

### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

### July 8, 2013

Judy Eldem, Regulatory Manager AllChem Performance Products, Inc. 416 South Main Street Corsicana, TX 75110

SUBJECT:

FQPA Code 302 Label Amendment per Agency Letter

PRODUCT NAME: Clor Mor Calcium Hypochlorite Tablets

EPA REGISTRATION NUMBER: 69681-14

APPLICATION DATE: April 25, 2013

APPLICATION RECEIVED DATE: April 30, 2013

### Dear Ms. Eldem:

This acknowledges receipt of your Label Amendment application, submitted pursuant to registration under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) 3(c) 7(A), as amended.

### Pesticide Application:

"...AllChem has removed all references to "fogging/misting" and/or "fog/mist" applications on our attached label. AllChem has also added the following statement as outlined in the Agency's Letter: "This product may be applied only by methods specified on the labeling." All changes have been highlighted on the red-lined copy of the attached label."

### On Page Two:

Inserted: "This product may be applied only by methods specified on the labeling."
On Page Six:

Deleted all references to "fog" in "Spray/Fog Method" of "Sanitization Of Porous Food Contact Surfaces" subsection and also in "Spray/Fog Method" of "Immersion Method" subsection above it.

### On Page Seven:

Deleted all references to "fog" in "Spray Method" of "Sanitization of Porous Non-Food Contact Surfaces" subsection and also in "Spray Method" of "Sanitization of Nonporous Non-Food Contact Surfaces" subsection that begins on Page Six.

### On Page Seventeen:

Inserted: "This product may be applied only by the method specified on the labeling." On Page Twenty:

Deleted all references to "fog" in "Spray/Fog Method" of "Clean-In-Place Method" subsection and also in "Spray/Fog Method" of "Sanitization Of Porous Food Contact Surfaces" subsection and also in "Spray Method" of "Sanitization Of Porous Non-Food Contact Surfaces" subsection.

### General Comments:

Based on the review of the submitted material, the following comments apply. The Label Amendment application is **Acceptable.** An EPA-stamped **Accepted** Product Label is enclosed for your Company record. And a copy of the EPA-stamped **Accepted** Product Label is attached in **Regulatory File Jacket 69681-14** for future reference.

If you have questions or comments with regard to this Agency Letter, the please contact Killian Swift via email at **Swift.Killian@epa.gov** or by telephone at **703-308-6346.** When you are submitting information or data in response to this Agency Letter, please send a copy of this Agency Letter with your response in order to facilitate processing.

Sincerely yours,

Demson Fuller,

Acting EPA Product Manager 32 Regulatory Management Branch II Antimicrobials Division 7510P

Enclosure: EPA-stamped Accepted "Clor Mor Calcium Hypochlorite Tablets" Product Label.

{Text in brackets [xxx] is optional and may or may not be included on any final label.} {Text in braces (xxx} is for administrative purposes and will not appear on any final label.}

## CLOR MOR CALCIUM HYPOCHLORITE TABLETS

{Optional marketing statements.}

[For Commercial Pool Use]

[Chlorinating Tablets for Calcium Hypochlorite Tablet [and Briquette] Feeders]

[For Swimming Pool Disinfection, Potable Water Treatment, and Sewage and Waste Water Applications]

[For Sewage and Waste Water Applications]

[For Industrial Use Applications]

[For Industrial and Institutional Uses]

[Disinfectant]

[For Use in [Small] Tablet [and Briquette] Feeders]

[For Use in Large Tablet Feeders]

[Kills Bacteria]

[Controls Algae]

[Contains no cyanuric acid]

[For multi-purpose chlorinating uses]

[For potable water treatment systems]

[For Emergency Potable Water Disinfection]

[For Use on Farm Premises]

[1" Tablets]

[2 5/8" Tablets]

[3" Tablets]

[With Scale Inhibitor]

[For Hard Water Areas]

[Now with Anti-Scale Inhibitor]

[With Anti-Scale Inhibitor]

[Formulated with Anti-Scale Inhibitor]

[Formulated with Scale Inhibitor]

[For Spa and Hot Tubs]

[For Decorative and Interactive Fountains and Water Features]

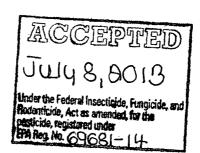
[For Irrigation Systems]

[See Collateral Booklet] [For additional listing of end-uses]

**ACTIVE INGREDIENT:** 

Calcium Hypochlorite...... 68% OTHER INGREDIENTS: ..... 32%

Available Chlorine 65%



# KEEP OUT OF REACH OF CHILDREN DANGER

### **FIRST AID**

IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call poison control center or doctor for treatment advice.

IF SWALLOWED: Call 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 poison control center or doctor. Do not give anything by mouth to an unconscious person.

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 poison control center or doctor for treatment advice.

NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric layage.

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

For emergency information on this product, call the National Pesticides Information Center at 1-800-858-7378, 6:30 AM to 4:30 PM Pacific time (PT), seven days a week. During other times, call the poison control center 1-800-222-1222.

SEE [BACK] [SIDE] PANEL FOR [FIRST AID AND] ADDITIONAL PRECAUTIONARY STATEMENTS. FIRE OR EXPLOSION COULD RESULT FROM IMPROPER USE. DO NOT USE THIS PRODUCT IN ANY FEEDER, SKIMMER OR OTHER CHLORINATING DEVICE IN WHICH ANY OTHER CHLORINATING COMPOUND HAS BEEN USED.

Net Weight:	

### PRECAUTIONARY STATEMENTS:

HAZARDS TO HUMANS AND DOMESTIC ANIMALS: DANGER. Highly corrosive. Causes irreversible eye damage. Do not get in eyes or on clothing. May be fatal if swallowed. Wear rubber gloves and protective eyewear such as goggles, face shield, or safety glasses. Do not breathe dust and fumes. 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.

{Environmental hazards statement for end-use products in containers less than 5 gallons (liquid) or less than 50 pounds (solid, dry weight)} ENVIRONMENTAL HAZARDS: This pesticide is toxic to fish and aquatic organisms.

{Environmental hazards statement for end-use products in containers greater than or equal to 5 gallons (liquid) or greater than or equal to 50 pounds (solid, dry weight) or all container sizes of technical grade or manufacturing use products registered for industrial/commercial/institutional water treatment or processing uses}

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 local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

### PHYSICAL AND CHEMICAL HAZARDS:

### CONTAMINATION MAY CAUSE FIRE OR EXPLOSION! MIX ONLY INTO WATER

DANGER: STRONG OXIDIZING AGENT. Add only into water. Use clean, dry utensils. Contamination may start a chemical reaction with generation of heat, liberation of hazardous gases, and possible fire and explosion. Avoid any contact with chame or burning material, such as a lighted cigarette. Do not contaminate with moisture, garbage, dirt, organic matter, chemicals, including pool chemicals, pool chlorinating compounds, household products, Cyanuric acid pool water stabilizers, soap products, paint pfoducts, solvents, acids, vinegar, beverages, oils, pine oil, dirty rags or any other foreign matter. Do not use this product in any automatic childrinating device to then than calcium hypochlorite tablet [or briquette] feeder systems. Do not use Trichloro-s-triazinetrione tablets or any other chlorinating compound in systems that use this product. Do not add this product to any dispensing device containing remnants of any other groduct. Such improper use may cause a violent reaction leading to fire or explosion. In case of contamination or decomposition, do not reseal container. If possible, isolate container in open air or well ventilated area. Flood with large volumes of water if necessary.

