88346-6 01/24/2013 1/24

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

NOTICE OF PESTICIDE:
x Registration
__ Reregistration

(under FIFRA, as amended)

EPA Reg. Number:	Date of Issuance:
88346-6	January 24, 2013

Term of Issuance: Conditional

Name of Pesticide Product: Pooline Superchlor Shock 70

Name and Address of Registrant (include ZIP Code):

Tianjin Pool & Spa Corporation
2522 Malt Avenue
Commerce, CA 90040

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 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 (OPP Decision Number: D-469439) 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 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 re-registration of your product under FIFRA section 4.

2. Make the labeling change listed below before you release the product for shipment:

a. Revise the EPA Registration Number to read, "EPA Reg. No. 88346-6"

Signature of Approving Official:

Monisha Harris
Product Manager Team 32
Regulatory Management Branch II
Antimicrobials Division (7510P)

Date: January 24, 2013

EPA Form 8570-6

2/24

b. In the precautionary statement section, revise the sentence regarding removal of contaminated clothing and washing to read:

"HIGHLY CORROSIVE: Causes skin and eye damage. May be fatal if swallowed, etc.... Wear protective eyewear (such as goggles, face shield, or safety glasses). 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."

3. Within one (1) year from the date of this notice, you must submit OPPTS 830.6317 Storage Stability and OPPTS 830.6320 Corrosion Characteristic guidelines for the subject product.

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 label with comments is enclosed for your records. Submit one (1) copy of your final printed labeling prior to release of this product for shipment. Should you have any questions concerning this letter, please contact me by telephone at (703) 308-0410 during the hours of 8:00 am to 4:00 pm EST.

Sincerely,

Monisha Harris
Product Manager 32
Regulatory Management Branch II
Antimicrobials Division (7510P)

Enclosures: (Stamped Label and Product Chemistry DER)

3/24

Pooline Superchlor Shock 70

[Dry Granular Chlorinating Granules][3" Tablets][1" Tablets][1" Sticks]

ACTIVE INGREDIENT:	
Calcium Hypochlorite	70%
OTHER INGREDIENTS	30%
TOTAL	100%

KEEP OUT OF REACH OF CHILDREN

DANGER

Contamination or improper use may cause fire or explosion or the release of toxic gases. Do not allow product to contact any foreign matter, including other water treatment products. If product is exposed to small amounts of water, it can react violently to produce heat and toxic gases and spatter. Do not add water to this product. Add only into water. Highly corrosive. Causes skin and eye damage. May be fatal if swallowed.

FIRST AID

IF SWALLOWED: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

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 INHALED: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.

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.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

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

IN CASE OF MEDICAL EMERGENCY CALL 1-800-535-5053.

(See additional precautions on side panel.)

Manufactured by:
Tianjin Pool & Spa Corporation
2522 Malt Avenue
Commerce, CA 90040, USA

4/24

EPA REGISTRATION NO. 88346- EPA ESTABLISHMENT NO. 71674-CHN-001
BATCH NO.:
[NET CONTENTS: 100 LBS][Each 3" tablet weighs 200.0 grams (7.0 ounces)][Each 1" tablet weighs 20.0 grams (0.7 ounces)][Each 1" stick weighs 311.8 grams (11.0 ounces)]

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS
DANGER

Highly corrosive. Causes skin and eye damage. May be fatal if swallowed. Irritating to nose and throat. Open in well ventilated area. Avoid breathing dust and fumes. Do not get in eyes, on skin or on clothing. Do not handle with bare hands. Wear goggles or face shield and use rubber gloves when handling. For additional protection of skin, wear long sleeves and long pants. Remove and wash contaminated clothing before reuse.

Only use utensils that are thoroughly clean and dry.

PHYSICAL OR CHEMICAL HAZARDS

If product is exposed to small amounts of water, it can react violently to produce heat and toxic gases and spatter. Do not add water to this product. Add only into water. Do not allow to become wet or damp before use. Can react with other materials, including other water treatment products, to cause intense fire, explosion, and the release of toxic gases. Keep all foreign matter, including other water treatment products, away from this product. Use only clean dry equipment to dispense this product. Do not use this product in a container or dispensing device that has been used with any other product. Exposure to heat can cause this product to rapidly decompose, leading to intense fire, explosion, and the release of toxic gases. Store in cool, dry ventilated area. Store oxidizing agent. This product can increase fire intensity. Keep away from heat and from flame and burning material (like a lighted cigarette).

ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish and aquatic organisms. Do not discharge effluent containing this product into lakes, ponds, streams, 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 to sewer systems without previously notifying the sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

STORAGE AND DISPOSAL

STORAGE: Keep this product dry in a tightly closed container, when not in use. Store in a cool, dry, well ventilated area away from heat or open flame. In case of decomposition, isolate container (if possible) and flood area with large amounts of water to dissolve all material before discarding this container.

DISPOSAL:

{Household/residential instructions}

Nonrefillable container. Do not reuse or refill this container.
If empty: Place in trash or offer for recycling, if available.
If partly filled: Call your local solid waste agency for disposal instructions. Never place unused product down any indoor or outdoor drain.

{Non-household/non-residential residue removal instructions for rigid nonrefillable containers equal to or less than 50 lbs)

Nonrefillable container. Do not reuse or refill this container. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Offer for recycling, if available.

{Non-household/non-residential residue removal instructions for rigid nonrefillable containers greater than 50 lbs.}

Nonrefillable container. Do not reuse or refill this container. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Offer for recycling, if available.

EMERGENCY HANDLING

In case of contamination or decomposition – Do not reseal container. Immediately remove container to an open and well-ventilated outdoor area by itself. Flood with large amounts of water. Dispose of the container and any remaining contaminated material in an approved landfill area.

