

PM 32 70419-3  
US ENVIRONMENTAL PROTECTION AGENCY  
OFFICE OF PESTICIDES PROGRAMS  
REGISTRATION DIVISION (75-767)  
WASHINGTON, DC 20460

EPA REGISTRATION NO.

70419-3

DATE OF ISSUANCE

NOV 23 1998

TERM OF ISSUANCE

NAME OF PESTICIDE PRODUCT

Crystal Wave Calcium Hypochlorite  
Granular

NOTICE OF PESTICIDE: ☒ REGISTRATION

☐ REREGISTRATION

(Under the Federal Insecticide, Fungicide,  
and Rodenticide Act, as amended)

NAME AND ADDRESS OF REGISTRANT (Include ZIP code)

JAJA Group, Inc.  
301 East 45th Street  
Suite 12A  
New York, NY 10017

NOTE: Changes in labeling formula differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above U.S. EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby Registered/Reregistered under the Federal Insecticide, Fungicide, and Rodenticide Act.

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

Registration is in no way to be construed as an indorsement or approval of this product by this Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA section 3(c)(7)(A) provided that you:

1. Submit and/or cite all data required for registration/reregistration of your product under FIFRA section 3(c)(5) and section 4 when the Agency requires all registrants to similar products to submit such data.
2. Make the labeling changes listed below before you release the product for shipment.
  - a. Add the phrase "EPA Registration No. 70419-3."
  - b. Add the "Directions for Use" for Seeds which is omitted from the label.

Submit one copy of the final printed labeling before you release the product for shipment. Refer to the A-79 enclosure for a further description of final printed labeling.



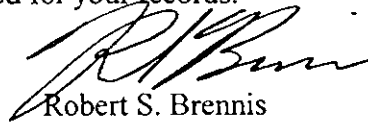
ATTACHMENT IS APPLICABLE

SIGNATURE OF APPROVING OFFICIAL

DATE

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

A stamped copy of the label is enclosed for your records.



Robert S. Brennis  
Product Manager (32)  
Regulatory Management Branch II  
Antimicrobial Division (7510C)

30411

JAJA Group, Inc.

# Crystal Wave

## CALCIUM HYPOCHLORITE GRANULAR

For Crystal Clear Sanitized Water

For Public and Private, Commercial and Household use to:  
Kill Bacteria; Control Algae Slime, and Microorganisms;  
Destroy Organic Contaminants;  
Sanitation and Disinfection of:

Water Systems including: Drinking Water, Wells, Reservoirs, Ponds,  
Swimming Pools, Spas/Hot Tubs, Sewage and Waste Water;  
Porous and Non-Porous surfaces; Agricultural and Aqua cultural;  
Dialysis Machines; Laundries; Toilet Bowls; Seeds

ACCEPTED  
with COMMENTS  
in EPA Letter Dated:

NOV 23 1998

Under the Federal Insecticide,  
Fungicide, and Rodenticide Act  
Registered under EPA Reg. No. 70419-3

### FIRST AID :

**IF ON SKIN:** Brush off excess chemical and  
flush with cold water for at least 15 minutes. If  
irritation persists, get medical attention.  
**IF INHALED:** Remove person to fresh air. Get  
immediate medical attention.  
**IF SWALLOWED:** Drink large quantities of  
water. Do Not induce vomiting. Call a physician.  
**IF IN EYES:** Flush eyes with water for at least  
15 minutes. Call a physician immediately.

**DANGER! KEEP OUT OF  
REACH OF CHILDREN!  
ADD ONLY into Water!  
Contamination may cause Fire!**

### EMERGENCY HANDLING:

In case of contamination or  
decomposition, if possible, isolate  
container in open and well ventilated  
area. Flood with large volumes of  
water to dissolve all materials.  
Dispose of contaminated material in  
an approved landfill area.

Active Ingredient: Calcium Hypochlorite: 65%  
Inert Ingredients: 35%  
Total: 100%  
Available Chlorine: 65%

SEE BACK PANEL FOR ADDITIONAL  
PRECAUTIONARY STATEMENTS,  
AND DIRECTIONS FOR USE!

