



**OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION**

WASHINGTON, D.C. 20460

February 19, 2025

**SENT BY EMAIL**

Jennifer Brandon  
jbrandon@delta-ac.com  
MIAMI PRODUCTS & CHEMICAL CO.

Subject: Labeling Notification per Pesticide Registration Notice (PRN) 98-10 - Removing Graphics and "Briquettes or Tablets" from the Label  
Product Name: K-O-K BLEACH  
Admin Number: 278-65  
EPA Receipt Date: 04/26/2024  
Action Case Number: 00609290

Dear Jennifer Brandon:

The U.S. Environmental Protection Agency is in receipt of your application for notification under Pesticide Registration Notice 98-10 for the above referenced product. The EPA has conducted a review of this request for its applicability under PRN 98-10 and finds that the action requested falls within the scope of PRN 98-10.

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

Should you wish to add/retain a reference to your company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide, Fungicide, and Rodenticide Act and is subject to review by the EPA. If the website is false or misleading, the product will be considered to be misbranded and sale or distribution of the product is unlawful under FIFRA section 12(a)(1)(E). 40 CFR § 156.10(a)(5) lists examples of statements the EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the EPA find or if it is brought to our attention that a website contains statements or claims substantially differing from statements or claims made in connection with obtaining a FIFRA section 3 registration, the website will be referred to the EPA's Office of Enforcement and Compliance Assurance.

If you have questions, please contact Aline Heffernan via email at [heffernan.aline@epa.gov](mailto:heffernan.aline@epa.gov).

Sincerely,

Aline Heffernan, Senior Regulatory Advisor  
RMB1, AD  
Office of Pesticide Programs

# K-O-K Bleach

{ABN: Sanamax Bleach}

[(Select marketing claims and graphics from *Marketing Claims and Graphics* section below)]

## Active Ingredient:

Sodium Hypochlorite ..... 5.25%

Other Ingredients ..... 94.75%

Total ..... 100.00%

Contains 5% available chlorine. Contains 0.5 pound available chlorine per gallon.

## NOTIFICATION

278-65

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

02/19/2025

Keep Out of Reach of Children

**DANGER**

See back [side] [top] panel for additional Precautionary Statements.

## 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, and then continue rinsing eye.
- Call a poison control center or doctor for treatment advice.

### If On Skin Or Clothing:

- Take off contaminated clothing.
- Immediately rinse skin with plenty of water for 15-20 minutes.
- Call a poison control center or doctor for treatment advice.

### If Swallowed:

- Immediately call a poison control center or doctor for treatment advice.
- Have person sip a glass of water if able to swallow.
- Do not induce vomiting unless told to do so by a poison control center or doctor.
- Do not give anything 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 by mouth-to-mouth if possible.
- Call a poison control center or doctor for further treatment advice.

Have the product container or label with you when calling a poison control center or doctor or going for treatment. For medical emergencies call your poison control center at 1-800-222-1222. For transportation emergency information concerning this product, call Chemtrec at 1-800-424-9300.

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

{Note: The First Aid statements' grid format will be used if label space allows, otherwise a paragraph format will be used.}

EPA Reg. No. 278-65      EPA Est. \_\_\_\_\_

Net Contents: \_\_\_\_\_ Gallon[s] (\_\_\_\_ Liter[s])

## PRECAUTIONARY STATEMENTS

### Hazards to Humans & Domestic Animals

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

### Environmental Hazards

*(For product packaged in containers less than 5 gallons:)*

This product is toxic to fish and aquatic organisms.

*(For product packaged in containers 5 gallons or greater:)*

This pesticide is toxic to fish and aquatic organisms. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other 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 or Chemical Hazards

**Strong Oxidizing Agent.** Mix only with water according to label directions. Mixing this product with chemicals (e.g. ammonia, acids, detergents, etc.) or organic matter (e.g. urine, feces, etc.) will release chlorine gas which is irritating to eyes, lungs and mucous membranes.