### **DIRECTIONS FOR USE**

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. Read entire label and use directly in accordance with precautionary statements and use directions. This product may be applied only by the methods specified on the labeling.

### SWIMMING POOL WATER DISINFECTION

Easy to use Calcium Hypochlorite Tablets are designed for use with calcium hypochlorite [tablet] [puck] [or] [and] [briquette] feeders. When used according to the instructions provided with the feeder, this product provides a steady supply of available chlorine while the pools filtration system is in operation. Available chlorine controls the growth of algae and effectively kills many bacteria.

- 1. Read the Installation and Operations Manual for your calcium hypochlorite tablet [or briquette] feeder system.
- 2. Start the filter pump and check free available chlorine residual with a reliable test kit.
- 3. Fill the feeder hopper with this product. Adjust device's feed rate setting according to the operation instructions in the manual. Use calcium hypochlorite tablets only in calcium hypochlorite tablet [or briquette] feeder systems.
- 4. After 24 hours, check the chlorine residual. If 1.0 to 5.0 ppm, do not change the feed rate setting. If below 1.0 ppm, increase the feed rate. Allow sufficient time (e.g. one day) after changing the feed rate setting for the chlorine residual to readjust. The pool must not be used until the 1.0 to 3.0 ppm free chlorine residual is established.
- 5. Always maintain pH between 7.2 and 7.6 by using a suitable pH adjustment product according to that product's label directions.
- 6. If stabilizer (cyanuric acid) is used to protect chlorine residual from breakdown by sunlight, follow label application directions for the stabilizer product and maintain the chlorine residual at 1.0 to 3.0 ppm as determined by a test kit.

Note: If algae develops, adjust pH to 7.2 - 7.4. Fill the feeder hopper with this product. Thoroughly clean pool by brushing surface of algae growth and vacuum to waste. Increase the feed rate setting until a 5.0 ppm free chlorine residual is maintained. If algae persist, establish and maintain a 5.0 - 10.0 ppm free chlorine residual for at least 4 hours or until algae is visually eliminated. Reentry is prohibited above levels of

3 ppm chlorine due to risk of bodily injury. Alternative EPA registered algaecides must be used according to those products' label directions.

[WATER BALANCE: For best product performance, swimmer comfort and crystal clear water, maintain pH in the 7.2-7.6 range. Maintain total alkalinity in the 60-120 parts per million (ppm ranges). Maintain calcium hardness above 200 ppm. Use a reliable test kit that measures all these ranges. [Use (brand name) to make adjustments.] Follow label directions for each product.] SUPERCHLORINATION: For pools stabilized with cyanuric acid, periodic superchlorination is necessary to provide sufficient free available chlorine to control algae, destroy unfiltered organic contaminants, minimize odors and keep your water sparkling clear. Superchlorinate with a suitable product following directions on that product's label. Superchlorinate every 14 days when the temperature of the water is below 80° F. Treatment every 7 days is recommended when the temperature is higher, bathing loads are heavy, pool water appears dull or hazy, an unpleasant chlorine-like smell is present, excessive eye irritation occurs, or after heavy rains. Check the level of residual chlorine with a reliable test kit. Reentry is prohibited above levels of 3 ppm chlorine due to risk of bodily injury.

{The following is not essential information and may or may not appear on swimming pool use directions, at AllChem's discretion.}

HOW TO CALCULATE POOL CAPACITY

SHAPE OF POOL

GAL. OF WATER (Dimensions in ft.)

Rectangular. . . . . . . Length x width x avg. depth x 7.5

Circular..... Diameter x diameter x avg. depth x 5.9

Oval with straight sides . . Long diameter x short diameter x avg. depth x 6.7

### **SPA AND HOT TUBS**

Apply 0.5 ounces of product per 500 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 7.6. Some oils, lotions, fragrances, cleaners, etc. cause foaming or cloudy water as well as reduce the efficiency of the product. To maintain the water, apply 0.5 oz. of product per 500 gallons of water over the surface to maintain a chlorine concentration of 5 ppm. Do not enter spa until chlorine residual is 2-5 ppm. After each use, shock exith 1.5 oz. of this product per 500 gallons of water to control odor and algae.

### 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, if 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, crust be the final and primary standard and the chlorine residual must 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 must 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 of contact time.

### SEWAGE & WASTEWATER TREATMENT

EFFLUENT SLIME CONTROL: Apply a 100 to 1,000 ppm available chlorine solution at a location that 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 this 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.

### <u>DISINFECTION OF DRINKING WATER</u> (EMERGENCY / PUBLIC / INDIVIDUAL SYSTEMS)

**PUBLIC SYSTEMS:** Add this product at the rate of 1 oz. of this product to 6,000 gallons of water to be treated using 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 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, DRIVEN & BORED WELLS: Run pump until water is as free from turbidity as possible. Pour a 100 ppm available chlorine sanitizing solution into the well. This solution can be made by thoroughly mixing 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 will 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 must 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 be made palatable by pouring it between clean containers several times.

### **PUBLIC WATER SYSTEMS**

[RESERVOIRS - ALGAE CONTROL: Hypochlorinate streams feeding the reservoir. Suitable feeding points finds be selected on each stream at least 50 yards upstream from the point of entry into the reservoir.][Not approved for use in the State of the York.]

MAINS: Thoroughly flush section to be sanitized by discharging from hydrants. Permit a water flow of at least 2.5 feet per fainute 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 must be pumped or fed by gravity into the well after thorough mixing with agitation. The well must stand for several hours or overnight under chlorination. It must 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 for at least 4 hours. Drain and place in service. If previous treatment is not practical, surfaces must 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.

### 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. Retreat well 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.] [Not approved for use in the State of New York.]

**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 to 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 must be distributed over the surface at the rate of 16 oz. per 20 sq. ft. Water must stand at a depth of 1 foot above the surface of the filter bed for 4 to 24 hours. When filter beds can be backwashed 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 backwashing.

**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.

### **EMERGENCY DISINFECTION AFTER FIRES**

CROSS CONNECTIONS OR EMERGENCY CONNECTIONS: Hypochlorination or gravity feed equipment must 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.

### **EMERGENCY DISINFECTION AFTER DROUGHTS**

**SUPPLEMENTARY WATER SUPPLIES:** Gravity or mechanical hypochlorite feeders must 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 5 gallons of water. During the filling of the containers, dose with sufficient amounts of this product to provide at least a 0.2 ppm chlorine residual. Use a chlorine test kit. [Not approved for use in the State of California.]

### **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.

### SANITIZATION OF NONPOROUS FOOD CONTACT SURFACES

RINSE METHOD: A solution of 100 ppm available chlorine must 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 ensure 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 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 must be used for general cleaning but must not be reused for sanitizing purposes.

IMMERSION METHOD: A solution of 100 ppm available chlorine must 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 ensure 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 surfaces 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 must be used for general cleaning but must 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 ensure 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 ensure contact with all internal surfaces. Remove some cleaning solution from drain valve and test with a chlorine test kit. Repeat entire cleaning/sanitizing process if effluent contains less than 50 ppm available chlorine.

SPRAY 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 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 that 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 with a 200 ppm available chlorine solution. Prepare a 200 ppm sanitizing solution by thoroughly mixing 1 oz. of this product with 20 gallons of water.

### 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 20 gallons of water. Clean equipment in the normal manner. Prepare a 200 ppm sanitizing solution by thoroughly mixing 2 oz. of this product with 10 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.

**SPRAY 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 3 oz. product with 20 gallons of water. Use spray equipment that 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 with a 200 ppm available chlorine solution. Prepare a 200 ppm sanitizing solution by thoroughly mixing 1 oz. of this product with 20 gallons of water.

### 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.

**SPRAY METHOD:** Pre-clean all surfaces after use. Prepare a 200 ppm available chlorine sanitizing solution of sufficient size by thoroughly mixing this product in a ratio of 1 oz. product with 20 gallons of water. Use spray equipment that 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.

### **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 disinfecting 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 solution to drain. Do not rinse equipment with water after treatment.

### 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.

**IMMERSION 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.

**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 that 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.

### **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 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. 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 daily, or as needed to maintain control and keep the chlorine residual at 1 ppm. 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 from 5 to 10 ppm available chlorine.

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

### 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 from 5 to 10 ppm available chlorine. Apply half (or 1/3, 1/4, or 1/5) of this initial dose when half (or 1/3, 1/4, or 1/5) of the water in the system has been lost by blow down.

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. 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 from 5 to 10 ppm available chlorine.

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

### **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 1000 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 liter 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.

### **AQUACULTURE USES**

[FISH PONDS: Remove fish from ponds prior to treatment. Thoroughly mix 20 oz. of this product into 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 must 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 degrees F to obtain 0.5 ppm available chlorine. Expose oysters to the 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 degrees F. Not for Use in California]

[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 zero ppm, as determined by a test kit.]

### AGRICULTURAL USES

[POST-HARVEST PROTECTION: Potatoes can be sanitized after cleaning and prior to storage by spraying with sanitizing solution at a level of 1 gallon of sanitizing solution per 1 ton of potatoes. Thoroughly mix 1 oz. of this product to 10 gallons of water to obtain 500 ppm available chlorine.

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. This solution is made by thoroughly mixing ½ Tsp. of this product to 200 gallons of water. The bee domicile is disinfected by spraying with a 0.1 ppm solution until all surfaces are thoroughly wet. 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 must 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 must not be reused to sanitize eggs.]

[FRUIT AND VEGETABLE WASH: Thoroughly clean all fruits and vegetables in a wash tank. Thoroughly mix 1 oz. of this product in 200 gallons of water to make a sanitizing solution of 25 ppm available chlorine. After draining the tank, submerge fruit or vegetables for 2 minutes in a second wash tank containing the recirculating sanitizing solution. Spray rinse vegetables with the sanitizing solution prior to packaging. Rinse fruit with potable water only prior to packaging.]

[SEEDS: To control bacterial spot (Xanthosmonas vesticatoris) 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 must be made by mixing 8 oz. of this product with 1 gallon of water.]

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

### 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 degrees 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 for decontaminating single and multi-patient 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 will 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 acceptable levels when used as directed. This product must be used in a disinfectant program which includes bacteriological monitoring of the hemodialysate delivery system. This product is NOT for use in hemodialysate or reverse osmosis (RO) membranes. Consult the guidelines for hemodialysates systems available from the Hepatitis Laboratories, CDC, Phoenix, AZ 85021)

### TOILET BOWL SANITIZERS

These products are marketed as individual packages for placement in the toilet. Therefore, use directions are not appropriate. {Claims are limited to sanitization. No claims for disinfection are permitted}

### 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.

### **BOAT BOTTOMS**

To control slime on boat buttons, 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 must contain approximately 500 gallons of water for a 14 foot boat. Add 35 oz. of this product to this water to obtain a 35ppm 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 zero ppm as determined by a swimming pool test kit.

### ARTIFICIAL SAND BEACHES

To sanitize 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.

### 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 must be fed into the water supply by a hypochlorinator on the intake side of the pump. An available chlorine residual of 0.1 to 0.6 ppm must be maintained throughout the water distribution system to assure adequate disinfection. A regular testing program must be initiated to make sure that the proper chlorine residuals are present at all times. To make a 1% solution, mix 10 oz of this product into 5 gallons of water.

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 must 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, mix 10 oz. of this product into 5 gallons of water.

**POULTRY DRINKING WATER:** Spray or flush with a solution containing 1 oz. of this product for every gallon of water. Treat poultry drinking water to a dosage of 1 to 5 oz. of this product per 5,000 gallons of water.

**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 are placed in a rotary cleaner where they are washed, drained and soaked in a 2% sulfuric 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 % sulfuric acid bath at 80 to 90°F. They are then dried.

CONTROL OF BACTERIA, ALGAE, SLIME BUILD-UP AND CLOGGING IN SPECIFIED IRRIGATION SYSTEMS: [This product is] {or} [brand name are] designed to be used in a tablet chlorinator system. Use a suitable chemical feed dispenser to dissolve and dose the chlorinated solution. The Application Rates section provides the levels of free residual chlorine needed to prevent or address biofouling occurring in drip, trickle irrigation systems. When utilizing a metering pump, refer to the instruction manual for varying the output of the pump. This product is to be applied through drip/trickle and sprinkler irrigation systems only for agricultural crops only 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 is necessary. The level of free residual 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 chlorine (also called "free residual" or "free available" chlorine)."

Periodic shock treatments at a higher available chlorine rate of up to 20 ppm free residual is 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 available chlorine, is for reclaiming low-volume irrigation systems if clogged by algae and bacterial slimes. Set the metering pump to deliver 100 ppm in the drip system and monitor the free chlorine residual at the end of the farthest lateral. As soon as it is established that the free residual reading is between 10-20 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 chlorine concentration (ppm) at the end of the treated increment in the field and adjust the dose setting until the desired free chlorine concentration is obtained. This is because contaminants in the water consume available chlorine resulting in a concentration that is less than the concentration desired as specific above. Only experience can establish the actual metering pump settings required to provide the amount of free chlorine at the end of the farthest lateral (and consequent treatment of the irrigation system). Normally the treatment level at the end of the farthest lateral will be 1-2 ppm free chlorine.]