### Net Wt.

- |   |  |   |
|---|--|---|
| <input type="checkbox"/> 10 lb (4.536 kg) | <input type="checkbox"/> 10 lb (4.536 kg)  | <input type="checkbox"/> 10 lb (4.536 kg)   |
| <input type="checkbox"/> 1 lb (453.59 g)  | <input type="checkbox"/> 20 lb (9.072 kg)  | <input type="checkbox"/> 90 lb (40.823 kg)  |
| <input type="checkbox"/> 5 lb (2.268 kg)  | <input type="checkbox"/> 75 lb (34.021 kg) | <input type="checkbox"/> 100 lb (45.359 kg) |
| <input type="checkbox"/> 25 lb (11.34 kg) | <input type="checkbox"/> 60 lb (27.216 kg) | <input type="checkbox"/> 275 lb (124.74 kg) |



EPA Reg. No.:  
EPA EST. No.:  
RQ Calcium Hypochlorite Dry  
Mixtures UN# 1748

JAJA Group, Inc.  
301 East 45th Street, New York, NY 10017

JAJA Group, Inc.

301 East 45th Street Ste 12A New York, NY 10017

Phone (212) 922-9066

4041

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

#### PRECAUTIONARY STATEMENTS:

**HAZARDS TO HUMANS & DOMESTIC ANIMALS DANGER** Highly corrosive. Causes skin and eye damage. May be fatal if swallowed. Do not get in eyes, on skin or clothing. Do not handle with bare hands. Wear goggles or face shield and use rubber gloves and only thoroughly clean utensils when handling. Irritating to nose and throat. Avoid breathing dust and fumes. Remove and wash contaminated clothing before reuse. Avoid breathing vapors. Vacate poorly ventilated areas as soon as possible. Do not return until strong odors have dissipated

**ENVIRONMENTAL HAZARD:** 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.

#### CHEMICAL HAZARDS:

**DANGER:** Strong oxidizing agent. Mix only into water. Contamination may start a chemical reaction with generation of heat, liberation of hazardous gasses, and possible fire or explosion. Avoid any contact with flame or burning material, such as a lighted cigarette. Do not contaminate with moisture, garbage dirt, chemicals including other pool chemicals, pool chlorinating compounds, household products, cyanuric acid pool stabilizers, soap products, oil products, solvents acids, vinegar beverages, oils, pine oil, dirty rags or any other foreign matter.

#### STORAGE AND DISPOSAL:

Keep this product dry in a tightly closed container when not in use. Store in a cool, dry well ventilated area away from heat or open flame. In case of decomposition isolate container (if possible) and flood area with large amounts of water to dissolve all materials before discarding this container. Do not reuse empty container but place in trash collection. Do not contaminate food or feed by storage or disposal or cleaning of equipment.

#### SWIMMING POOL WATER DISINFECTION

For a new pool or spring start-up, superchlorinate with 10 to 20 oz. of product for each 10,000 gallons of water to yield 5 to 10 ppm available chlorine by weight. Check the level of available chlorine with a test kit. Adjust and maintain pool water pH to between 7.2 to 7.6. Adjust and maintain the alkalinity of the pool to between 50 to 100 ppm

To maintain the pool, add manually or by a feeder device 2 oz. of this product for each 10,000 gallons of water to yield an available chlorine residual between 0.6 to 1.0 ppm by weight. Stabilized pools should maintain a residual of 1.0 to 1.5 ppm available chlorine. Test the pH, available chlorine residual and alkalinity at the water frequently with appropriate test kits. Frequency of water treatment will depend upon temperature and number of swimmers.

Every 7 days, or as necessary, superchlorinate the pool with 10 to 20 oz. of product for each 10,000 gallons of water to yield 5 to 10 ppm available chlorine by weight. Check the level of available chlorine with a test kit. Do not reenter pool until the chlorine residual is between 1.0 to 3.0 ppm.