## DIRECTIONS FOR USE

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

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

### Swimming Pool Water Disinfection

For a new pool or spring start-up, superchlorinate with 122 to 244 fl 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 water to between 50 to 100 ppm.

To maintain the pool, add manually or by a feeder device 19.5 fl 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. Frequently test the pH, available chlorine residual and alkalinity of the water 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 122 to 244 fl 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 to 3 ppm. Reentry into treated pools is prohibited above levels of 4 ppm due to risk of bodily harm. 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 and clean, apply 8 fl oz of product per 1,000 gallons, while filter is running, to obtain a 3 ppm available chlorine residual, as determined by a suitable test kit. Cover pool, prepare heater, filter and heater components for winter by following manufacturers' instructions.

### Spas, Hot Tubs, Hubbard/Immersion Tanks and Hydrotherapy Tanks

**Spas/Hot Tubs:** Apply 13 fl oz of product per 1,000 gallons of water to obtain a free available chlorine concentration of 5 ppm, as determined by a suitable chlorine test kit. Adjust and maintain pool water pH to between 7.2 and 7.8. Some oils, lotions, fragrances, cleaners, etc. may cause foaming or cloudy water as well as reduce the efficiency of the product. To maintain the water, apply 13 fl oz of product per 1,000 gallons of water over the surface to maintain a chlorine concentration of 5 ppm. Reentry into treated pools is prohibited above levels of 4 ppm due to risk of bodily harm. After each use, shock treat with 20 fl oz of this product per 500 gallons of water to control odor and algae. During extended periods of disuse, daily add 8 fl oz of product per 1,000 gallons of water to maintain a 3 ppm chlorine concentration.

**Hubbard and Immersion Tanks:** Add 13 fl oz of this product per 200 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 13 fl 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. Thoroughly clean tank and dry with clean cloths.

**Hydrotherapy Tanks:** Add 3 fl oz of this product per 1,000 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. Continuously operate pool filter. Drain pool weekly and clean before refilling.

### Dilution Chart

Use the following chart to determine the required amount of this product to be mixed with water to obtain the desired available chlorine ppm concentration. Thoroughly mix this product with water when preparing disinfecting and sanitizing solutions.

Amount of This Product Fluid Ounces	Amount of Water Gallon(s)	Available Chlorine Concentration ppm (approx.)
0.26	1	100
0.51	1	200
1.03	1	400
2.57	1	1000
13	1	5000
1.03	2	200
2.57	2	500
13	5	1000
3	10	100
5.13	10	200
6.5	10	250
13	10	500
15.4	10	600
25.8	10	1000
0.26	100	1
3	100	10
4	100	15
13	100	50
25.8	100	100
260	100	1000
2.56	200	5
13	200	25
25.8	200	50
0.26	1,000	0.1
13	10,000	0.5
15,552 (121.5 gal)	10,000	600

### Sanitization of Nonporous Food Contact Surfaces

**Rinse Method:** A 100 ppm available chlorine solution 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 periodically adjusted to ensure that the available chlorine does not drop below 50 ppm. If no test kit is available, prepare a 200 ppm available chlorine sanitizing solution. Clean equipment surfaces in the normal manner. Prior to use, thoroughly rinse all surfaces 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 available chlorine residual. Do not rinse equipment with water after treatment and do not soak equipment overnight. Sanitizers used in automated systems may be used for general cleaning but may not be reused for sanitizing purposes.

**Immersion Method:** A 100 ppm available chlorine solution 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 periodically adjusted to ensure that the available chlorine does not drop below 50 ppm. If no test kit is available, prepare a 200 ppm available chlorine sanitizing solution. 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 available chlorine residual. Do not rinse equipment with water after treatment. Sanitizers used in automated systems may be used for general cleaning but may not be reused for sanitizing purposes.

**Flow/Pressure Method:** Prepare a volume of a 200 ppm available chlorine sanitizing solution equal to 110% of volume capacity of the equipment. 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. Disassemble equipment and thoroughly clean; then assemble equipment in operating position post-treatment and prior to use.

