after use. Thoroughly spray or fog all surfaces until wet, allowing excess sanitizer to drain. Vacate area for at least 2 hours. Prior to using equipment, rinse all surfaces treated with a 600 ppm solution with a 200 ppm solution.

**SANITIZATION OF NONPOROUS NON-FOOD CONTACT SURFACES**
RINSE METHOD – Prepare a sanitizing solution by thoroughly mixing 2 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. Do not rinse equipment with water after treatment and do not soak equipment overnight.
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 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 with water after treatment.
SPRAY/FOG METHOD – Preclean all surfaces after use. Prepare a 200 ppm available chlorine sanitizing solution of sufficient size by thoroughly mixing the product in a ratio of 2 OZ. product with 10 gallons of water. Use spray or fogging equipment which can resist hypochlorite solutions. Prior to using equipment, thoroughly spray or fog all surfaces until wet, allowing excess sanitizer to drain. Vacate area for at least 2 hours.

**DISINFECTION OF DRINKING WATER (POTABLE)**
PUBLIC SYSTEMS: Mix a ratio of 1 oz. of this product to 100 gallons of water. Begin feeding this solution with a hypo-chlorinator until a 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 no less than that prescribed by the National Primary Drinking Water Regulations. Contact your local Health Department for further details.

INDIVIDUAL SYSTEMS: DUG WELLS: Upon completion of the casing (lining) wash the interior of the casing (lining) with a 100 ppm available chlorine solution using a stiff brush. This solution can be made by thoroughly mixing 1 oz. of this product into 10 gallons of water. After covering the well, pour the sanitizing solution into the well through both the pipe sleeve opening and the pipeline. Wash the exterior of the pump cylinder also with the sanitizing solution. 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. Consult your local Health Department for further details.

**SEWAGE AND WASTEWATER EFFLUENT TREATMENT**
The disinfection 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 bacteria 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 1,000 ppm available chlorine solution at a location which will allow complete mixing. Prepare this solution by mixing 10 to 105 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 1.5 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 100 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.

**EMERGENCY DISINFECTION AFTER MAIN BREAKS**
MAINS – Before assembly of the repaired section, flush out mud and soil. Permit a water flow of at least 2.5 feet per minute to continue under pressure while injecting this product by means of a hypochlorinator. Stop water flow when a chlorine residual test of 50 ppm is obtained at the low pressure end of the new main section after a 24 hour retention time. When chlorination is completed, the system must be flushed free of all heavily chlorinated water.

**COOLING TOWER/EVAPORATIVE CONDENSER WATER**
SLUG FEED METHOD – *Initial Dose:* When system is noticeably fouled, apply 50 to 100 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 10 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 50 to 100 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 10 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 50 to 100 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 1.0 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 – *Initial Dose:* Initially slug dose the system with 50 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 10 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.

**COMMERCIAL LAUNDRY SANITIZERS**

Wet fabrics or clothes should be spun dry prior to sanitation. Thoroughly mix 2.0 oz. of this product with 10 gallons of water to yield 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.

**PULP AND PAPER MILL PROCESS WATER SYSTEM**

SLUG FEED METHOD – *Initial Dose:* When system is noticeably fouled, apply 45 to 90 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 10 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 noticeable fouled apply 45 to 90 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 10 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 45 to 90 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 1.0 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 – *Initial Dose:* Initially slug dose the system with 45 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 10 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.

## STORAGE AND DISPOSAL

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.

Refillable container. Refill this container with Sodium Hypochlorite only. Do not reuse 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.

To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

**Manufactured by:**
**HILL BROTHERS CHEMICAL COMPANY**
4450 N. 42nd Ave., Phoenix, AZ 85019 (602) 272-9363

FOR 24 HOUR EMERGENCY INFORMATION CALL CHEMTREC: (800) 424-9300

**Locations**
City of Industry, San Jose, CA; Phoenix, Tucson, AZ; Salt Lake City, UT

**Reg. No. (266-20001)**
**EPA EST. NO. 266-AZ-1**