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

**WINTERIZING POOLS** - While water is still clear & clean, apply 0.6 oz. of product per 1000 gallons, while filter is running, to obtain a 3 ppm available chlorine residual, as determined by a suitable test kit. Cover pool, prepare heater, filter and heater components for winter by following manufacturers' instructions.

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

**SPAS/HOT-TUBS** - Apply 0.5 oz. 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 7.8. Some oils, lotions, fragrances cleaners, etc. may 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

After each use, shock treat with 1.5 oz. of this product per 500 gallons of water to control odor and algae.

During extended periods of disuse, add 1.5 oz. of product daily per 500 gallons of water to maintain a 3 ppm chlorine concentration.

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

ACCEPTED  
with COMMENTS  
NOV 23 1998  
Under the Federal Insecticide,  
Fungicide, and Rodenticide Act as  
amended, for the pesticide  
registered under EPA Reg. No. 70419-3

5041

JAJA Group, Inc.

301 East 45th Street Ste 12A New York, NY 10017

Phone (212) 922-9066

**HYDROTHERAPY TANKS** - Add 1 oz. of this product per 1000 gallons of water to obtain a chlorine residual of 1 ppm, as determined by a suitable chlorine test kit. Pool should not be entered until the chlorine residual is below 3 ppm. Adjust and maintain the water pH to between 7.2 and 7.6. Operate pool filter continuously. Drain pool weekly, and clean before refilling.

#### SANITIZATION OF NONPOROUS FOOD CONTACT SURFACES

**RINSE METHOD** - A solution of 100 ppm available chlorine may be used in the sanitizing solution if a chlorine test kit is available. Solutions containing an initial concentration of 100 ppm available chlorine must be tested and adjusted periodically to insure that the available chlorine does not drop below 50 ppm. Prepare a 100 ppm sanitizing solution by thoroughly mixing 1 oz. of this product with 40 gallons of water. If no test kit is available, prepare a sanitizing solution by thoroughly mixing 1 oz. of this product with 20 gallons of water to provide approximately 200 ppm available chlorine by weight.

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

**IMMERSION METHOD** - A solution of 100 ppm available chlorine may be used in the sanitizing solution. If a chlorine test kit is available. Solutions containing an initial concentration of 100 ppm available chlorine must be tested and adjusted periodically insure that the available chlorine does not drop below 50 ppm. Prepare a 100 ppm sanitizing solution by thoroughly mixing 1 oz. of this product with 40 gallons of water. If no test kit is available, prepare a sanitizing solution by thoroughly mixing 1 oz. of this product with 20 gallons of water to provide approximately 200 ppm available chlorine by weight.

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

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

**FLOW PRESSURE METHOD** - Disassemble equipment and thoroughly clean after use. Assemble equipment in operating position prior to use. Prepare a volume of a 200 ppm available chlorine sanitizing solution equal to 110 % of volume capacity of the equipment by mixing the product in a ratio of 1 oz. product with 20 gallons of water. Pump solution through the system until full flow is obtained at all extremities. the system is completely filled with the sanitizer and all air is removed from the system. Close drain valves and hold under pressure for at least 2 minutes to insure contact with all internal surfaces. Remove some cleaning solution from drain valve and test with a chlorine test kit. Repeat entire cleaning/sanitizing process if effluent contains less than 50 ppm available chlorine. Rinse system with potable water prior to use.

**CLEAN-IN-PLACE METHOD** - Thoroughly clean equipment after use. Prepare a volume of a 200 ppm available chlorine sanitizing solution equal to 110 % of volume capacity of the equipment by mixing the product in a ratio of 1 oz. product with 20 gallons of water. Pump solution through the system until full flow is obtained at all extremities. the system is completely filled with the sanitizer and all air is removed from the system. Close drain valves and hold under pressure for at least 10 minutes to insure contact with all internal surfaces. Remove some cleaning solution from drain valve and test with a chlorine test kit. Repeat entire cleaning/sanitizing process if effluent contains less than 50 ppm available chlorine. Rinse system with potable water prior to use.