**Clean-In-Place Method:** Prepare a volume of a 200 ppm available chlorine sanitizing solution equal to 110% of volume capacity of the equipment. 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. Thoroughly clean equipment post-treatment and prior to use.

**Spray Method:** Preclean all surfaces. Use a 200 ppm available chlorine solution to control bacteria, mold or fungi and a 600 ppm solution to control bacteriophage. Use spray equipment that can resist hypochlorite solutions. Thoroughly spray all surfaces until wet, allowing excess sanitizer to drain. Vacate area for at least 2 hours. Prior to using equipment, rinse all surfaces treated with a 600 ppm solution with a 200 ppm solution. Always empty and rinse spray equipment with potable water after use.

### Sanitization of Porous Food Contact Surfaces

**Rinse Method:** Prepare a 600 ppm available chlorine sanitizing solution. Clean surfaces in the normal manner. Thoroughly rinse all surfaces with the 600 ppm solution, maintaining contact for at least 2 minutes. Prepare a 200 ppm available chlorine sanitizing solution. Prior to using equipment, rinse all surfaces with a 200 ppm available chlorine solution. Do not rinse equipment with water after treatment and do not soak equipment overnight.

**Immersion Method:** Prepare a 600 ppm available chlorine sanitizing solution in an immersion tank. Clean equipment in the normal manner. Immerse equipment in the 600 ppm solution for at least 2 minutes. Prepare a 200 ppm sanitizing solution in an immersion tank. Prior to using equipment, immerse all surfaces in the 200 ppm available chlorine solution. Do not rinse equipment with water after treatment and do not soak equipment overnight.

**Spray Method:** Preclean all surfaces. Prepare a 600 ppm available chlorine sanitizing solution of sufficient size. Use spray equipment that can resist hypochlorite solutions. 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. Always empty and rinse spray equipment with potable water after use.

### **Sanitization of Nonporous Nonfood Contact Surfaces**

**Rinse Method:** Prepare a 200 ppm available chlorine sanitizing solution. Clean equipment surfaces in the normal manner. Prior to use, thoroughly rinse all surfaces 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 200 ppm available chlorine sanitizing solution. 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 and do not soak equipment overnight.

**Spray Method:** Preclean all surfaces. Prepare a 200 ppm available chlorine sanitizing solution of sufficient size. 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 Nonfood Contact Surfaces**

**Rinse Method:** Clean equipment surfaces in the normal manner. Prepare a 600 ppm available chlorine disinfecting solution. Prior to use, thoroughly rinse all surfaces 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:** Clean equipment in the normal manner. Prepare a 600 ppm available chlorine disinfecting solution in an immersion tank. 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 Nonfood Contact Surfaces**

**Rinse Method:** Clean surfaces in the normal manner. Prepare a 600 ppm available chlorine sanitizing solution. Prior to use, thoroughly rinse all surfaces 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:** Clean equipment in the normal manner. Prepare a 600 ppm available chlorine sanitizing solution in an immersion tank. 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 surfaces with a 600 ppm available chlorine solution. 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. Always empty and rinse spray equipment with potable water post-treatment.

### **Sewage and Wastewater Effluent Treatment**

The disinfection of sewage effluent must be evaluated by determining the total number of coliform bacteria and/or fecal coliform bacteria, as determined by the Most Probable Number ("MPN") procedure, 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, 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 minutes contact time. A reasonable average of residual chlorine is 0.5 ppm after 15 minutes contact time.

### Sewage and Wastewater Treatment

**Effluent Slime Control:** Apply a 100 to 1000 ppm available chlorine solution at a location that will allow complete mixing. Once control is evident, apply a 15 ppm available chlorine solution.

**Filter Beds – Slime Control:** Remove filter from service, drain to a depth of 1 foot above filter sand and add 126 fl 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.