### [GENERAL APPLICATION INSTRUCTIONS

Chlorination must be started during irrigation, near the end of the irrigation sequence, but early enough to establish the desired free chlorine concentration throughout the system being treated.

Apply this product upstream of the filter to help keep filter clean.

Determine the level of free chlorine as described above, using a free 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 available chlorine and 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 metering pump use instructions as needed.]

### DECORATIVE AND INTERACTIVE FOUNTAINS AND WATER FEATURES HOW TO APPLY TO DECORATIVE AND INTERACTIVE FOUNTAINS AND WATER FEATURES:

Initial Chlorination: Begin operation of your recirculation equipment. Balance the water by making certain the water parameters for pH, total alkalinity and water hardness are in their proper range, provided in Table 1. Shock treat the water. Follow label directions of the product used as recommended. Allow 30 minutes for the product to disperse, then determine the free chlorine residual using a pool test kit. If no residual is found, superchlorinate again. Repeat treatment, as needed, until the chlorine residual is 1.0 ppm. If a stabilizer is used, check and adjust stabilizer to proper level (10-20 ppm). Do not enter the water until the free chlorine residual is 4.0 ppm or less. Begin routine Chlorination.

Routine Chlorination: The pH, total alkalinity, water hardness, and stabilizer concentration must be maintained at values in Table 1 under "Regular Treatment." Actual dosages of this product required to maintain the desired free chlorine residual will vary with sunlight, water temperature, bathing load, stabilizer concentration, water balance, and other factors. Use a test kit frequently to determine and maintain the proper free chlorine residual. Fill chlorinator with Tablets. Adjust flow control valve to initial setting described in Instruction Manual. Adjust tablet delivery, as needed, to maintain a 1-3 ppm free available chlorine residual. Use a DPD test kit daily to determine and maintain the proper free chlorine residual. Do not use an OTO test kit.

How to adjust: These tablets are designed to be dispensed using the Chlorinators. To decrease tablet delivery rate: Reduce water flow through the chlorinator. To increase tablet delivery rate: Increase water flow through the chlorinator. Do not throw the tablets directly into the water or allow tablets to contact plastic or steel linings.

Fill the [skimmer] [dispenser] with Tablets, adjust dispenser lid to half open and place the dispenser in the skimmer basket. Follow dispenser directions to adjust chlorine residual. Adjust tablet delivery, as needed, to maintain a 1-3 ppm free available chlorine residual. Only for use in dispensers designed for calcium hypochlorite tablets. Run circulation system at least 12 hours each day. Re-fill [skimmer] [dispenser] with Tablets each week. Use 3-way test strips or a DPD test kit daily at first and then at least once each week to determine and maintain the proper free chlorine residual. Do not use an OTO test kit.

How to adjust: These Tablets are designed to be dispensed using the [skimmer] [dispenser]. To decrease tablet delivery rate: Close the adjustable dispenser lid to reduce the flow of water to the tablet surface. To increase tablet delivery rate: 1) Fully open or remove adjustable dispenser lid, 2) Use a second skimmer dispenser, if you have space, 3) Increase circulation time, 4) Increase water flow through the skimmer. Do not throw the tablets directly into the water or allow tablets to contact plastic or steel linings.

### ADDITIONAL INSTRUCTIONS FOR WATER FEATURES AND FOUNTAIN CARE:

Regular Treatment: Maintain water parameters in the ranges in Table 1 or at levels required by local regulations. This product will raise the pH of water. If your pH measures 7.4 or higher, adjust it downward to between 7.2 to 7.4. This will help avoid clouding of water and allow for faster dispersion of the product. Obtain and make use of a pool test kit to measure pH, free chlorine residual, total alkalinity, water hardness, and cyanuric acid concentration.

Table 1. Parameters for Water Features or Fountains

Parameter	Test Frequency	Level
pH	Daily	7.2 to 7.4
Fee Chlorine Residual	Daily	1 to 3 ppm in unstabilized water 2 to 4 ppm in minimum in stabilized water
Total Alkalinity as CaCO3	Weekly	80 – 100 ppm
Stabilizer (Cyanuric Acid)	Monthly	10 – 20 ppm
Water hardness as CaCO3	Monthly	200 ppm minimum

WARRANTY STATEMENT: Buyer assumes all responsibility for safety and use not in accordance with directions.

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[STORAGE AND DISPOSAL - {For pesticides with only household/residential uses in nonrefillable containers.}

**STORAGE:** Keep this product dry in tightly closed container when not in use. Store in 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 materials before discarding this container.

### CONTAINER HANDLING AND DISPOSAL:

Nonrefillable container (bottles/pails). Do not reuse or refill this container (bottles/pails). If empty: Offer for recycling if available or discard in a sanitary landfill. If partly filled: Call your local solid waste agency for disposal instructions. Never place unused product down any indoor or outdoor drain.]

[STORAGE AND DISPOSAL – {For all pesticides except products with only household/residential uses in nonrefillable containers}. Do not contaminate water, food, or feed by storage and disposal.

**PESTICIDE STORAGE:** Keep this product dry in tightly closed container when not in use. Store in 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 materials before discarding this container. Do not reuse empty container but place in trash collection.

**PESTICIDE DISPOSAL**: Pesticide wastes may be hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the hazardous Waste representative at the EPA Regional Office for guidance.

**CONTAINER HANDLING:** Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying.

{Rigid nonrefillable containers small enough to shake with capacities equal to or less than 5 gallons or 50 lbs.}

[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. Then offer for recycling if available or reconditioning if appropriate or puncture and dispose of in trash or in sanitary landfill, or incinerations, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.]

{Rigid nonrefillable containers too large to shake with capacities greater than 5 gallons or 50 lbs}

[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. Then offer for recycling if available or reconditioning if appropriate or puncture and dispose of in trash or in sanitary landfill, or incinerations, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.]

CONTAINER HANDLING AND DISPOSAL (FIBERBOARD): Nonrefillable container. Do not reuse or refill this container. Completely empty liner by shaking and tapping sides or bottom to loosen clinging particles. Empty residue into application equipment. Offer for recycling if available or dispose of in a sanitary landfill or by incineration. If drum is contaminated and cannot be reused, dispose of it in the manner required for its liner.

EPA REG. NO. 69681-14

EPA EST. NO. xxxxx-xxx

AllChem Performance Products, Inc. 416 South Main Street / Corsicana, TX 75110

[{Supplemental labeling for Agricultural Use}

"Agricultural Use Requirements: Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. Refer to supplemental labeling under "Agricultural Use Requirements" in the Directions for use section for information about this standard."

Directions for Use: It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers must be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulations.

### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Workers Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, green houses, 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 this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours. PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil or water is:

Coveralls over long-sleeved shirt and long pants

Waterproof gloves

Chemical-resistant footwear plus socks

Protective eyewear

Chemical-resistant headgear for overhead exposure

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

[Precautionary Statement: Hazards to Humans and Domestic Animals:.DANGER. PELIGRO. Highly Corrosive. Causes irreversible eye damage. Do not get in eyes or on clothing. May be fatal if swallowed. Wear rubber gloves and protective eyewear such as goggles, face shield, or safety glasses. Do not breathe dust and fumes. 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. Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail).

Personal Protective Equipment: Mixers and Loaders of the concentrate product must wear:

Coveralls over long-sleeved shirt and long pants

Waterproof gloves

Chemical-resistant footwear plus socks

Protective eyewear

Chemical-resistant headgear for overhead exposure

Chemical-resistant apron when cleaning equipment, mixing or loading

Dust/mist filtering respirator (MSHA/NIOSH...D/M approval # prefix TC-21C).

Applicators and other handlers of the diluted (100 – 200 ppm Solution) must wear:

Coveralls over long-sleeved shirt and long pants

Waterproof gloves

Chemical-resistant footwear plus socks

Protective eyewear

Chemical-resistant headgear for overhead exposure

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate.]

[{Supplemental labeling for Agricultural Use}

### FOR USE ON SEEDS FOR SPROUTING AS FOOD FOR HUMAN CONSUMPTION.

While this treatment will reduce populations of food poisoning on seeds intended for sprout production, it will not eliminate these organisms on the seeds. Additionally, treatment will not reduce or eliminate these organisms on the final sprouts. In addition to these direction, follow the Food & Drug Administration "Guidance for Industry: Reducing Microbial Food Safety Hazards for Sprouted Seeds" and "Guidance for Industry: Sampling and Microbial Testing of Spent Irrigation Water During Sprout Production."

Dosage: Preparation of Calcium Hypochlorite Solution

In a well-ventilated area, prepare a 2% (20,000 ppm available chlorine) solution by dissolving 4.1 oz. of product that contains 65% available chlorine into 1 gallon of potable water (see table below for preparing various amount of treatment solution).

Available Chlorine	Gallons of water						
%	ppm	1	5	15	30	50	100
		4.1					
2.0	20,000	oz	1 lb 5 oz	3 lbs 13 oz	7 lbs 11 oz	12 lbs 13 oz	25 lbs 10 oz

### Frequency/Timing of Application:

Pre-wash seeds with potable water for at least 5 minutes. Treat pre-washed seeds once by soaking 5 pounds of seeds in 1 gallon of 2% (20,000 ppm available chlorine) calcium hypochlorite solution for 15 minutes at room temperature with continuous agitation. After treatment, drain solution and rinse treated seeds thoroughly with potable water for 10 minutes (changing the water several times, as necessary). Prepare fresh solution for each batch of seeds.

### Restricted Entry Interval (REI): 12 Hours

[The US EPA has determined that the REI applies when the calcium hypochlorite is sprayed on the benches or areas around the soaking containers. Note: The REI is not applicable when the disinfectant is applied directly to the raw commodity (seeds) by soaking in a container/bin. There are no re-entry interval concerns when treating pests in this manner (soaking).]]

{Collateral Booklet – this information will be provided in a separate booklet when not all end-uses can be printed on the finished product label}

### [CLOR MOR CALCIUM HYPOCHLORITE TABLETS] [Product Name]

**ACTIVE INGREDIENT:** 

Calcium Hypochlorite...... 68% OTHER INGREDIENTS:..... 32%

TOTAL . . . . . . . . . . . . . . . . . . 100%

Available Chlorine 65%



# KEEP OUT OF REACH OF CHILDREN DANGER

### **FIRST AID**

IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call poison control center or doctor for treatment advice.

IF SWALLOWED: Call 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 poison control center or doctor. Do not give anything by mouth to an unconscious person.

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 poison control center or doctor for treatment advice.

NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.

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

For emergency information on this product, call the National Pesticides Information Center at 1-800-858-7378, 6:30 AM to 4:30 PM Pacific time (PT), seven days a week. During other times, call the poison control center 1-800-222-1222.

FIRE OR EXPLOSION COULD RESULT FROM IMPROPER USE. DO NOT USE THIS PRODUCT IN ANY FEEDER, SKIMMER OR OTHER CHLORINATING DEVICE IN WHICH ANY OTHER CHLORINATING COMPOUND HAS BEEN USED.

Net Weight:

READ ENTIRE LABEL BEFORE USING THIS PRODUCT.

### PRECAUTIONARY STATEMENTS:

HAZARDS TO HUMANS AND DOMESTIC ANIMALS: DANGER. Highly corrosive. Causes irreversible eye damage. Do not get in eyes or on clothing. May be fatal if swallowed. Wear rubber gloves and protective eyewear such as goggles, face shield, or safety glasses. Do not breathe dust and fumes. 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.

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 local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

PHYSICAL AND CHEMICAL HAZARDS:CONTAMINATION MAY CAUSE FIRE OR EXPLOSION! MIX ONLY INTO WATER. DANGER: STRONG OXIDIZING AGENT. Add only into water. Use clean, dry utensils. Contamination may start a chemical reaction with generation of heat, liberation of hazardous gases, and possible fire and explosion. Avoid any contact with flame or burning material, such as a lighted cigarette. Do not contaminate with moisture, garbage, dirt, organic matter, chemicals, including pool chemicals, pool chlorinating compounds, household products, Cyanuric acid pool water stabilizers, soap products, paint products, solvents, acids, vinegar, beverages, oils, pine oil, dirty rags or any other foreign matter. Do not use this product in any automatic chlorinating device other than calcium hypochlorife tablet feeder systems. Do not use Trichloro-s-triazinetrione tablets or any other chlorinating compound in systems that use this product. Do not add this product to any dispensing device containing remnants of any other product. Such improper use may cause a violent reaction leading to fire or explosion. In case of contamination or decomposition, do not reseal container. If possible, isolate container in open air or well ventilated area. Flood with large volumes of water if necessary.

### STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage and disposal.

**PESTICIDE STORAGE:** Keep this product dry in tightly closed container when not in use. Store in 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 materials before discarding this container. Do not reuse empty container but place in trash collection.

**PESTICIDE DISPOSAL**: Pesticide wastes may be hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the hazardous Waste representative at the EPA Regional Office for guidance.

**CONTAINER HANDLING:** Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ½ 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. Then offer for recycling if available or reconditioning if appropriate or puncture and dispose of in trash or in sanitary landfill, or incinerations, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

**CONTAINER HANDLING AND DISPOSAL (FIBERBOARD):** Nonrefillable container. Do not reuse or refill this container. Completely empty liner by shaking and tapping sides or bottom to loosen clinging particles. Empty residue into application equipment. Offer for recycling if available or dispose of in a sanitary landfill or by incineration. If drum is contaminated and cannot be reused, dispose of it in the manner required for its liner.

EPA REG. NO. 69681-14

EPA EST. NO. 69681-TX-001

AllChem Performance Products, Inc. 416 South Main Street / Corsicana, TX 75110

### **DIRECTIONS FOR USE**

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. Read entire label and use strictly in accordance with precautionary statements and use directions. This product may be applied only by the methods specified on the labeling.