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

#### SANITIZATION OF POROUS FOOD EQUIPMENT 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. 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. Rinse equipment with water after treatment.

**SPRAY/FOG METHOD** Pre-clean all surfaces after use. Prepare a 600 ppm available chlorine sanitizing solution of sufficient size by thoroughly mixing the product in a ratio of 3 oz. product with 20 gallons of water. Use spray or fogging equipment which can resist hypochlorite solutions. Always empty and rinse spray/fog equipment with potable water after use. Thoroughly spray or fog all surfaces until wet, allowing excess sanitizer to drain. Vacate area

NOV 23 1998  
Under the Federal Insecticide,  
Fungicide and Rodenticide Act as  
amended, for the pesticide  
labeled under EPA Reg. No.

70,419-3

301 East 45th Street Ste 12A New York, NY 10017

Phone (212) 922-9066

ACCEPTED

in EPA Letter Dated:

NOV 23 1998

Under the Federal Insecticide,  
Fungicide and Rodenticide Act as

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/FOG METHOD** - Pre-clean all surfaces after use. Prepare a 200 ppm available chlorine sanitizing solution of sufficient size by thoroughly mixing the product in a ratio of 1 oz. product with 20 gallons of water. Use spray or fogging equipment which can resist hypochlorite solutions. Prior to using equipment, thoroughly spray or fog all surfaces until wet, allowing excess sanitizer to drain. Vacate area for at least 2 hours.

#### DISINFECTION OF 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 sanitizer 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 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/FOG 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 or fogging equipment which can resist hypochlorite solutions. Always empty and rinse spray/fog equipment with potable water after use. Prior to using equipment, thoroughly spray or fog all surfaces until wet, allowing excess sanitizer to drain. Vacate area for at least 2 hours.

#### SEWAGE & WASTEWATER EFFLUENT TREATMENT

The disinfection of sewage effluent must be evaluated by determining the total number of coliform bacteria and/or fecal coliform bacteria, as determined by the Most Probable Number (MPN) procedure, of the chlorinated effluent has been reduced to or below the maximum permitted by the controlling regulatory jurisdiction.

On the average, satisfactory disinfection of secondary wastewater effluent can be obtained when the chlorine residual is 0.5 ppm after 15 minutes contact. Although the chlorine residual is the critical factor in disinfection, the importance of correlating chlorine residual with bacterial kill must be emphasized. The MPN of the effluent, which is directly related to the water quality standards requirements, should be the final and primary standard and the chlorine residual should be considered an operating standard valid only to the extent verified by the coliform quality of the effluent.

The following are critical factors affecting wastewater disinfection.

1. **Mixing:** It is imperative that the product and the wastewater be instantaneously and completely flash mixed to assure reaction with every chemically active soluble and particulate component of the wastewater.
2. **Contacting:** Upon flash mixing, the flow through the system must be maintained.
3. **Dosage/Residual Control:** Successful disinfection is extremely dependent on response to fluctuating chlorine demand to maintain a predetermined, desirable chlorine level. Secondary effluent should contain 0.2 to 1.0 ppm chlorine residual after a 15 to 30 minute contact time. A reasonable average of residual chlorine is 0.5 ppm after 15 minutes contact time.

JAJA Group, Inc.

301 East 45th Street Ste 12A New York, NY 10017

Phone (212) 922-9066

ACCEPTED  
with COMMENTS

NOV 23 1998

Under the Federal Insecticide,  
Fungicide, and Rodenticide Act as  
amended, this pesticide  
registered under EPA Reg. No. 70419-

### SEWAGE AND WASTEWATER TREATMENT

**EFFLUENT SLIME CONTROL** - Apply a 100 to 1000 ppm available chlorine solution at a location which will allow complete mixing. Prepare this solution by mixing 2 to 20 oz. of this product with 100 gallons of water. Once control is evident, apply a 15 ppm available chlorine solution. Prepare this solution by mixing 0.3 oz. of this product with 100 gallons of water.