### Drinking Water Disinfection

**Public Systems:** Prepare a 10 ppm available chlorine disinfecting solution. Begin feeding this solution with a hypochlorinator until a free available chlorine residual of at least 0.2 ppm and no more than 0.6 ppm is attained throughout the distribution system. Frequently check water 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 Water Systems – Dug Wells:** Upon completion of the casing (lining) wash the interior of the casing with a 100 ppm available chlorine solution using a stiff brush. After covering the well, pour the solution into the well through both the pipe sleeve opening and the pipeline. Also wash the exterior of the pump cylinder with the solution. Start pump and pump water until a strong chlorine odor in the water is noted. Stop pump and wait at least 24 hours. After 24 hours flush the well until all traces of chlorine have been removed from the water. Consult your local Health Department for further details.

**Individual Water Systems – Drilled, Driven and Bored Wells:** Run pump until water is as free from turbidity as possible. Pour a 100 ppm available chlorine solution into the well. Add 5 to 10 gallons of clean, chlorinated water to the well to force the solution into the rock formation. Also wash the exterior of the pump cylinder with the solution. Drop a pipeline into the well, start the pump and pump water until a strong odor of chlorine in the water is noted. Stop pump and wait at least 24 hours. After 24 hours flush the 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, disinfect the well. Consult your local Health Department for details.

**Emergency Disinfection:** When boiling water for 1 minute is not practical, water can be made potable by using this product. **Prior** to addition of the disinfectant, 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 2.5 drops of this product to 20 gallons of water. 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 several times between clean containers.

### Public Water Systems

**Reservoirs – Algae Control:** Hypochlorinate streams feeding the reservoir. Select suitable feeding points 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, flush the system free of all heavily chlorinated water.

**New Tanks, Basins, Etc.:** Remove all physical soil from surfaces. Place 48 fl 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 125 fl 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. After thorough mixing under agitation, pump or gravity feed the solution into the well. Allow the well to 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 and thoroughly clean surfaces of all physical soil. Sanitize by placing 50 fl oz of this product for each 5 cubic feet of capacity (approximately 500 ppm available chlorine). Fill to working capacity and let stand at least 4 hours. Drain and place in service. If this treatment method is not practical, surfaces may be sprayed with a 1000 ppm available chlorine solution. 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. 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 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 48 fl oz of product per 5 cubic feet of water to obtain 500 ppm available chlorine, as determined by a chlorine test kit. After 24 hours drain, flush and return to service. If the this treatment method is not suitable, spray or flush the equipment with a 1000 ppm available chlorine solution. Allow to stand for 2 to 4 hours, flush and return to service.

**Filters:** When the sand filter needs replacement, apply 126 fl oz of this product for each 150 to 200 cubic feet of sand. When the filter is severely contaminated, distribute additional product over the surface at the rate of 126 fl oz per 20 square feet. 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 126 fl oz of this product per each 50 square feet, 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:** Set up hypochlorination or gravity feed equipment 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:** Set up gravity or mechanical hypochlorite feeders 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 contact time. While filling the containers, dose with sufficient amounts of this product to provide at least a 0.2 ppm available 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 an available 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, flush the system free of all heavily chlorinated water.



### Cooling Tower/Evaporative Condenser Water

**Slug Feed Method – Initial Dose:** When system is noticeably fouled, apply 122 to 244 fl oz of this product per 10,000 gallons of water in the system (5 to 10 ppm available chlorine). Repeat until control is achieved. Badly fouled systems must be cleaned before treatment is begun. **Subsequent Dose:** When microbial control is evident, add daily or as needed, 25 fl oz of this product per 10,000 gallons of water in the system to maintain control and keep the chlorine residual at 1 ppm.

**Intermittent Feed Method – Initial Dose:** When system is noticeably fouled, apply 122 to 244 fl oz of this product per 10,000 gallons of water in the system (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. Badly fouled systems must be cleaned before treatment is begun. **Subsequent Dose:** When microbial control is evident, add 25 fl 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 dose when half (or 1/3, 1/4 or 1/5) of the water in the system has been lost by blowdown.