{MARKETING CLAIMS}
[Concentrated chlorinator for routine use]
[Kills bacteria, destroys organic contaminants and controls algae]
[Destroys organic contaminants (perspiration, suntan oil)]
[Controls algae]
[Kills bacteria]
[Fast acting with no residue]
[Fast acting]
[Quick dissolving]
[Fast dissolving]
[No need to pre-dissolve]
[No residue]

6/24

[Shock treatment for a crystal clear pool]
[Sanitizes pool water]
[Swimming pool sanitizer]
[Will not cause over stabilization]
[Multipurpose chlorinator for crystal clear water]
[Multipurpose sanitizer for crystal clear water]
[Multipurpose sanitizer and shock treatment: all in one]
[Multipurpose sanitizer and shock treatment]
[Contains no cyanuric acid]
[Good for all pool surfaces]

{Optional statements for use with shock directions}
[Powerful shock treatment for crystal clear pool water]
[Multipurpose sanitizer and shock treatment: all in one]
[Multipurpose sanitizer and shock treatment]
[Multipurpose chlorinator for crystal clear water]
[Sanitizes pool water]
[Swimming pool sanitizer]
[Will not cause over stabilization]
[Contains no cyanuric acid]
[Good for all pool surfaces]

DIRECTIONS FOR USE

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

READ ALL PRECAUITONARY STATEMENTS BEFORE USE.

{Use 1}[SWIMMING POOLS]
This is a highly effective, multi-purpose product that sanitizes, clarifies, [helps] prevent[s] algae and shock treats your pool. It is convenient, easy to use, and won't over-stabilize your pool.][For crystal clean pool water, follow our 4 step pool care program: Step 1: Test and adjust pool water balance, Step 2: Chlorinate and clarify, Step 3: Shock treat your pool at least one a week, and Step 4: Add algaecide regularly [where needed].]

[Additional shocking to keep water clean and clear is recommended after: rain and heavy winds; high number of swimmers; increased water temperature; and/or increased frequency of pool usage.]

{For commercial pool, municipal, and industrial labels:}
[This product is a concentrated chlorinating agent in a dry, free-flowing form which controls the growth of algae, kills bacteria, and destroys organic contaminants in pools, spas and hot tubs.]

{Small pools (500 gallons to less than 10,000 gallons) and pools 10,000 gallons and above}

7/24

[**HOT TO USE**: Add the recommended dosage of this product during evening hours while the filter pump is running. When adding this product to your pool, broadcast the product evenly over a wide area in the deepest part of the pool.
{When contents are in a resealable container} [Use a clean, dry [scoop] lid to measure this product]. [Do not use the [scoop] lid for any other purpose.]
{When contents are in a single use bag for use as a shock for pools 10,000 gallons or larger} [Use entire contents when opened]. If any granules settle to the bottom of the pool, use brush to disperse.

WATER BALANCE: For best product performance, swimmer comfort, and crystal clear water: Maintain pH in the range of 7.2 to 7.6. Maintain total alkalinity in the range of 60 to [120] {retail brands only} {Commercial product for very large commercial or municipal pools will use}[100] parts per million (ppm). Maintain calcium hardness above 200 ppm. Use a reliable test kit that measures all these ranges. Use [brand] pool care products to make adjustments. Follow label directions for each product.

Do not enter pool until the free available residual is 1-4 ppm for each of the below noted water treatment applications.
{For Industrial/Municipal pool labels: [Reenter pool when residual is 1-4 ppm, or when chlorine residual meets local public health guidelines].

OPENING YOUR POOL: For best results, see the Water Balance section above before treatment. Always adjust and maintain pH in the 7.2 to 7.6 range. Follow "SHOCK TREATMENT" directions on this package. Allow 30 minutes for product to disperse. Test free available chlorine residual with a pool test kit. Repeat treatment as needed.

[**ROUTINE CHLORINATION**: For best results, see Water Balance section above before treatment. Throughout the pool season, adjust and maintain pH at 7.2-7.6. Check available chlorine with a suitable test kit.]

{For small pools 500 gallons to less than 10,000 gallons}
[Each 0.2-0.4 ounces of this product will provide approximately 1-4 ppm available chlorine in 500 gallons of water. Maintain these conditions for proper operation by frequent testing with a test kit. Follow "HOW TO USE" directions on this package.]

{For pools 10,000 gallons and larger}
[**FOR UNSTABILIZED POOLS**: Add 5-7 ounces of this product per 10,000 gallons of pool water daily or as often as needed to maintain the free available chlorine residual at 1-4 ppm. Follow "HOW TO USE" directions on this package. FOR POOL STABILIZED USING (brand name) STABILIZER AND CONDITIONER: Add 3-5 ounces per 10,000 gallons every other day or as often as needed to maintain the free available chlorine residual at 1-4 ppm. Follow "HOW TO USE" directions on this package.]

{For pools 10,000 gallons and larger}
[SHOCK TREATMENT/SUPERCHLORINATION: For best results, see "WATER BALANCE" and "HOW TO USE" sections above before treatment. Every 7 days, or as

necessary to prevent pool problems, [shock treat / superchlorinate the pool by adding 9-18 ounces [one bag {for 16 oz containers}] of this product per 10,000 gallons of water to provide 5 to 10 ppm available chlorine.]

{alternate shock directions for 16 oz containers}
[One bag {for 16 oz containers} treats up to {choose gallons of water from chart to give dosage between 5-10 ppm}

Gallons	ppm AvCl	oz. for 5 ppm	oz. for 10 ppm
8,000	10.93	7.32	14.63
9,000	9.72	8.23	16.46
10,000	8.75	9.15	18.29
11,000	7.95	10.06	20.12
12,000	7.29	10.97	21.95
13,000	6.73	11.89	23.78
14,000	6.25	12.80	25.61
14,500	6.03	13.26	26.52
15,000	5.83	13.72	27.44
15,500	5.64	14.18	28.35
16,000	5.47	14.63	29.26
16,500	5.30	15.09	30.18
17,000	5.15	15.55	31.09
17,500	5.00	16.00	32.01

Additional shock treatments may be required to correct problems which are caused by visible algae, high bathing loads, heavy wind and rainstorms. Additional shock treatments may also be required to correct problems such as unpleasant odors and eye irritation. Check the available chlorine with a suitable test kit.]

{For pools 10,000 gallons and larger}
[ALGAE CONTROL: Follow "SHOCK TREATMENT" directions on this label. Add this product as close as possible to any algae on the sides or bottom of the pool. If necessary, repeat the treatment. To prevent possible staining or bleaching, take the following steps immediately after treatment: Thoroughly clean pool by brushing surface of algae growth, vacuum and cycle through filter.]

[For preventative algae control, use your preferred (brand name) algaecide product regularly. Follow label directions on the algaecide.]

{Labels of resealable containers {2 lbs. or more} used to treat pools 10,000 gallons and larger}
[WINTERIZING: For best results, see "WATER BALANCE" section above before treatment. Gradually add 27 ounces of this product per 10,000 gallons of pool water that is clear and clean. This provides 15 ppm free available chlorine. Follow "HOW TO USE" directions on this package. Run the filter until granules are completely dissolved. Cover the pool with a pool cover. Prepare the heater, pump and filter components for winterizing by following manufacturer's directions.]

9/24

[TO DETERMINE YOUR POOL CAPACITY IN U.S. GALLONS, USE THE APPROPRIATE FORMULA BELOW:

POOL SHAPE FORMULA (Use measurements in feet only)

RECTANGULAR – Length x Width x Average Depth x 7.5 = Total Gallons

ROUND-Diameter x Diameter x Average Depth x 5.9 = Total Gallons

OVAL-Maximum Length x Maximum Width x Average Depth x 5.9 = Total Gallons

FREE FORM-Surface Area (Sq. Feet) x Average Depth x 7.5 = Total Gallons]

{Use 2}[SPA & HOT TUBS]
For best results, see "WATER BALANCE" section below before treatment. Maintain these conditions for proper operation by frequent testing with a test kit. Do not allow cyanuric acid level to exceed 100 ppm. It is recommended that spas and hot tubs be drained every 30-90 days, more often under heavy use. Consult manufacturer's recommendations concerning the compatibility of chlorine sanitizers with their equipment. Some oils, lotions, fragrances, cleansers, etc., may cause foaming or cloudy water and may react with chlorine sanitizers to reduce their efficacy. If circulation is low, stir water after addition of chlorine or other chemicals.]

[Water Balance: For best product performance, comfort, and crystal clear water. Maintain pH in the range of 7.2 to 7.6. Maintain total alkalinity in the range of 60 to 120 parts per million (ppm). Maintain calcium hardness above 200 ppm. Use a reliable test kit that measures all these ranges. Use (brand name) [Spa] care products to make adjustments. Follow label directions for each product.]

Do not enter spa or hot tub until the free available chlorine residual is less than 5 ppm for the below noted spa applications.

[Opening Your Spa] Startup (Freshly Filled): For best results, see "WATER BALANCE" section above before treatment. Turn on circulation system and ensure that it is operating properly. Add one (1) ounce of this product to provide approximately 10 ppm available chlorine for each 500 gallons of water. Check the free available chlorine (FAC) and if less than 4-5 ppm, repeat as needed.

[Routine Chlorination For] Regular Use: For best results, see "WATER BALANCE" section above before treatment. Turn on circulation system and ensure that it is operating properly. Scatter 0.3-0.5 ounces of this product per 500 gallons over the surface of the water. Test for free available chlorine and add additional product if necessary to maintain 3-5 ppm FAC while unit is in use.

10/24

Shock Treatment: After each use, shock treat with one (1) ounce of this product to provide approximately 10 ppm available chlorine per 500 gallons of water, to control odors and algae. Repeat as needed.

Algae Control: For preventative algae control, use your (brand name) [spa] algaecide product regularly. Follow the label directions on the algaecide.

Extended Non-use Period: For best results, see "WATER BALANCE" section above before treatment. During extended non-use periods when the unit is not being used add 1.4 ounces of this product per 500 gallons twice a week with the circulation system running or as needed to maintain 3-5 ppm free available chlorine.]

{Use 3}
[**HUBBARD AND IMMERSION TANKS**- Add 0.5 oz. of this product per 100 gallons of water before patient use to obtain a chlorine residual of 25 ppm, as determined by a suitable test kit. Adjust and maintain the water pH to between 7.2 and 7.6. After each use drain the tank. Add 0.5 oz. to a bucket of water and circulate this solution through the agitator of the tank for 15 minutes and then rinse out the solution. Clean tank thoroughly and dry with clean cloths.]

[**HYDROTHERAPHY TANKS**-Add 1 oz. of this product per 1,000 gallons of water to obtain a minimum chlorine residual of 1 ppm, as determined by a suitable chlorine test kit, after satisfying any chlorine demand. Pool should not be entered until the chlorine residual is below 3 ppm. Adjust and maintain the water pH to between 7.2 and 7.6. Operate pool filter pump continuously. Drain pool weekly, and clean before refilling.]

{Use 4} [**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 oz. of this product with 40 gallons of water. If no test kit is available, prepare a sanitizing solution by thoroughly mixing 1 oz. of this product with 20 gallons of water to provide approximately 200 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 reused 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 oz. of this product with 40 gallons of water. If no test kit is available,

prepare a sanitizing solution by thoroughly mixing 1 oz. of this product with 20 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 reused 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 1 oz. product with 20 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 1 oz. product with 20 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.

[COARSE] SPRAY 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 1 oz. product with 20 gallons of water. Prepare a 600 ppm solution by thoroughly mixing the product in a ratio of 3 oz. product with 20 gallons of water .use spray equipment which can resist hypochlorite solutions. Always empty and rinse spray equipment with potable water after use. Thoroughly spray 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.]

{Use 5} [SANITIZATION OF POROUS FOOD CONTACT SURFACES:
RINSE METHOD-Prepare a 600 ppm solution by thoroughly mixing 3 oz. of this product with 20 gallons of water. Clean surfaces in the normal manner. Rinse all surfaces thoroughly with the 600 ppm solution, maintaining contact for at least 2 minutes. Prepare a 200 ppm sanitizing solution by thoroughly mixing 1 oz. of this product with 20 gallons of water. Prior to using

equipment, rinse all surfaces with a 200 ppm available chlorine solution. Do not rinse and do not soak equipment overnight.

IMMERSION METHOD-Prepare a 600 ppm solution by thoroughly mixing, in an immersion tank, 3 oz. of this product with 200 gallons of water. Clean equipment in the normal manner. Prepare a 200 ppm sanitizing solution by thoroughly mixing 1 oz. of this product with 20 gallons of water. Prior to using, immerse equipment in the 200 ppm sanitizing solution for at least 2 minutes and allow the sanitizer to drain. Do not rinse and do not soak equipment overnight.

[COARSE] SPRAY METHOD-Preclean all surfaces after use. Prepare a 600 ppm available chlorine sanitizing solution of sufficient size by thoroughly mixing the product in a ratio of 3 oz. product with 20 gallons of water. Use spray equipment which can resist hypochlorite solutions. Always empty and rinse spray equipment with potable water after use. Thoroughly spray all surfaces with a 200 ppm available solution. Prepare a 200 ppm sanitizing solution by thoroughly mixing 1 oz. of this product with 20 gallons of water.]

{Use 6} [SANITIZATION OF NONPOROUS NON-FOOD CONTACT SURFACES: RINSE METHOD-Prepare a sanitizing solution by thoroughly mixing 1 oz. of this product with 20 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, 1 oz. of this product with 20 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.

[COARSE] SPRAY 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 1 oz. product with 20 gallons of water. Use spray equipment which can resist hypochlorite solutions. Prior to using equipment, thoroughly spray all surfaces until wet, allowing excess sanitizer to drain. Vacate area for at least 2 hours.]

{Use 7} [DISINFECTION OF NONPOROUS NON-FOOD CONTACT SURFACES: RINSE METHOD-Prepare a disinfecting solution by thoroughly mixing 3 oz. of this product with 20 gallons of water to provide approximately 600 ppm available chlorine by weight. Clean equipment surfaces in the normal manner. Prior to use, rinse all surfaces thoroughly with the disinfecting solution, maintaining contact with the solution for at least 10 minutes. Do not rinse equipment with water after treatment and do not soak equipment overnight.

IMMERSION METHOD-Prepare a disinfection solution by thoroughly mixing, in an immersion tank, 3 oz. of this product with 20 gallons of water to provide approximately 600 ppm available chlorine by weight. Clean equipment in the normal manner. Prior to use, immerse

equipment in the disinfecting solution for at least 10 minutes and allow the sanitizer to drain. Do not rinse equipment with water after treatment.]

{Use 8} [**SANITIZATION OF POROUS NON-FOOD CONTACT SURFACES: RINSE METHOD**-Prepare a sanitizing solution by thoroughly mixing 3 oz. of this product with 20 gallons of water to provide approximately 600 ppm available chlorine by weight. Clean 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.

IMMERSTION METHOD-Prepare a sanitizing solution by thoroughly mixing, in an immersion tank, 3 oz. of this product with 20 gallons of water to provide approximately 600 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.

[COARSE] SPRAY METHOD-After cleaning, sanitize non-food contact surfaces with 600 ppm available chlorine by thoroughly mixing the product in a ratio of 3 oz. of this product with 20 gallons of water. Use spray equipment which can resist hypochlorite solutions. Always empty and rinse spray equipment with potable water after use. Prior to using equipment, thoroughly spray all surfaces until wet, allowing excess sanitizer to drain. Vacate area for at least 2 hours.]

{Use 9} [**SEWAGE & 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 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 waste water be instantaneously and completely flash mixed to assure reaction with every chemically active soluble and particulate component of the waste water.
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.]

{Use 10) [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 2 to 20 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 0.3 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 16 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.]

{Use 11} [DISINFECTION OF DRINKING WATER (EMERGENCY / PUBLIC / INDIVIDUAL SYSTEMS:
PUBLIC SYSTEMS-[Mix a ratio of 1 oz. of this product to 6,000 gallons of water.]{or}[Mix a ratio of 10 oz. to 30 oz. of this product into 10 gallons of water to make a 0.5% to 1.5% solution]. Begin feeding this solution with a hypochlorinator 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 40 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. Contact your local Health Department for further details.

INDIVIDUAL WATER SYSTEMS: DRILLED, DRIVE & 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 1 oz. of this product into 40 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 pipeline 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. Deep wells with high water levels may necessitate the use of special methods for introduction of the sanitizer into the well. Consult your local Health Department for further details.

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

EMERGENCY DISINFECTION-When boiling of water for 1 minute is not practical, water can be made potable by using this product. Prior to addition of the sanitizer, remove all suspended material by filtration or by allowing it to settle to the bottom. Decant the clarified, contaminated water to a clean container and add 1 grain of this product to 1 gallon of water. One grain is approximately the size of the letter "o" in this sentence. Allow the treated water to stand for 30 minutes. Properly treated water should have a slight chlorine odor. If not, repeat dosage and allow the water to stand an additional 15 minutes. The treated water can then be made palatable by pouring it between clean containers for several times.]

{Use 12) [PUBLIC WATER SYSTEMS:
RESERVOIRS-ALGAE CONTROL-Hypochlorinate streams feeding the reservoir. Suitable feeding points should be selected on each stream at least 50 yards upstream from the points of entry into the reservoir.

MAINS-Thoroughly flush section to be sanitized by discharging from hydrants. 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.

NEW TANKS, BASINS, ETC.-Remove all physical soil from surfaces. Place 4 oz. of this product for each 5 cubic feet of working capacity (500 ppm available chlorine). Fill to working capacity and allow to stand for at least 4 hours. Drain and flush with potable water and return to surface.

NEW FILTER SAND-Apply 16 oz. of this product for each 150 to 200 cubic feet of sand. The action of the product dissolving as the water passes through the bed will aid in sanitizing the new sand.

NEW WELLS-Flush the casing with a 50 ppm available chlorine solution of water containing 1 oz. of this product for each 100 gallons of water. The solution should be pumped or fed by gravity into the well after thorough mixing with agitation. The well should stand for several hours or overnight under chlorination. It may then be pumped until a representative raw water sample is obtained. Bacterial examination of the water will indicate whether further treatment is necessary.

EXISTING EQUIPMENT-Remove equipment from service, thoroughly clean surfaces of all physical soil. Sanitize by placing 4 oz. of this product for each 5 cubic feet capacity (approximately 500 ppm available chlorine). Fill to working capacity and let stand at least 4 hours. Drain and place in service. If the previous treatment is not practical, surfaces may be sprayed with a solution containing 1 oz. of this product for each 5 gallons of water (approximately 1,000 ppm available chlorine). After drying, flush with water and return to service.]

{Use 13} [**EMERGENCY DISINFECTION AFTER FLOODS:**
WELLS-Thoroughly flush contaminated casing with a 500 ppm available chlorine solution. Prepare this solution by mixing 1 oz. of this product with 10 gallons of water. Backwash the well to increase yield and reduce turbidity, adding sufficient chlorinating solution to the backwash to produce a 10 ppm available chlorine residual, as determined by a chlorine test kit. After the turbidity has been reduced and the casing has been treated, add sufficient chlorinating solution to produce a 50 ppm available chlorine residual. Agitate the well water for several hours and take a representative water sample. Treat well again if water samples are biologically unacceptable.

RESERVOIRS-In case of contamination by overflowing streams, establish hypochlorinating stations upstream of the reservoir. Chlorinate the inlet water until the entire reservoir obtains a 0.2 ppm available chlorine residual, as determined by a suitable chlorine test kit. In case of contamination from surface drainage, apply sufficient product directly to the reservoir to obtain a 0.2 ppm available chlorine residual in all parts of the reservoir.

BASINS, TANKS, FLUMES, ETC.-Thoroughly clean all equipment, then apply 4 oz. of product per 5 cu. ft. of water to obtain 500 ppm available chlorine, as determined by a suitable test kit. After 24 hours drain, flush, and return to service. If the previous method is not suitable, spray or flush the equipment with a solution containing 1 oz. of this product for each 5 gallons of water (1,000 ppm available chlorine). Allow to stand for 2-4 hours, flush and return to service.

FILTERS-When the sand filter needs replacement, apply 16 oz. of this product for each 150 to 200 cubic feet of sand. When the filter is severely contaminated, additional product should be distributed over the surface at the rate of 16 oz. per 20 sq. ft. Water should stand at a depth of 1 foot above the surface of the filter bed for 4 to 24 hours. When filter beds can be back washed of mud and silt, apply 16 oz. of this product per each 50 sq. ft., allowing the water to stand at a depth of 1 foot above the filter sand. After 30 minutes, drain water to the level of the filter. After 4 to 6 hours drain, and proceed with normal back washing.

DISTRIBUTION SYSTEM-Flush repaired or replaced section with water. Establish a hypochlorinating station and apply sufficient product until a consistent available chlorine residual of at least 10 ppm remains after a 24-hour retention time. Use a chlorine test kit.]

{Use 14} [**EMERGENCY DISINFECTION AFTER FIRES: CROSS CONNECTIONS OR EMERGENCY CONNECTIONS**-Hypochlorination or gravity feed equipment should be set up near the intake of the untreated water supply. Apply sufficient product to give a chlorine residual of at least 0.1 to 0.2 ppm at the point where the untreated supply enters the regular distribution system. Use a chlorine test kit.]

{Use 15} [**EMERGENCY DISINFECTION AFTER DROUGHTS:**
SUPPLEMENTARY WATER SUPPLIES-Gravity or mechanical hypochlorite feeders should be set up on a supplementary line to dose the water to a minimum chlorine residual of 0.2 ppm after a 20 minute contact time. Use a chlorine test kit.

WATER SHIPPED IN BY TANKS, TANK CARS, TRUCKS, ETC.-Thoroughly clean all containers and equipment. Spray a 500 ppm available chlorine solution and rinse with potable

water after 5 minutes. This solution is made by mixing 1 oz. of this product for each 10 gallons of water. During the filling of the containers, dose with sufficient amounts of this product to provide at least 0.2 ppm chlorine residual. Use a chlorine test kit.]

{Use 16} [**EMERGENCY DISINFECTION AFTER MAIN BREAKS: MAINS**-Before assemble 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.]

{Use 17}[**COOLING TOWER/EVAPORATIVE CONDENSER WATER:**
SLUG FEED METHOD-Initial dose: When system is noticeably fouled, apply 10 to 20 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 2 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 10 to 20 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 blow down.
Subsequent Dose: When microbial control is evident, add 2 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 blow down. Badly fouled systems must be cleaned before treatment is begun.

CONTINUOUS FEED METHOD-Initial dose: When system is noticeably fouled, apply 10 to 20 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 2 oz. of this product per 10,000 gallons of water lost by blow down to maintain a 1 ppm residual. Badly fouled systems must be cleaned before treatment is begin.]

{Use 18} [**LAUNDRY SANITIZERS:**
HOUSEHOLD LAUNDRY SANITIZERS-
IN SOAKING SUDS-Thoroughly mix 1 Tbs. of this product to 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 the wash/rinse cycle.
IN WASHING SUDS-Thoroughly mix 1 Tbs. of this product to 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 1 oz. of this product with 20 gallons of water to yield 200 ppm

available chlorine. Promptly after mixing the sanitizer, add the solution into the prewash prior to washing fabrics/chlothes in the regular wash cycle with a good detergent. Test the level of available chlorine if solution has been allowed to stand. And more of this product if the available chlorine level has dropped below 200 ppm.

[FEDERALLY INSPECTED MEAT & POULTRY PLAN LAUNDRY SANITIZERS-Wet fabrics which contact meat or poultry products directly or indirectly should be spun dry prior to sanitization. Thoroughly mix 1 oz. of this product with 20 gallons of water to yield 200 ppm available chlorine. Promptly after mixing the sanitizer, add the solution into the prewash prior to washing fabrics 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. Thoroughly rinse fabrics with potable water at the end of the laundering operation.]

{Use 19} [FARM PREMISES-Remove all animals, poultry, and feed from premises, vehicles, and enclosures. Remove all litter and manure from floors, walls and surfaces of barns, pens, stalls, chutes and other facilities occupied or traversed by animals or poultry. Empty all troughs, racks and other feeding and watering appliances. Thoroughly clean all surfaces with soap or detergent and rinse with water. To disinfect, saturate all surfaces with a solution of at least 1,000 ppm available chlorine for a period of 10 minutes. A 1,000 ppm solution can be made by thoroughly mixing 2 oz. of this product with 10 gallons of water. Immerse all halters, ropes and other types of equipment used in handling and restraining animals or poultry, as well as the cleaned forks, shovels and scrapers used for removing litter and manure. Ventilate buildings, cars, boats and other closed spaces. Do not house livestock or poultry or employ equipment until chlorine has been dissipated. All treated feed racks, mangers, troughs, automatic feeders, fountains and waterers must be rinsed with potable water before reuse.]

{Use 20) [PULP AND PAPER MILL PROCESS WATER SYSTEMS:
SLUG FEED METHOD-Initial Dose: When system is noticeably fouled, apply 10 to 20 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 2 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 10 to 20 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 blow down.
Subsequent Dose: When microbial control is evident, add 2 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 blow down. Badly fouled systems must be cleaned before treatment is begun.

CONTINUOUS FEED METHOD-Initial Dose: When system is noticeably fouled, apply 10 to 20 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 2 oz. of this product per 10,000 gallons of water lost by blow down to maintain a 1 ppm residual. Badly fouled systems must be cleaned before treatment is begun.]

{Use 21} [AGRICULTURAL USES:
{Note: The following WPS section will appear only on end-use product labels that bear agricultural uses}

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted-entry interval. The requirements in the box only apply to uses of this product that are covered by the Workers Protection Standard.

The Restricted-Entry Interval (REI) is 0 days when using this product. There are no posting or notification requirements when using this product. Personal Protective Equipment should be worn as described under the "Precautionary Statements" section of this label.

BEES-Disinfect leaf cutting bee cells and bee boards by immersion in a solution containing 1 ppm available chlorine for 3 minutes. Allow cells to drain for 2 minutes and dry for 4 to 5 hours or until no chlorine odor can be detected. Using a suitable chemical feed dispenser and test kit, dissolve and dose the chlorinated solution until a concentration of 1 ppm is achieved. The bee domicile is disinfected by spraying with a 0.1 ppm solution until all surfaces are thoroughly wet. Again, use a suitable chemical feed dispenser to dissolve and dose the chlorinated solution until a concentration of 0.1 ppm is achieved. Allow the domicile to dry until all chlorine odor has dissipated.

FOOD EGG SANITIZATION-Thoroughly clean all eggs. Thoroughly mix 1 oz. of this product with 20 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 reused to sanitize eggs.

COMMODITY FRUIT & VEGETABLE WASHING: Wash fruits and vegetables to remove organic matter: then treat as noted below.

Table of Recommended Levels and Use Dilutions for Available Chlorine

Commodity	Usage Dilution Oz. Added to 100 Gal. of Water	Available Chlorine (ppm)	Contact Time
Apples	3.1 to 4.1	150 - 200	45-90 sec. (dump tank) 5-15 sec. (spray)
Artichoke	2.1 to 3.1	100 – 150	5-15 sec. (spray)
Asparagus	2.6 to 3.1	125 – 150	5-15 sec. (spray) 20-30 min. (hydrocooler)
Brussel Sprouts	2.1 to 3.1	100 – 150	5-15 sec. (spray)
Carrots	2.1 to 4.1	100 – 200	1-5 min. (dump tank) 1-5 min. (flume)
Cauliflower	6.2 to 8.2	300 – 400	5-15 sec. (spray)
Celery	2.1 to 2.3	100 – 110	5-15 sec. (spray)
Chopped Cabbage[1]	1.6 to 2.1	80 – 100	5-15 sec. (spray)
Chopped Lettuce[1]	1.6 to 2.1	80 – 100	5-15 sec. (spray)
Citrus Fruits	0.8 to 1.5 0.6 to 1.0 2.1 to 4.1	40 - 75 30 – 50 100 – 200	5-15 sec. (spray) 2-3 min. (dump tank) 3-5 min. (drench)
Cucumber	6.2 to 7.2	300 – 350	5-15 sec. (spray)
Green Onions	1.5 to 2.5	75 – 120	5-15 sec. (spray)
Melons	2.1 to 3.1 0.6 to 1.5	100 – 150 30 – 75	5-15 sec. (spray) 20-30 min. (hydrocooler)
Pears	6.2 to 8.2	300 – 400	2-3 min. (dump tank)
Peppers	6.2 to 8.2 2.1 to 2.8	300 – 400 100 – 135	5-15 sec. (spray) 2-5 min. (dump tank)
Potatoes	0.6 to 2.1 4.1 to 6.2 2.1 to 10.5	30 – 100 200 – 300 100 – 500	2-5 min. (dump tank) 2-5 min. (flume) 5-30 sec. (spray)
Radishes	2.1 to 3.1	100 – 150	5-15 sec. (spray)
Stonefruits (Cherries, Peaches, Nectarines, and Plums)	0.6 to 1.5 1.0 to 2.1	30 – 75 50 – 100	Hydrocooler 5-15 sec. (spray)
Sweet Potatoes (Ipomoea batatas) – to control & reduce spread post-harvest soft rot organisms	3.1 to 4.1	150 – 500	2-5 min. (spray or dip; change the solution after one hour, or as needed)
Tomatoes	6.2 to 7.2 2.1 to 3.1	300 – 350 100 - 150	2-3 min. (tank) 5-15 sec. (spray)

[1]Note: After treatment the adhering water must be removed by a centrifugation process.

SEEDS-To control bacterial spot (Xanthomonas vesicatoria) on pimento seeds, initially remove moist seeds from ripe fruits. To control surface fungi and bacteria on tomato seeds initially wash

seeds. Immediately soak seeds in 39,000 ppm solution for 15 minutes with continuous agitation. After treatment rinse seeds in potable water for 15 minutes. Dry seeds to normal moisture. The solution may be made by mixing 8 oz. of this product with 1 gallon of water.

MUSHROOMS-To control bacterial blotch (Pseudomonas tolaasii), use a 100 to 200 ppm solution prior to watering mushroom production surfaces. This solution may be made by mixing 0.2 to 0.4 oz. of this product with 10 gallons of water. First application should begin when pins form, and thereafter, between breaks on a need basis depending on the occurrence of bacterial blotch. This product may be applied directly to pins to control small infection foci. Apply 1.5 to 2.0 oz. per square foot of growing space.

FISH FILLETING-Eviscerated and degilled fish removed from the fishing vessel are placed in a wash tank of seawater or fresh water which has been treated with enough product to produce a chlorine residual of 25 ppm, as determined by a test kit. Remove fish from treated water 24 to 48 hours before filleting. After scaling, the fish are again washed in a 25 ppm solution, and are ready for filleting.

PECAN CRACKING AND DYEING-Prepare a 1,000 ppm available chlorine soaking solution by adding 1 oz. of this product for each 5 gallons of water to obtain a 1,000 ppm available chlorine content. Soak for a minimum of 10 minutes. After removal, age pecans for 24 hours. Before bleaching, pecans ae placed in a rotary cleaner where they are washed, drained, and soaked in a 2% sulphuric acid bath at 80 to 90° F for 1 minute. Transfer to a solution containing 100 oz. of this product for each 100 gallons of water (5,000 ppm). After 4 to 8 minutes, they are drained and washed in a 1% sulphuric acid bath at 80 to 90° F. they are then dried.]

POST-HARVEST ROOTS-To control and reduce the spread of soft rot causing organisms in water and on sweet potatoes (Ipomoea batatas), spray or dip the potatoes with a 150 to 500 ppm solution for 2 to 5 minutes. Thoroughly mix 0.3 to 1.0 oz. of this product per 10 gallons of water to obtain this solution. Monitor the chlorine concentration and change the solution after one hour or as needed.]

{Use 22} [AQUACULTURAL USES:
FISH PONDS-Remove fish from ponds prior to treatment. Thoroughly mix 20 oz. of this product to 10,000 gallons of water to obtain 10 ppm available chlorine. Add more product to the water if the available chlorine level is below 1 ppm after 5 minutes. Return fish to pond after the available chlorine level reaches zero.

FISH POND EQUIPMENT-Thoroughly clean all equipment prior to treatment. Thoroughly mix 1 oz. of this product to 20 gallons of water to obtain 200 ppm available chlorine. Porous equipment should soak for one hour.

MAINE LOBSTER PONDS-Remove lobsters, seaweed etc. from ponds prior to treatment. Drain the pond. Thoroughly mix 1,200 oz. of this product to 10,000 gallons of water to obtain at least 600 ppm available chlorine. Apply so that all barrows, gates, rock and dam are treated with product. Permit high tide to fill the pond and then close gates. Allow water to stand for 2 to 3

days until the available chlorine level reaches zero. Open gates and allow 2 tidal cycles to flush the pond before returning lobsters to pond.

CONDITIONING LIVE OYSTERS-Thoroughly mix 1 oz. of this product to 10,000 gallons of water at 50 to 70°F to obtain 0.5 ppm available chlorine. Expose oysters to this solution for at least 15 minutes, monitoring the available chlorine level so that it does not fall below 0.05 ppm. Repeat entire process if the available chlorine level drops below 0.05 ppm or the temperature falls below 50°F.

CONTROL OF SCAVENGERS IN FISH HATCHERY PONDS-Prepare a solution containing 200 ppm of available chlorine by mixing 0.5 oz. of product with 10 gallons of water. Pour into drained pond potholes. Repeat if necessary. Do not put desirable fish back into refilled ponds until chlorine residual has dropped to 0 ppm, as determined by a test kit.]

{Use 23] [SANITIZATION OF DIALYSIS MACHINES-Flush equipment thoroughly with water prior to using this product. Thoroughly mix 7 oz. of this product to 60 gallons of water to obtain at least 600 ppm available chlorine. Immediately use this product in the hemodialysate system allowing for a minimum contact time of 15 minutes at 20°C. Drain system of the sanitizing solution and thoroughly rinse with water. Discard and DO NOT reuse the spent sanitizer. Rinsate must be monitored with a suitable test kit to insure that no available chlorine remains in the system.

This product is recommended for decontaminating single and multipatient hemodialysate systems. This product has been shown to be an effective disinfectant (virucide, fungicide, bactericide, pseudomonicide) when tested by AOAC and EPA test methods. This product may not totally eliminate all vegetative microorganisms in hemodialysate delivery systems due to their construction and/or assembly, but can be relied upon to reduce the number of microorganisms to be acceptable levels when used as directed. This product should be used in a disinfectant program which includes bacteriological monitoring of the hemodialysate delivery system. This product is NOT recommended for use in hemodialysate or reverse osmosis (RO) membranes. Consult the guidelines for hemodialysate systems available from the Hepatitis Laboratories, CDC, Phoenix, AZ 85021.]

{Use 24} [TOILET BOWL SANITIZERS-These products are marketed as individual packages for placement in the toilet. Therefore, use directions are not appropriate.]

{Use 25} [ASPHALT OR WOOD ROOFS AND SIDINGS-To control fungus and mildew, first remove all physical soil by brushing and hosing with clean water, and apply a 5,000 ppm available chlorine solution. Mix 1 oz. of this product per gallon of water and brush or spray roof or siding. After 30 minutes, rinse by hosing with clean water.]

{Use 26} [BOAT BOTTOMS-To control slime on boat bottoms, sling a plastic tarp under boat, retaining enough water to cover the fouled bottom area, but not allowing water to enter enclosed area. This envelope should contain approximately 500 gallons of water for a 14 foot boat. Add 3.5 oz. of this product to this water to obtain a 35 ppm available chlorine concentration. Leave

immersed for 8 to 12 hours. Repeat if necessary. Do not discharge the solution until the free chlorine level has dropped to 0 ppm, as determined by a swimming pool test kit.]

{Use 27} [**ARTIFICIAL SAND BEACHES**-To sanitize the sand, spray a 500 ppm available chlorine solution containing 0.1 oz. of this product per gallon of water at frequent intervals. Small areas can be sprinkled with a watering can.]

{Use 28} [**FOOD PROCESSING PLANTS:**
TREATMENT OF FEDERALLY INSPECTED MEAT & POULTRY PLANT POTABLE WATER SUPPLIES: Solutions of this product containing 1% available chlorine will effectively disinfect the water supply in Federally Inspected Meat & Poultry Plants. The solutions should be fed into the water supply by a hypochlorinafor on the intake side of the pump. An available chlorine residual of 0.2 to 0.6 ppm must be maintained throughout the water distribution system to assure adequate disinfection. A regular testing program should be initiated to make sure that the proper chlorine residuals are present at all times. To make a 1% solution use a suitable chemical feed dispenser and test kit to dissolve and dose the chlorinated solution until a concentration of 10,000 ppm (1%) is achieved.

{Chlorine potable water treatment compounds}
[Chlorine may be present in the processing water of meat and poultry plants at concentrations up to 5 parts per million calculated as free available chlorine. Also, chlorine may be present in poultry chiller intake water, and in carcass wash water at concentrations up to 50 parts per million calculated as free available chlorine. Chlorine must be dispersed at a constant and uniform level and the method or system must be such that a controlled rate is maintained.

COOLING WATER IN CANNERIES-Solutions of this product containing 1% available chlorine will sanitize cooling water, protect canned goods from contamination and spoilage and prevent staining of cans. The solution should be fed into cooling tanks or channels to reach a concentration of 2 ppm available chlorine. Check every two or three hours to be sure that an available chlorine residual of 2 ppm is maintained throughout the cooling system. To make a 1% solution use a suitable chemical feed dispenser to dissolve and dose the chlorinated solution until a concentration of 10,000 ppm (1%) is achieved.

POULTRY DRINKING WATER [Not approved for use in the State of California]-Spray or flush with a chlorinated solution using a suitable chemical feed dispenser and test kit to dissolve and dose the chlorinated solution until a concentration of 5,000 ppm (0.5%) is achieved. Treat poultry drinking water to a dosage of 1 to 5 ppm available chlorine. Use a suitable chemical feed dispenser to dissolve and dose the chlorinated solution until a concentration of 1 to 5 is achieved.]

{Use 29} [**IRRIGATION SYSTEMS:**
FOR THE CONTROL OF BACTERIA, ALGAE, SLIME BUILD-UP AND CLOGGING IN SPECIFIED IRRIGATION SYSTEMS
This product is to be applied through drip/trickle irrigation systems only for agricultural crops where this manner of use will not cause crop damage.

APPLICATION RATES

If the irrigation water has high levels of nutrients causing bacterial, algal, or other bio-fouling that reduces system performance, continuous use of this product may be necessary. The recommended level of free available chlorine for continuous feed is 1 to 2 ppm, measured at the end of the farthest lateral using a good quality test kit for free available chlorine. Periodic shock treatments at a higher free available chlorine rate of up to 20 ppm free available chlorine may be appropriate where bacteria and/or algae clogging and build-up are not managed by maintaining a continuous residual. The frequency of the shock application depends upon the frequency and extent of bio-clogging. Superchlorination, bringing concentrations to as much as 100 ppm total free available chlorine, is recommended for reclaiming low-volume irrigation systems if clogged by algae and bacterial slimes. Set the chlorinator to deliver 100 ppm in the drip system and monitor the free available chlorine residual at the end of the farthest lateral. As soon as it is established that the free available chlorine reading is between 10 and 20 ppm, shut the system down and leave it undisturbed for up to 24 hours. Then flush all submains and laterals with fresh water. Superchlorination will not dissolve/remove scale or inorganic sediment fouling.
*Note: To correctly establish the dose setting required, it is necessary to measure the free available chlorine concentration (ppm) at the end of the treated increment in the field and adjust the dose setting until the desired free available chlorine concentration is obtained. This is because contaminants in the water may consume available chlorine resulting in a concentration that is less than the concentration desired as specified above. Only experience can establish the actual chlorinator settings required to provide the amount of free available chlorine at the end of the farthest lateral (and consequent treatment of the irrigation systm). Normally the treatment level at the end of the farthest lateral will be 1-2 ppm free available chlorine.

GENERAL APPLICATION INSTRUCTIONS

Chlorination should be started during irrigation, near the end of the irrigation sequence, but early enough to establish the desired free available chlorine concentration throughout the system being treated. Apply this product upstream of the filter to help keep the filter clean. Determine the level of free available chlorine as described above, using a free available chlorine test kit. Allow sufficient time to achieve a steady reading. DO NOT apply this product when fertilizers, herbicides, and insecticides are being injected since they will consume the free available chlorine and may produce toxic reaction products.
Shut down the product feed as soon as the irrigation water is switched to the next irrigation sector. Leave the treated water residing in the section that has been shut down. Refer to the chlorinator use instructions as needed.

SENSTIVE PLANT SPECIES

Certain plants, including various species of trees, flowers, shrubs, agronomic crops, fruits and vegetables are adversely affected by chlorinated irrigation. The use of this product can impact the growth, appearance and health of the plants
Begonias, geraniums and other ornamental plant species are known to be sensitive to continuous chlorination at levels of 1-2 ppm free available chlorine. Plant species such as tomato, lettuce, broccoli, and petunia are sensitive to periodic chlorination levels of 10-20 ppm free available chlorine. If uncertain of a plant's tolerance, consult an agronomist or a support agency or use an alternate method to remove bio-fouling from the irrigation system.]