**FILTER BEDS - SLIME CONTROL** Remove filter from service, drain to a depth of 1 ft. above filter sand, and add 16 oz. of product per 20 sq/ft evenly over the surface. Wait 30 minutes before draining water to a level that is even with the top of the filter. Wait for 4 to 6 hours before completely draining and backwashing filter.

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

**PUBLIC SYSTEMS:** Mix a ratio of 1 oz. of this product to 6000 gallons of water. Begin feeding this solution with a hypochlorinator until a free available chlorine residual of at least 0.2 ppm and no more than 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 Interim Primary Drinking Water Regulations. Contact your local Health Department for further details.

**INDIVIDUAL SYSTEMS - DUG WELLS** Upon completion at the casing (lining) wash the interior of the casing (lining) with a 100 ppm available chlorine solution using a stiff brush. This solution can be made by thoroughly mixing 1 oz. of this product into 40 gallons of water. After covering the well, pour the sanitizing solution into the well through both the pipesleeve 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 may necessitate the use of special methods for introduction of the sanitizer into the well. Consult your local Health Department for further details.

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

**EMERGENCY DISINFECTION** - When boiling of water for 1 minute is not practical, water can be made potable by using this product. Prior to addition of the sanitizer, remove all suspended material by filtration or by allowing it to settle to the bottom. Decant the clarified, contaminated water to a clean container and add 1 grain of this product to 1 gallon of water. One grain is approximately the size of the letter "O" in this sentence. Allow the treated water to stand for 30 minutes. Properly treated water should have a slight chlorine odor, if not, repeat dosage and allow the water to stand an additional 5 minutes. The treated water can then be made palatable by pouring it between clean containers for several times.

### PUBLIC WATER SYSTEMS

**RESERVOIRS - ALGAE CONTROL:** Hypochlorinate streams feeding the reservoir. Suitable feeding points should be selected on each stream at least 50 yards upstream from the points of entry into the reservoir.

**MAINS** - Thoroughly flush section to be sanitized by discharging from hydrants. Permit a water flow of at least 2.5 feet per minute to continue under pressure while injecting this product by means of a hypochlorinator. Stop water flow when a chlorine residual test of 50 ppm is obtained at the low pressure end of the new main section after a 24 hour retention time. When chlorination is completed, the system must be flushed free of all heavily chlorinated water.

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

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

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

**EXISTING EQUIPMENT** - Remove equipment from service, thoroughly clean surfaces of all physical soil. Sanitize by placing 4 oz. of this product for each 5 cubic feet capacity (approximately 500 ppm available chlorine). Fill to working capacity and let stand at least 4 hours. Drain and place in service. If the previous treatment is not practical, surfaces may be sprayed with a solution containing 1 oz. of this product for each 5 gallons of water (approximately 1000 ppm available chlorine). After drying, flush with water and return to service.

JAJA Group, Inc.

301 East 45th Street Ste 12A New York, NY 10017

Phone (212) 922-9066

NOV 23 1988

Under the Federal Insecticide,  
Fungicide, and Rodenticide Act as  
amended, for the pesticide  
registered under EPA Reg. No. 70419-3

### 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.

**BASINS, TANKS, FLUMES, ETC.** - Thoroughly clean all equipment, then apply 4 oz. of product per 5 cu. ft. of water to obtain 500 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 (1000 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 should be distributed over the surface at the rate of 16 oz. per 20 sq. ft. Water should stand at a depth of 1 foot above the surface of the filter bed for 4 to 24 hours. When filter beds can be 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 should be set up near the intake of the untreated water supply. Apply sufficient product to give a chlorine residual of at least 0.1 to 0.2 ppm at the point where the untreated supply enters the regular distribution system. Use a chlorine test kit.

### EMERGENCY DISINFECTION AFTER DROUGHTS

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

**WATER SHIPPED IN BY TANKS, TANK CARS, TRUCKS, ETC.** - Thoroughly clean all containers and equipment. Spray a 500 ppm available chlorine solution and rinse with potable water after 5 minutes. This solution is made by mixing 1 oz. of this product for each 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.