**Continuous Feed Method – Initial Dose:** When system is noticeably fouled, apply 122 to 244 fl oz of this product per 10,000 gallons of water in the system (5 to 10 ppm available chlorine). Badly fouled systems must be cleaned before treatment is begun. **Subsequent Dose:** Maintain this treatment level by starting a continuous feed of 2.5 fl oz of this product per 1,000 gallons of water lost by blowdown to maintain a 1 ppm residual.

**Briquettes or Tablets:** Initially slug dose the system with 122 fl 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 daily or as needed, 25 fl oz of this product per 10,000 gallons of water in the system to maintain control and keep the chlorine residual at 1 ppm.

### Laundry Sanitizers

#### Household Laundry Sanitizers

**In Soaking Suds:** Thoroughly mix 5 fl oz of this product with 10 gallons of wash water (200 ppm available chlorine). Wait 5 minutes, then add soap or detergent. Immerse laundry for at least 11 minutes prior to starting the wash/rinse cycle.

**In Washing Suds:** Thoroughly mix 5 fl oz of this product with 10 gallons of wash water containing clothes (200 ppm available chlorine). Wait 5 minutes, then add soap or detergent and start the wash/rinse cycle.

#### Commercial Laundry Sanitizers

Spin dry wet fabrics or clothes prior to sanitization. Thoroughly mix 5 fl oz of this product with 10 gallons of water (200 ppm available chlorine). Promptly after mixing the sanitizer, add the solution into the prewash prior to washing fabrics/clothes in the regular wash cycle with a good detergent. Test the level of available chlorine if solution has been allowed to stand. Add more of this product if the available chlorine level has dropped below 200 ppm.

#### To Bleach and Sanitize Laundry

To bleach and sanitize white and colorfast cotton, linen, nylon, Dacron®, Orlon® and rayon fabrics/garments, use 8 fl oz of this product per load for conventional washing machines and 4 fl oz for front loading machines. Add to presoak, wash water or first rinse. If clothes are in machine, dilute this product in one quart of water before adding to machine.

#### Fabric Bleach, Disinfectant, Stain Remover or Cleaner

To remove stains (such as berry, blood, chocolate, coffee, dye, flour, fruit, grass, ink, medicine, tea, vegetable and wine) as well as Scorch and Mildew: Thoroughly mix 2 fl oz of this product with one quart of cold water. Immerse fabric in mixture for 5 to 10 minutes then rinse well in clear water. Repeat if necessary. Any remaining traces of mildew will usually disappear when fabric is dried in direct sunlight. Do not use on silk, wool or unfast colors.

#### Whiten Nylon and Other Synthetics

Use 1 fl oz of this product per gallon of water to whiten nylon and other synthetic fabrics that have turned yellow or gray. Soak clean fabric in this solution for 15 to 20 minutes, then rinse well. Repeat if necessary.

### 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 transversed 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. 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 122 to 244 fl oz of this product per 10,000 gallons of water in the system (5 to 10 ppm available chlorine). Repeat until control is achieved. Badly fouled systems must be cleaned before treatment is begun. **Subsequent Dose:** When microbial control is evident, add daily or as needed, 25 fl oz of this product per 10,000 gallons of water in the system to maintain control and keep the chlorine residual at 1 ppm.

**Intermittent Feed Method – Initial Dose:** When system is noticeably fouled, apply 122 to 244 fl oz of this product per 10,000 gallons of water in the system (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. Badly fouled systems must be cleaned before treatment is begun. **Subsequent Dose:** When microbial control is evident, add 25 fl 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 dose when half (or 1/3, 1/4 or 1/5) of the water in the system has been lost by blowdown.

**Continuous Feed Method – Initial Dose:** When system is noticeably fouled, apply 122 to 244 fl oz of this product per 10,000 gallons of water in the system (5 to 10 ppm available chlorine). Badly fouled systems must be cleaned before treatment is begun. **Subsequent Dose:** Maintain this treatment level by starting a continuous feed of 2.5 fl oz of this product per 1,000 gallons of water lost by blowdown to maintain a 1 ppm residual.