### SWIMMING POOL WATER DISINFECTION

Easy to use Calcium Hypochlorite Tablets are designed for use with calcium hypochlorite tablet feeders. When used according to the instructions provided with the feeder, this product provides a steady supply of available chlorine while the pools filtration system is in operation. Available chlorine controls the growth of algae and effectively kills many bacteria.

- 1. Read the Installation and Operations Manual for your calcium hypochlorite tablet feeder system.
- 2. Start the filter pump and check free available chlorine residual with a reliable test kit.
- 3. Fill the feeder hopper with this product. Adjust device's feed rate setting according to the operation instructions in the manual. Use calcium hypochlorite tablets only in calcium hypochlorite tablet feeder systems.
- 4. After 24 hours, check the chlorine residual. If 1.0 to 5.0 ppm, do not change the feed rate setting. If below 1.0 ppm, increase the feed rate. Allow sufficient time (e.g. one day) after changing the feed rate setting for the chlorine residual to readjust. The pool must not be used until the 1.0 to 3.0 ppm free chlorine residual is established.
- 5. Always maintain pH between 7.2 and 7.6 by using a suitable pH adjustment product according to that product's label directions.
- 6. If stabilizer (cyanuric acid) is used to protect chlorine residual from breakdown by sunlight, follow label application directions for the stabilizer product and maintain the chlorine residual at 1.0 to 3.0 ppm as determined by a test kit.

Note: If algae develops, adjust pH to 7.2 - 7.4. Fill the feeder hopper with this product. Thoroughly clean pool by brushing surface of algae growth and vacuum to waste. Increase the feed rate setting until a 5.0 ppm free chlorine residual is maintained. If algae persist, establish and maintain a 5.0 - 10.0 ppm free chlorine residual for at least 4 hours or until algae is visually eliminated. Reentry is prohibited above levels of 3 ppm chlorine due to risk of bodily injury. Alternative EPA registered algaecides must be used according to those products' label directions.

WATER BALANCE: For best product performance, swimmer comfort and crystal clear water, maintain pH in the 7.2-7.6 range. Maintain total alkalinity in the 60-120 parts per million (ppm ranges). Maintain calcium hardness above 200 ppm. Use a reliable test kit that measures all these ranges. Follow label directions for each product.

SUPERCHLORINATION: For pools stabilized with cyanuric acid, periodic superchlorination is necessary to provide sufficient free available chlorine to control algae, destroy unfiltered organic contaminants, minimize odors and keep your water sparkling clear. Superchlorinate with a suitable product following directions on that product's label. Superchlorinate every 14 days when the temperature of the water is below 80° F. Treatment every 7 days is recommended when the temperature is higher, bathing loads are heavy, pool water appears dull or hazy, an unpleasant chlorine-like smell is present, excessive eye irritation occurs, or after heavy rains. Check the level of residual chlorine with a reliable test kit. Reentry is prohibited above levels of 3 ppm chlorine due to risk of bodily injury.

### HOW TO CALCULATE POOL CAPACITY

SHAPE OF POOL<br/>Rectangular.GAL. OF WATER (Dimensions in ft.)Length x width x avg. depth x 7.5Circular.Diameter x diameter x avg. depth x 5.9

Oval with straight sides . . Long diameter x short diameter x avg. depth x 6.7

### SPA AND HOT TUBS

Apply 0.5 ounces of product per 500 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 7.6. Some oils, lotions, fragrances, cleaners, etc. cause foaming or cloudy water as well as reduce the efficiency of the product. To maintain the water, apply 0.5 oz. of product per 500 gallons of water over the surface to maintain a chlorine concentration of 5 ppm. Do not enter spa until chlorine residual is 2-5 ppm. After each use, shock with 1.5 oz. of this product per 500 gallons of water to control odor and algae.

### **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, if 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, must be the final and primary standard and the chlorine residual must 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.

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3. Dosage/Residual Control: Successful disinfection is extremely dependent on response to fluctuating chlorine demand to maintain a predetermined, desirable chlorine level. Secondary effluent must 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 of contact time.

### SEWAGE & WASTEWATER TREATMENT

**EFFLUENT SLIME CONTROL:** Apply a 100 to 1,000 ppm available chlorine solution at a location that 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 this 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.

### DISINFECTION OF DRINKING WATER

### (EMERGENCY / PUBLIC / INDIVIDUAL SYSTEMS)

PUBLIC SYSTEMS: Add this product at the rate of 1 oz. of this product to 6,000 gallons of water to be treated using 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 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, DRIVEN & BORED WELLS: Run pump until water is as free from turbidity as possible. Pour a 100 ppm available chlorine sanitizing solution into the well. This solution can be made by thoroughly mixing 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 will 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 must 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 several times.

### PUBLIC WATER SYSTEMS

**RESERVOIRS - ALGAE CONTROL:** Hypochlorinate streams feeding the reservoir. Suitable feeding points must be selected on each stream at least 50 yards upstream from the point of entry into the reservoir. Not approved for use in the State of New York.

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 must be pumped or fed by gravity into the well after thorough mixing with agitation. The well must stand for several hours or overnight under chlorination. It must 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 for at least 4 hours. Drain and place in service. If previous treatment is not practical, surfaces must 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.

### 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. Retreat well 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. Not approved for use in the State of New York.

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 to 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 must be distributed over the surface at the rate of 16 oz. per 20 sq. ft. Water must stand at a depth of 1 foot above the surface of the filter bed for 4 to 24 hours. When filter beds can be backwashed 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 backwashing.

**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.

### EMERGENCY DISINFECTION AFTER FIRES

CROSS CONNECTIONS OR EMERGENCY CONNECTIONS: Hypochlorination or gravity feed equipment must 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.

### EMERGENCY DISINFECTION AFTER DROUGHTS

SUPPLEMENTARY WATER SUPPLIES: Gravity or mechanical hypochlorite feeders must 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 5 gallons of water. During the filling of the containers, dose with sufficient amounts of this product to provide at least a 0.2 ppm chlorine residual. Use a chlorine test kit. Not approved for use in the State of California.

### 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.

### SANITIZATION OF NONPOROUS FOOD CONTACT SURFACES

RINSE METHOD: A solution of 100 ppm available chlorine must 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 ensure 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 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 must be used for general cleaning but must not be reused for sanitizing purposes.

IMMERSION METHOD: A solution of 100 ppm available chlorine must 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 ensure 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 surfaces 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 must be used for general cleaning but must 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 ensure 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 ensure contact with all internal surfaces. Remove some cleaning solution from drain valve and test with a chlorine test kit. Repeat entire cleaning/sanitizing process if effluent contains less than 50 ppm available chlorine.

SPRAY 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 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 that 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 with a 200 ppm available chlorine solution. Prepare a 200 ppm sanitizing solution by thoroughly mixing 1 oz. of this product with 20 gallons of water.