### EMERGENCY DISINFECTION AFTER MAIN BREAKS

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

### COOLING TOWER/EVAPORATIVE CONDENSER WATER

**SLUG FEED METHOD** - Initial Dose: When system is noticeably fouled, apply 10 to 20 oz. of this product per 10,000 gallons of water in the system to obtain from 5 to 10 ppm available chlorine. Repeat until control is achieved.

Subsequent Dose: When microbial control is evident, add 2 oz. of this product per 10,000 gallons of water in the system daily, or as needed to maintain control and keep the chlorine residual at 1 ppm. Badly fouled systems must be cleaned before treatment is begun.

**INTERMITTENT FEED METHOD** - Initial Dose: When system is noticeably fouled, apply 10 to 20 oz of this product per 10,000 gallons of water in the system to obtain 5 to 10 ppm available chlorine. Apply half (or 1/3, 1/4, or 1/5) of this initial dose when half (or 1/3, 1/4, or 1/5) of the water in the system has been lost by blowdown.

Subsequent dose: When microbial control is evident, add 2 oz. of this product per 10,000 gallons of water in the system to obtain a 1 ppm residual. Apply half (or 1/3, 1/4, or 1/5) Of this initial dose when half (or 1/3, 1/4, or 1/5) of the water in the system has been lost by blowdown. Badly fouled system must be cleaned before treatment is begun.

**CONTINUOUS FEED METHOD** - Initial Dose: When system is noticeably fouled, apply 10 to 20 oz. of this product per 10,000 gallons of water in the system to obtain 5 to 10 ppm available chlorine.

Subsequent Dose: Maintain this treatment level by starting a continuous feed of 1 oz. of this product per 3,000 gallons of water lost by blowdown to maintain a 1 ppm residual. Badly fouled systems must be cleaned before treatment is begun.



JAJA Group, Inc.

301 East 45th Street Ste 12A New York, NY 10017

Phone (212) 922-9066

NOV 23 1998

Under the Federal Insecticide,  
Fungicide, and Rodenticide Act  
Endorsed for the pesticide 70419-3  
Badly Fouled Systems

**BRIQUETTES OR TABLETS** - Initially slug dose the system with 10 oz. of this product per 10,000 gallons of water in the system. Badly fouled systems must be cleaned before treatment is begun.

**Subsequent Dose:** When microbial control is evident, add 2 oz. of the 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.

### LAUNDRY SANITIZERS

#### Household Laundry Sanitizers

**IN SOAKING SUDS** - Thoroughly mix 1 Tbs. of this product to 10 gallons of wash water to provide 200 ppm available chlorine. Wait 5 minutes, then add soap or detergent. Immerse laundry for at least 11 minutes prior starting the wash/rinse cycle.

**IN WASHING SUDS** - Thoroughly mix 1 Tbs. of this product to 10 gallons of wash water containing clothes to provide 200 ppm available chlorine. Wait 5 minutes, then adding soap or detergent and start the wash/rinse cycle.

#### Commercial Laundry Sanitizers

Wet fabrics or clothes should be spun dry prior to sanitization. Thoroughly mix 1 oz. of this product with 20 gallons of water to yield 200 ppm available chlorine. Promptly after mixing the sanitizer, add the solution into the pre-wash prior to washing fabrics/clothes in the regular wash cycle with a good detergent. Test the level of available chlorine, if solution has been allowed to stand. Add more of this product if the available chlorine level has dropped below 200 ppm.

### 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 transverse 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 1000 ppm solution can be made by thoroughly mixing 2 oz. of this product with 10 gallons of water. Immerse all halters, ropes and other types of equipment used in handling and restraining animals or poultry, as well as the cleaned forks, shovels and scrapers used for removing litter and manure. Ventilate buildings, cars, boats and other closed spaces. Do not house livestock or poultry or employ equipment until chlorine has been dissipated. All treated feed racks, mangers, troughs, automatic feeders, fountains and waterers must be rinsed with potable water before reuse.