**Briquettes or Tablets:** Initially slug dose the system with 122 fl 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 daily or as needed, 25 fl oz of this product per 10,000 gallons of water in the system to maintain control and keep the chlorine residual at 1 ppm.

### Agricultural Uses

**Potatoes post-harvest protection:** Potatoes may be sanitized after cleaning and prior to storage by spraying a 500 ppm available chlorine solution at the rate of 1 gallon solution per ton of potatoes.

**Disinfect leafcutting bee cells and bee boards** by immersion in a 1 ppm available chlorine solution 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. Disinfect bee domicile 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. Spray the eggs until thoroughly wet with a warm (not greater than 130°F) 200 ppm available chlorine solution. Allow the eggs to completely dry before casing or breaking. Do not apply a potable water rinse. Do not reuse this solution to sanitize eggs.

**Egg destaining:** Prepare a solution containing 250 ppm available chlorine. The solution must be at least 20°F warmer than the egg shells with a minimum solution temperature of 90°F. Total elapsed time in the destaining solution must not exceed 5 minutes. After destaining, rewash and spray rinse eggs. Destain eggs after completion of the initial washing. Replace destaining solution daily or whenever it becomes visibly fouled; do not reuse.

**Fruit and vegetable washing:** Thoroughly clean all fruits and vegetables in a wash tank. After draining the tank, submerge fruit or vegetables for 2 minutes in a second wash tank containing a recirculating 25 ppm available chlorine solution. Spray rinse vegetables with the sanitizing solution prior to packaging. Rinse fruit with potable water only prior to packaging.

**Meat and Poultry Plants:** This product may be used in processing water of meat and poultry plants at concentrations of up to 5 ppm available chlorine. Chlorine may be present in poultry chiller intake water, and in carcass wash water, at concentrations up to 40 ppm available chlorine. Use a chlorine test kit to adjust to desired available chlorine level. Chlorine must be dispensed at a constant and uniform level and the method or system must be such that a controlled rate is maintained.

#### **Aquacultural Uses**

**Fish ponds:** Remove fish from ponds prior to treatment. Thoroughly mix 244 fl oz of this product with 10,000 gallons of water (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 the pond **after** the available chlorine level reaches zero.

**Fish pond equipment:** Thoroughly clean all equipment prior to treatment. Soak porous equipment for one hour in a 200 ppm available chlorine solution.

**Maine lobster ponds:** Remove lobsters, seaweed, etc. from ponds prior to treatment. Drain the pond. Apply a 600 ppm available chlorine solution and ensure that all barrows, gates, rock and dam areas 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 the pond.

**Conditioning live oysters:** Prepare a 0.5 ppm available chlorine solution using 50°F to 70°F water. Expose oysters to this solution for at least 15 minutes, monitoring the available chlorine level to ensure that it does not fall below 0.05 ppm. Repeat entire process if the available chlorine level drops below 0.05 ppm or the temperature falls below 50°F.

**Control of scavengers in fish hatchery ponds:** Prepare a 200 ppm available chlorine solution. Pour solution into drained pond potholes. Repeat if necessary. Do not put desirable fish back into refilled ponds until chlorine residual has dropped to zero.

#### **Sanitization of Dialysis Machines**

Thoroughly flush equipment with water prior to using this product. Prepare a solution containing at least 600 ppm available chlorine. Immediately use this solution in the hemodialysis system allowing for a minimum contact time of 15 minutes at 68°F (20°C). Drain solution from system and thoroughly rinse with water. Discard and **do not** reuse the spent sanitizer. Rinsate must be monitored with a chlorine test kit to ensure that no available chlorine remains in the system. This product is recommended for decontaminating single- and multi-patient hemodialysis systems. This product has been shown to be an effective disinfectant (virucide, fungicide, bactericide and pseudomonicide) when tested by AOAC and EPA test methods. This product may not totally eliminate all vegetative microorganisms in hemodialysis 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. Use this product in a disinfectant program that includes bacteriological monitoring of the hemodialysis delivery system. This product is **not** recommended for use in hemodialysis or reverse osmosis ("RO") membranes. Consult the guidelines for hemodialysis systems that are available from the CDC.