### 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 20 gallons of water. Clean equipment in the normal manner. Prepare a 200 ppm sanitizing solution by thoroughly mixing 2 oz. of this product with 10 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.

SPRAY 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 3 oz. product with 20 gallons of water. Use spray equipment that 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 with a 200 ppm available chlorine solution. Prepare a 200 ppm sanitizing solution by thoroughly mixing 1 oz. of this product with 20 gallons of water.

### 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. SPRAY METHOD: Pre-clean all surfaces after use. Prepare a 200 ppm available chlorine sanitizing solution of sufficient size by thoroughly mixing this product in a ratio of 1 oz. product with 20 gallons of water. Use spray equipment that 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.

### 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 disinfecting 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 solution to drain. Do not rinse equipment with water after treatment.

### 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.

IMMERSION 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. 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 that 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.

### **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 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. 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 daily, or as needed to maintain control and keep the chlorine residual at 1 ppm. 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 from 5 to 10 ppm available chlorine.

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

### 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 from 5 to 10 ppm available chlorine. Apply half (or 1/3, 1/4, or 1/5) of this initial dose when half (or 1/3, 1/4, or 1/5) of the water in the system has been lost by blow down.

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. 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 from 5 to 10 ppm available chlorine.

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

### **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 1000 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 liter 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.

### **AQUACULTURE USES**

FISH PONDS: Remove fish from ponds prior to treatment. Thoroughly mix 20 oz. of this product into 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 must 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 degrees F to obtain 0.5 ppm available chlorine. Expose oysters to the 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 degrees F. Not approved for use in the State of California.

**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 zero ppm, as determined by a test kit.

### AGRICULTURAL USES

**POST-HARVEST PROTECTION:** Potatoes can be sanitized after cleaning and prior to storage by spraying with sanitizing solution at a level of 1 gallon of sanitizing solution per 1 ton of potatoes. Thoroughly mix 1 oz. of this product to 10 gallons of water to obtain 500 ppm available chlorine.

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. This solution is made by thoroughly mixing 1/4 Tsp. of

this product to 200 gallons of water. The bee domicile is disinfected by spraying with a 0.1 ppm solution until all surfaces are thoroughly wet. 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 must not exceed 1300 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 must not be reused to sanitize eggs.

**FRUIT AND VEGETABLE WASH:** Thoroughly clean all fruits and vegetables in a wash tank. Thoroughly mix 1 oz. of this product in 200 gallons of water to make a sanitizing solution of 25 ppm available chlorine. After draining the tank, submerge fruit or vegetables for 2 minutes in a second wash tank containing the recirculating sanitizing solution. Spray rinse vegetables with the sanitizing solution prior to packaging. Rinse fruit with potable water only prior to packaging.

SEEDS: To control bacterial spot (Xanthosmonas vesticatoris) 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 must be made by mixing 8 oz. of this product with 1 gallon of water.

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

### 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 degrees 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 for decontaminating single and multi-patient 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 will 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 acceptable levels when used as directed. This product must be used in a disinfectant program which includes bacteriological monitoring of the hemodialysate delivery system. This product is NOT for use in hemodialysate or reverse osmosis (RO) membranes. Consult the guidelines for hemodialysates systems available from the Hepatitis Laboratories, CDC, Phoenix, AZ 85021)

### TOILET BOWL SANITIZERS

These products are marketed as individual packages for placement in the toilet. Therefore, use directions are not appropriate. {Claims are limited to sanitization. No claims for disinfection are permitted}

### 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.

### **BOAT BOTTOMS**

To control slime on boat buttons, 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 must contain approximately 500 gallons of water for a 14 foot boat. Add 35 oz. of this product to this water to obtain a 35ppm 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 zero ppm as determined by a swimming pool test kit.

### ARTIFICIAL SAND BEACHES

To sanitize 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.

### 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 must be fed into the water supply by a hypochlorinator on the intake side of the pump. An available chlorine residual of 0.1 to 0.6 ppm must be maintained throughout the water distribution system to assure adequate disinfection. A regular testing program must be initiated to make sure that the proper chlorine residuals are present at all times. To make a 1% solution, mix 10 oz of this product into 5 gallons of water.

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 must 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, mix 10 oz. of this product into 5 gallons of water.

**POULTRY DRINKING WATER:** Spray or flush with a solution containing 1 oz. of this product for every gallon of water. Treat poultry drinking water to a dosage of 1 to 5 oz. of this product per 5,000 gallons of water.

**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 are placed in a rotary cleaner where they are washed, drained and soaked in a 2% sulfuric 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 % sulfuric acid bath at 80 to 90°F. They are then dried.

### CONTROL OF BACTERIA, ALGAE, SLIME BUILD-UP AND CLOGGING IN SPECIFIED IRRIGATION SYSTEMS

This product is designed to be used in a tablet chlorinator system. Use a suitable chemical feed dispenser to dissolve and dose the chlorinated solution. The Application Rates section provides the levels of free residual chlorine needed to prevent or address bio-fouling occurring in drip, trickle irrigation systems. When utilizing a metering pump, refer to the instruction manual for varying the output of the pump. This product is to be applied through drip/trickle and sprinkler irrigation systems only for agricultural crops only 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 is necessary. The level of free residual 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 chlorine (also called "free residual" or "free available" chlorine)."

Periodic shock treatments at a higher available chlorine rate of up to 20 ppm free residual is 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 available chlorine, is for reclaiming low-volume irrigation systems if clogged by algae and bacterial slimes. Set the metering pump to deliver 100 ppm in the drip system and monitor the free chlorine residual at the end of the farthest lateral. As soon as it is established that the free residual reading is between 10-20 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 chlorine concentration (ppm) at the end of the treated increment in the field and adjust the dose setting until the desired free chlorine concentration is obtained. This is because contaminants in the water consume available chlorine resulting in a concentration that is less than the concentration desired as specific above. Only experience can establish the actual metering pump settings required to provide the amount of free chlorine at the end of the farthest lateral (and consequent treatment of the irrigation system). Normally the treatment level at the end of the farthest lateral will be 1-2 ppm free chlorine.

### GENERAL APPLICATION INSTRUCTIONS

Chlorination must be started during irrigation, near the end of the irrigation sequence, but early enough to establish the desired free chlorine concentration throughout the system being treated.

Apply this product upstream of the filter to help keep filter clean.

Determine the level of free chlorine as described above, using a free 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 available chlorine and 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 metering pump use instructions as needed.

### **DECORATIVE AND INTERACTIVE FOUNTAINS AND WATER FEATURES**

### HOW TO APPLY TO DECORATIVE AND INTERACTIVE FOUNTAINS AND WATER FEATURES:

Initial Chlorination: Begin operation of your recirculation equipment. Balance the water by making certain the water parameters for pH, total alkalinity and water hardness are in their proper range, provided in Table 1. Shock treat the water. Follow label directions of the product used as recommended. Allow 30 minutes for the product to disperse, then determine the free chlorine residual using a pool test kit. If no residual is found, superchlorinate again. Repeat treatment, as needed, until the chlorine residual is 1.0 ppm. If a stabilizer is used, check and adjust stabilizer to proper level (10-20 ppm). Do not enter the water until the free chlorine residual is 4.0 ppm or less. Begin routine Chlorination.

Routine Chlorination: The pH, total alkalinity, water hardness, and stabilizer concentration must be maintained at values in Table 1 under "Regular Treatment." Actual dosages of this product required to maintain the desired free chlorine residual will vary with sunlight, water temperature, bathing load, stabilizer concentration, water balance, and other factors. Use a test kit frequently to determine and maintain the proper free chlorine residual. Fill chlorinator with Tablets. Adjust flow control valve to initial setting described in Instruction Manual. Adjust tablet delivery, as needed, to maintain a 1-3 ppm free available chlorine residual. Use a DPD test kit daily to determine and maintain the proper free chlorine residual. Do not use an OTO test kit.

How to adjust: These tablets are designed to be dispensed using the Chlorinators. To decrease tablet delivery rate: Reduce water flow through the chlorinator. To increase tablet delivery rate: Increase water flow through the chlorinator. Do not throw the tablets directly into the water or allow tablets to contact plastic or steel linings.

Fill the dispenser with Tablets, adjust dispenser lid to half open and place the dispenser in the skimmer basket. Follow dispenser directions to adjust chlorine residual. Adjust tablet delivery, as needed, to maintain a 1-3 ppm free available chlorine residual. Only for use in dispensers designed for calcium hypochlorite tablets. Run circulation system at least 12 hours each day. Re-fill dispenser with Tablets each week. Use 3-way test strips or a DPD test kit daily at first and then at least once each week to determine and maintain the proper free chlorine residual. Do not use an OTO test kit.

How to adjust: These Tablets are designed to be dispensed using the dispenser. To decrease tablet delivery rate: Close the adjustable dispenser lid to reduce the flow of water to the tablet surface. To increase tablet delivery rate: 1) Fully open or remove adjustable dispenser lid, 2) Use a second skimmer dispenser, if you have space, 3) Increase circulation time, 4) Increase water flow through the skimmer. Do not throw the tablets directly into the water or allow tablets to contact plastic or steel linings.

#### ADDITIONAL INSTRUCTIONS FOR WATER FEATURES AND FOUNTAIN CARE:

Regular Treatment: Maintain water parameters in the ranges in Table 1 or at levels required by local regulations. This product will raise the pH of water. If your pH measures 7.4 or higher, adjust it downward to between 7.2 to 7.4. This will help avoid clouding of water and allow for faster dispersion of the product. Obtain and make use of a pool test kit to measure pH, free chlorine residual, total alkalinity, water hardness, and cyanuric acid concentration.

Table 1. Parameters for Water Features or Fountains

Parameter	Test Frequency	Level		
pH	Daily	7.2 to 7.4		
Fee Chlorine Residual	Daily	1 to 3 ppm in unstabilized water		
		2 to 4 ppm in minimum in stabilized water		
Total Alkalinity as CaCO3	Weekly	80 – 100 ppm		
Stabilizer (Cyanuric Acid)	Monthly	10 – 20 ppm		
Water hardness as CaCO3	Monthly	200 ppm minimum		

### SUPPLEMENTAL LABELING FOR AGRICULTURAL USE

"Agricultural Use Requirements: Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. Refer to supplemental labeling under "Agricultural Use Requirements" in the Directions for use section for information about this standard."

**DIRECTIONS FOR USE:** It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers must be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulations.

### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Workers Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, green houses, 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 this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours. PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil or water is:

Coveralls over long-sleeved shirt and long pants

Waterproof gloves

Chemical-resistant footwear plus socks

Protective eyewear

Chemical-resistant headgear for overhead exposure

### Precautionary Statement: Hazards to Humans and Domestic Animals: DANGER. PELIGRO. Highly Corrosive.

Causes irreversible eye damage. Do not get in eyes or on clothing. May be fatal if swallowed. Wear rubber gloves and protective eyewear such as goggles, face shield, or safety glasses. Do not breathe dust and fumes. 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. Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail).

Personal Protective Equipment: Mixers and Loaders of the concentrate product must wear:

Coveralls over long-sleeved shirt and long pants

Waterproof gloves

Chemical-resistant footwear plus socks

Protective eyewear

Chemical-resistant headgear for overhead exposure

Chemical-resistant apron when cleaning equipment, mixing or loading

Dust/mist filtering respirator (MSHA/NIOSH...D/M approval # prefix TC-21C).

Applicators and other handlers of the diluted (100 – 200 ppm Solution) must wear:

Coveralls over long-sleeved shirt and long pants

Waterproof gloves Chemical-resistant footwear plus socks Protective eyewear Chemical-resistant headgear for overhead exposure

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate.

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

### FOR USE ON SEEDS FOR SPROUTING AS FOOD FOR HUMAN CONSUMPTION

While this treatment will reduce populations of food poisoning on seeds intended for sprout production, it will not eliminate these organisms on the seeds. Additionally, treatment will not reduce or eliminate these organisms on the final sprouts. In addition to these directions, follow the Food & Drug Administration "Guidance for Industry: Reducing Microbial Food Safety Hazards for Sprouted Seeds" and "Guidance for Industry: Sampling and Microbial Testing of Spent Irrigation Water During Sprout Production."

Dosage: Preparation of Calcium Hypochlorite Solution

In a well-ventilated area, prepare a 2% (20,000 ppm available chlorine) solution by dissolving 4.1 oz. of product that contains 65% available chlorine into 1 gallon of potable water (see table below for preparing various amount of treatment solution).

Available Chlorine	Gallons of water						
%	ppm	1	5	15	30	50	100
2.0	20,000	4.1 oz	1 lb 5 oz	3 lbs 13 oz	7 lbs 11 oz	12 lbs 13 oz	25 lbs 10 oz

Frequency/Timing of Application:

Pre-wash seeds with potable water for at least 5 minutes. Treat pre-washed seeds once by soaking 5 pounds of seeds in 1 gallon of 2% (20,000 ppm available chlorine) calcium hypochlorite solution for 15 minutes at room temperature with continuous agitation. After treatment, drain solution and rinse treated seeds thoroughly with potable water for 10 minutes (changing the water several times, as necessary). Prepare fresh solution for each batch of seeds.

Restricted Entry Interval (REI): 12 Hours

The US EPA has determined that the REI applies when the calcium hypochlorite is sprayed on the benches or areas around the soaking containers. Note: The REI is not applicable when the disinfectant is applied directly to the raw commodity (seeds) by soaking in a container/bin. There are no re-entry interval concerns when treating pests in this manner (soaking).

WARRANTY STATEMENT: Buyer assumes all responsibility for safety and use not in accordance with directions.

{End of Collateral Booklet}