### PULP AND PAPER MILL PROCESS WATER SYSTEMS

**SLUG FEED METHOD** - Initial Dose: When system is noticeably fouled, apply 10 to 20 oz. of this product per 10,000 gallons of water in the system to obtain from 5 to 10 ppm available chlorine. Repeat until control is achieved.

**Subsequent Dose:** When microbial control is evident, add 2 oz. of this product per 10,000 gallons of water in the system daily, or as needed to maintain control and keep the chlorine residual at 1 ppm. Badly fouled systems must be cleaned before treatment is begun.

**INTERMITTENT FEED METHOD** - Initial Dose: When system is noticeably fouled, apply 10 to 20 oz. of this product per 10,000 gallons of water in the system to obtain 5 to 10 ppm available chlorine. Apply half (or 1/3, 1/4 or 1/5) of this initial dose when half (or 1/3, 1/4, or 1/5) of the water in the system has been lost by blowdown.

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

**CONTINUOUS FEED METHOD** - Initial Dose: When system is noticeably fouled, apply 10 to 20 oz. of this product per 10,000 gallons of water in the system to obtain 5 to 10 ppm available chlorine.

**Subsequent Dose:** Maintain this treatment level by starting a continuous feed of 2 oz. of this product per 1,000 gallons of water lost by blowdown to maintain a 1 ppm residual. Badly fouled systems must be cleaned before treatment is begun.

**BRIQUETTES OR TABLETS** - Initially slug dose the system with 10 oz. of this product per 10,000 gallons of water in the system. Badly fouled system must be cleaned before treatment is begun.

**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.

### AGRICULTURAL USES

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

Disinfect leafcutting 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 mix 1/4 Tsp. of this product to 200

JAJA Group, Inc.

301 East 45th Street Ste 12A New York, NY 10017

Phone (212) 922-9066

Under the Federal Insecticide,  
Fungicide, and Rodenticide Act,  
this product is registered for use as a  
disinfectant for the pesticide  
704193

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 20 gallons of warm water to produce a 200 ppm available chlorine product with solution. The sanitizer temperature should not exceed 130 Deg F. Spray the warm casing or breaking. Do not apply potable water rinse. The solution dry before should not be re-used to sanitize eggs.

**FRUIT & VEGETABLE WASHING** - 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 for 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 (*Xanthomonas vesicatoris*) on Pimento seeds, initially remove moist seeds from ripe fruits. To control surface fungi and bacteria on Tomato seeds initially wash seeds. Immediately soak seeds in 39,000 ppm solution, for 15 minutes with continuous agitation. After treatment rinse seeds in potable water for 15 minutes. Dry seeds to normal moisture. The solution may be made by mixing 8 oz. of this product with 1 gallon of water.

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

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

#### AQUACULTURAL USES

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

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

**MAINE LOBSTER PONDS** - Remove lobsters, seaweed etc. from ponds prior to treatment. Drain the pond. Thoroughly mix 1200 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 Deg F to obtain 0.5 ppm available chlorine. Expose oysters to this solution for at least 15 minutes, monitoring the available chlorine level so that it does not fall below 0.05 ppm. Repeat entire process if the available chlorine level drops below 0.05 ppm or the temperature falls below 50 Deg F.

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

#### 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 Deg F. Drain system of the sanitizing solution and thoroughly rinse with water. Discard and DO NOT reuse the spent sanitizer. Rinsate must be monitored with a suitable test kit to insure that no available chlorine remains in the system.

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

#### TOILET BOWL SANITIZERS

[These products are marketed as individual packages for placement in the toilet. Therefore, use directions are not appropriate.]

**Phone (212) 922-9066**

for the Federal Assault  
Weapon Act, 18 U.S.C. § 922(a)(1)  
under the Federal Assault  
Weapon Act, 18 U.S.C. § 922(a)(1)  
Stored under LPA Reg. No. 70419-3