#### **Asphalt or Wood Roofs and Sidings**

To control fungus and mildew, first remove all physical soil by brushing and hosing with clean water; then apply a 5000 ppm available chlorine solution by brushing or spraying roof/siding. After 30 minutes, rinse by hosing with clean water. [Not for use in California.]

#### **Boat Bottoms**

To control slime on boat bottoms, sling a plastic tarp under boat, retaining enough water to cover the fouled bottom area, but not allowing water to enter enclosed area. This envelope should contain approximately 500 gallons of water for a 14 foot boat. Add 43 oz of this product to this water (35 ppm available chlorine). Leave boat immersed for 8 to 12 hours. Repeat if necessary. Do not discharge the solution until the free chlorine level has dropped to 0 ppm. [Not for use in California.]

### **Artificial Sand Beaches**

To sanitize the sand, spray a 500 ppm available chlorine solution at frequent intervals. Small areas may be sprinkled with a watering can.

### **To Clean and Deodorize Trash Cans**

Use this product to clean and deodorize trash and garbage cans. After washing and rinsing, apply a solution containing 6 fl oz of this product in 1 gallon of water. Allow surfaces to remain wet for 5 minutes.

### **Toilet Bowl Sanitizer**

{These products are marketed as individual packages for placement in the toilet. Use directions are therefore not appropriate. Claims are limited to sanitization; no claims for disinfection are permitted.}

### **For Sanitizing Eating and Drinking Utensils**

#### **Used in Restaurants, Taverns, Soda Fountains, Dairies, Kitchens and Cafeterias**

Prepare a 200 ppm available chlorine sanitizing solution immediately prior to use. Remove food particles by pre-washing, flushing or scraping. Wash with a good detergent or compatible cleaner, then rinse with clean water. Immerse for 2 minutes or for the contact time specified by your governing sanitary code. Do not rinse but allow surfaces to air dry. Do not reuse sanitizing solution.

### **Disinfecting Walls, Floors and Other Hard, Nonporous Surfaces in Kitchens and Bathrooms (Only nonfood contact surfaces)**

Preclean surfaces and rinse. Mix 1.5 fl oz of this product per gallon of water. Spray, rinse or wipe surface with solution and let stand for 5 minutes. Drain, if applicable, and air-dry. May be applied to floors, counters, sinks and other surfaces made from stainless steel, glass, Corian®, acrylic, glazed ceramic tile, porcelain and hard plastics.

### **Sanitizing Rinse**

**For Food and Dairy Processors:** This product may be used to sanitize all food/food surface contact equipment, utensils, pipes, pans, tanks or flat surfaces that are hard, nonporous surfaces that will not absorb the sanitizer solution. Thoroughly wet all surfaces with a 200 ppm available chlorine solution and allow solution to contact surface for 2 minutes. Remove all food particles and soil prior to treatment using pre-flush or pre-scape. Depending upon equipment setup, immersion or flooding may be best. A heavy spray is also acceptable if properly applied to stationary equipment.

Before treatment, remove or cover food products and packaging materials. A potable water rinse is not required following sanitization of previously cleaned surfaces provided the surfaces are adequately drained before food contact. This product may be use without a potable water rinse for microbial control on ceilings, floors and walls at a concentration considerably higher than allowed for sanitizing food contact surfaces unless such use may result in contamination of food products. A potable water rinse is required following use under conditions other than those previously stated. Do not reuse solution; mix a fresh solution for each application.

**Notice: This product may be applied only by the methods specified on the labeling.**

### **Cleaning Formulations, Bleaching & Non-Pesticide Chemical Manufacturing**

This product may be used for cleaning formulations, bleaching and non-pesticide chemical manufacturing. Only specifically designed handling and dispensing equipment must be used in accordance with manufacturer's instructions and according to operating instructions or product formulations defined by the use facility.

To the extent consistent with applicable law, buyer assumes all risks of use of this chemical if used contrary to directions.

*{For product in household/residential-use containers:}*

#### **Storage and Disposal**

Do not contaminate food or feed by storage, disposal or cleaning of equipment.

**Pesticide Storage:** To avoid deterioration, store this product in a cool dry area, away from direct sunlight and heat. In case of spill, flood areas with large quantities of water. **Container Disposal:** Non-refillable container; do not reuse or refill this container. **If empty:** Do not reuse this container. Place in trash or offer for recycling if available. **If partly filled:** Call your local solid waste agency for disposal instructions. Never place undiluted unused product down any indoor or outdoor drain.

*{For product not in household/residential-use containers (refillable container):}*

#### **Storage and Disposal**

Do not contaminate food or feed by storage, disposal or cleaning of equipment.

**Pesticide Storage:** To avoid deterioration, store this product in a cool dry area, away from direct sunlight and heat. In case of spill, flood areas with large quantities of water. **Pesticide Disposal:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. Pesticide wastes are acutely 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 nearest EPA Regional Office for guidance. **Container Disposal:** Refillable container. Refill this container with only sodium hypochlorite. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

*{For product not in household/residential-use containers greater than 5 gallons (non-refillable container):}*

#### **Storage and Disposal**

Do not contaminate food or feed by storage, disposal or cleaning of equipment.

**Pesticide Storage:** To avoid deterioration, store this product in a cool dry area, away from direct sunlight and heat. In case of spill, flood areas with large quantities of water. **Pesticide Disposal:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. Pesticide wastes are acutely 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 nearest EPA Regional Office for guidance. **Container Disposal:** Non-refillable container; do not reuse or refill this container. Offer for recycling, if available. Triple rinse (or equivalent) container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 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.

*{For product not in household/residential-use containers less than or equal to 5 gallons (non-refillable container):}*

#### **Storage and Disposal**

Do not contaminate food or feed by storage, disposal or cleaning of equipment.

**Pesticide Storage:** To avoid deterioration, store this product in a cool dry area, away from direct sunlight and heat. In case of spill, flood areas with large quantities of water. **Pesticide Disposal:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. **Container Disposal:** Non-refillable container; do not reuse or refill this container. Offer for recycling, if available. Triple rinse (or equivalent) container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 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.

{Per PR Notice 2007-4 the batch code/lot number will appear on the label or container.}

## Miami Products & Chemical Co.

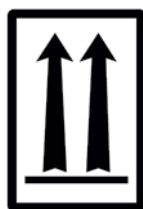
P.O. Box 486  
Dayton, OH 45403  
[1-]800-776-1313

*{Marketing Claims and Graphics}*

Keep Carton and Bottles Upright at all Times during Transportation, Handling and Storage  
Protect Vehicle Interior from Leakage While Transporting  
Tighten Caps before Unpacking and Handling Single Gallon Bottles  
Spillage Will Cause Bleaching on Contact  
Keep Bottles Upright  
Contains Bleach  
Keep Cap Tight and Bottle Upright in Cool Place  
This product is authorized by USDA for use in Federally-inspected meat and poultry plants.

### For Commercial Use

Disinfects    Deodorizes    Removes Stains from Fabrics  
For Disinfection [and Sanitization] of {Select from Sites Listed in **Directions for Use**}  
Klens-O-Klean



RS4ASLS



Do Not Mix With Acids or Other Chemicals



HYPOCHLORITE SOLUTION  
UN 1791

Corian® is a registered trademark of E.I. du Pont de Nemours  
Dacron® is a registered trademark of Invista North America S.A.R.L.  
Orlon® is a registered trademark of E.I. du Pont de Nemours

*{End of Marketing Claims and Graphics}*

*[ ] Denotes optional/alternative language*

*{ } Denotes language that does not appear on the market label*

Graphics Removed:

