

PM 32 5/1/95-3

1045

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

SEP 29 1995

Olivia D. Laird, Agent for
Deatrick & Associates Inc.
3345A Wakefield Street
Arlington, VA 22206

Subject: Hypochlor 10 x 70g Tablets for Klorman Chlorinator
EPA Registration No. 57425-3
Your Labeling Dated July 18, 1995

Dear Ms. Laird:

The revised labeling (the container label and the instruction leaflet) referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is acceptable subject to the comments listed below. A stamped copy is enclosed for your records. Five copies of the finished labeling must be submitted before the product is released for shipment bearing the amended labeling.

1. At the top of the front/title panel of the instruction leaflet, delete the words "EPA STANDARD" from the heading "EPA STANDARD USE INSTRUCTIONS."

2. On the front/title panel of the leaflet, above the ingredients statement, delete the statement, "SEE PRECAUTIONARY STATEMENT ON BACK PANEL." (The statements referred to are not in the leaflet.)

3. In the leaflet, in the last paragraph of the Directions for Use (i.e., the last paragraph of the Medical Emergency Care instructions):

- a. Insert the word "terminal" so that it reads, "This product is not to be used as a terminal sterilant/high level disinfectant...."
- b. Where it says "the bloodstream or formally sterile areas," replace the word "formally" with "normally".

CONCURRENCES

SYMBOL								
SURNAME								
DATE								

c. Where it says "prior to sterilization of high level disinfection," replace the word "of" with "or".

4. In the leaflet, in the "FLOW PRESSURE METHOD" paragraph, concatenate the last two sentences (so that they will read, "Repeat ... process if effluent contains")

5. In the leaflet, under the heading "DISINFECTION OF DRINKING WATER," in the "PUBLIC SYSTEMS" paragraph, the instructions must state that the 0.2 to 0.6 ppm available chlorine must be attained throughout the distribution system (or at the distal end of the distribution system).

6. In the leaflet, under the heading "EMERGENCY DISINFECTION AFTER DROUGHTS," add to the "MAINS" paragraph an instruction to stop the water flow only after 50 ppm available chlorine is attained at the low pressure point in the main.

7. On the container label, revise the paragraph following the ENVIRONMENTAL HAZARDS heading to read:

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.

If you have any questions about this letter, please call Wallace Powell at 703-305-6938.

Sincerely,



Ruth G. Douglas
Product Manager (32)
Antimicrobial Program Branch
Registration Division (7505C)

Enclosure

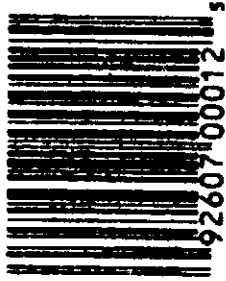
USE DIRECTIONS

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. Refer to container insert instruction leaflet for use directions.

STORAGE & 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.

Patent No's
 4,842,720/4,182,763
 6,243,080
 2,555-88
 8,630,682 1 (Pending)
 E.P.O. 208369/86 (Pending)
 Japan 8656822
 South Africa 8656822
 KLOORMAN® U.S.
 Reg. T.M. No. 1,532,863.



D.L.C.

ACCEPTED
 with COMMENTS
 In EPA Letter Dated:
 SEP 29 1995
 (Under) Use Federal Insecticide,
 Fungicide, and Rodenticide Act as
 amended; for the pesticide
 registered under EPA Reg. No.
 57425-3

HYPPOCHLOR
 10 x 70g TABLETS
 FOR

KLORMAN™ CHLORINATOR

**KEEP OUT OF REACH OF CHILDREN
 DANGER**

**CONTAMINATION MAY CAUSE FIRE
 MIX ONLY INTO WATER
 SEE PRECAUTIONARY STATEMENT
 ON BACK PANEL**

ACTIVE INGREDIENT	
CALCIUM HYPOCHLORITE.....	68%
INERT INGREDIENTS.....	32%
TOTAL	100%

AVAILABLE CHLORINE.....68%
 EPA REG. NO. 57425-3
 EPA EST NO. 57425-SA-002

FIRST AID (PRACTICAL TREATMENT)

If on skin: Brush off excess chemical and flush skin 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 immediately.

If in eyes: Flush eyes with water for at least 15 minutes. Call a physician immediately.

Distributed By
 Control Chemical
 D. b a Deatrick and Associates
 3345 A So Wakefield St
 Arlington VA 22206

Net weight 1 lb 5 oz (10 x 70 gram tablets)

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**HAZARDS
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**EPA STANDARD
USE INSTRUCTIONS**

Hypochlor
10 x 70 g TABLETS
FOR
KLORMAN™ CHLORINATOR

KEEP OUT OF REACH OF CHILDREN

DANGER.

CONTAMINATION MAY CAUSE FIRE
MIX ONLY INTO WATER
SEE PRECAUTIONARY STATEMENT
ON BACK PANEL

ACTIVE INGREDIENT:	
Calcium Hypochlorite	68%
Inert Ingredients	32%
TOTAL	100%
Available Chlorine	68%

EPA REG. NO. 57425-3
EPA EST NO. 57425 - SA - 002

FIRST AID (PRACTICAL TREATMENT)

If on skin: Brush off excess chemical and flush skin 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.

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Distributed By
Control Chemical
D/b/a Deatrick and Associates Inc.
3345A Wakefield Street
Arlington VA 22206

Nett weight: 1 lb 5 oz (10 x 70 gram tablets)

DIRECTIONS FOR USE

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

STORAGE AND DISPOSAL

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

SANITIZATION OF NON-POROUS NON-FOOD CONTACT SURFACES

Adjust KLORMAN® CHLORINATOR to deliver a solution of 100 ppm available chlorine (1 oz of this product with 40 gallons of water) using a suitable test kit for available chlorine. Solutions contain an initial 100 ppm available chlorine must be tested periodically, and the KLORMAN® CHLORINATOR adjusted as necessary to ensure that the available chlorine does not drop below 50 ppm.

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 test kit, adjust KLORMAN® CHLORINATOR as necessary to increase the dosage to establish 50 to 100 ppm. 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.

FLOW PRESSURE METHOD: Disassemble equipment and thoroughly clean after use. Assemble equipment in operating position prior to use. Using a test kit adjust KLORMAN® CHLORINATOR to yield a sanitizing solution containing 200 ppm available chlorine (1 oz of this 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 sanitizing solution, 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 check with a chlorine test kit. Repeat entire cleaning/sanitizing process. If effluent contains less than 50 ppm available chlorine.

CLEAN IN-PLACE METHOD: Thoroughly clean equipment after use. Using a test kit adjust KLORMAN® CHLORINATOR to yield a 200 ppm available chlorine sanitizing solution (1 oz of this product with 20 gallons of water) equal to 110% of volume capacity of equipment. Pump solution through the system until flow is obtained at all extremities, the system is completely filled with the sanitizing solution, 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 of the solution from drain valve and test with a chlorine test kit. Repeat entire cleaning/sanitizing process if effluent contains less than 50 ppm available

SANITIZATION OF POROUS FOOD CONTACT SURFACES

RINSE METHOD: Using a test kit adjust KLORMAN® CHLORINATOR to yield a sanitizing solution containing approximately 600 ppm available chlorine (3 oz of this product with 20 gallons of water). Clean surfaces in the normal manner. Rinse all surfaces thoroughly with the 600 ppm solution, maintaining contact for at least 2 minutes. Prior to using the equipment adjust the KLORMAN® CHLORINATOR to prepare a 200 ppm solution (1 oz of this product with 20 gallons of water) and rinse all surfaces with this solution. Do not rinse with water and do not soak equipment overnight.

SANITIZATION OF NON-POROUS NON-FOOD CONTACT SURFACES

RINSE METHOD: Using a test kit adjust KLORMAN® CHLORINATOR to yield a solution containing 200 ppm available chlorine (1 oz of this product with 20 gallons of water). 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.

DISINFECTION OF NON-POROUS NON-FOOD CONTACT SURFACES

RINSE METHOD: Prepare a disinfecting solution by using a test kit to adjust KLORMAN® CHLORINATOR to yield 600 ppm available chlorine (3 oz of this product with 20 gallons of water). 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.

SANITIZATION OF POROUS NON-FOOD CONTACT SURFACES

RINSE METHOD: Prepare a sanitizing solution by using a test kit to adjust KLORMAN® CHLORINATOR to yield 600 ppm available chlorine (3 oz of this product with 20 gallons of water). Clean surfaces in the normal manner. Prior to use, rinse all surfaces thoroughly with the sanitizing solution, maintaining contact with the sanitizer for at least 2 minutes. Do not rinse equipment with water after treatment and do not soak equipment overnight.

SEWAGE & WASTEWATER EFFLUENT TREATMENT

The disinfection of sewage effluent must be evaluated by determining the total number of 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 on operating standard valid only to the extent verified by the coliform quality of the effluent.

ACCEPTED
with COMMENTS
to EPA Letter Dated
SEP 29 1995
Under the Federal Insecticide
Fungicide and Rodenticide Act as
amended for the pesticide
registered under EPA Reg. No.
57425-3

BEST COPY AVAILABLE

- 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.
- Contacting: upon flash mixing, the flow through the system must be maintained.
- Dosage/Residual Control: successful disinfection is extremely dependent on response to fluctuating chlorine demand to maintain a predetermined, desirable chlorine level.

SEWAGE AND WASTEWATER TREATMENT

EFFLUENT SLIME CONTROL: Using a suitable test kit, adjust KLORMAN® CHLORINATOR to yield a solution containing (2 to 20 oz of this product with 100 gallons of water) 100 to 1000 ppm available chlorine. Feed the solution at a point in the system where complete mixing will occur. Once control is evident, adjust the KLORMAN® CHLORINATOR to yield a 15 ppm solution (0.3 oz of this product with 100 gallons of water) to maintain slime control.

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

PUBLIC SYSTEMS: Use a test kit to adjust KLORMAN® CHLORINATOR to yield no less than 0.2 ppm and not more than 0.6 ppm available chlorine (1 oz of this product with 60000 gallons of water). 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.

PUBLIC WATER SYSTEMS

RESERVOIRS - ALGAE CONTROL: Hypochlorinate systems 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 24 hour retention time. When chlorination is completed, the system must be flushed free of all heavily chlorinated water.

EMERGENCY DISINFECTION AFTER FIRES

CROSS CONNECTIONS OR EMERGENCY CONNECTIONS: The KLORMAN® CHLORINATOR should be set up near the intake of the untreated water supply. Use a test kit to adjust KLORMAN® CHLORINATOR to yield 0.1 to 0.2 ppm available chlorine.

EMERGENCY DISINFECTION AFTER DROUGHTS

SUPPLEMENTARY WATER SUPPLIES: Use a test kit to adjust KLORMAN® CHLORINATOR to yield a minimum available chlorine residual of 0.2 ppm after a 20 minute contact time.

WATER SHIPPED IN BY TANKS, TANK CARS, TRUCK: Thoroughly clean all containers and equipment. Use a test kit and adjust KLORMAN® CHLORINATOR to yield 500 ppm available

with 500 ppm available chlorine solution and rinse with potable water after 5 minutes. During the filling of the containers use test kit to adjust KLORMAN® CHLORINATOR to yield 0.2 ppm chlorine residual.

MAINS: Before assembly of repaired section, flush out mud and soil under pressure. Use a test kit to adjust KLORMAN® CHLORINATOR to yield 50 ppm available chlorine. Stop water for 24 hours retention time. When chlorination is completed, the system must be flushed free of all heavily chlorinated water.

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 400 ppm available chlorine (2 oz of this product with 10 gallons of water) for a period of 10 minutes. Use a test kit to adjust KLORMAN® CHLORINATOR. 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 feeder, fountains and waterers must be rinsed with potable water before reuse.

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 500 ppm available chlorine (1 oz of this product with 10 gallons of water). Use a test kit to adjust KLORMAN® CHLORINATOR.

FRUIT & VEGETABLE WASHING: Thoroughly clean all fruits and vegetables in a wash tank. Use a test kit to adjust KLORMAN® CHLORINATOR to yield 25 ppm available chlorine (1 oz of this product with 200 gallons of water). After draining the tank submerge fruit or vegetables for 2 minutes in a second wash tank containing the recirculating sanitizing solution. Spray vegetables with the sanitizing solution prior to packaging. Rinse fruit with potable water only prior to packaging.

MUSHROOMS: To control bacterial blotch (*Pseudomonas tolaasii*), use a test kit to adjust KLORMAN® CHLORINATOR to yield 100 to 200 ppm available chlorine solution (0.3 to 0.4 oz of this product with 10 gallons of water) prior to watering mushroom production surfaces. First application should be when pins form and thereafter between breaks on a need basis depending on occurrence of bacterial blotch. The chlorinated water may be applied directly to pins to control small infection foci.

POST-HARVEST ROOTS: To control and reduce the spread of soft rot causing organisms in water and on sweet potatoes (*Ipomoea batatas*), use a test kit to adjust KLORMAN® CHLORINATOR yield 150 to 500 ppm available chlorine (0.3 to 1 oz of this product with 10 gallons of water) and spray or dip the potatoes for 2 to 5 minutes.

kit to adjust KLORMAN® CHLORINATOR to yield 200 ppm available chlorine (1 oz of this product with 20 gallons of water) in warm water. The sanitizer temperature should not exceed 130°F. Spray the warm sanitizer so that the eggs are thoroughly wetted. Allow the eggs to thoroughly dry before casing or breaking. Do not apply a potable water rinse. The solution should not be re-used to sanitize eggs.

FOOD PROCESSING PLANTS

FISH FILLETING: Eviscerated and de-gilled fish removed from the fishing vessel are placed in a wash tank of sea-water or fresh water and use a test kit to adjust KLORMAN® CHLORINATOR to yield 25 ppm chlorine residual. Remove fish from treated water 24 to 48 hours before filleting. After scaling the fish are again washed in a 25 ppm chlorine solution, and are ready for filleting.

MEDICAL EMERGENCY CARE

FOR USE IN EMERGENCY CARE AREAS: Fire Departments, Ambulance Services, Rescue Squads and Hospital Emergency Departments for the rapid decontamination of patient handling devices such as stretchers, cots, scoop stretchers, as well as splinting devices and ambulance floors. Unit will provide 600 ppm (1.2 oz of this product per 10 gallons of water).

Thoroughly clean the surfaces prior to application. For use as spray to wet all surfaces thoroughly. Apply for 10 minutes.

This product is not to be used as a sterilant/high level disinfectant on any surface or instrument that (1) is introduced directly into the human body, either into or in contact with the bloodstream or formally sterile areas of the body, or (2) contacts intact mucous membranes but which does not ordinarily penetrate the blood barrier or otherwise enter normally sterile areas of the body. This product may be used to pre-clean or decontaminate critical or semi-critical medical devices prior to sterilization of high level disinfection.

Patent No's
U.S.A. 4, 842,729/4,192,763
Australia 62430/80

E.P.O. 86306882.1 (Pending)
Japan 209369/86 (Pending)
Chile 255-88
KLORMAN® U.S. REG. T.M. No. 1,532,893

ACCEPTED
with COMMENTS
in EPA Letter Dated:

SEP 29 1995

Under the Federal Insecticide, Fungicide, and Rodenticide Act, this product is registered under EPA Reg. No. 57425-3

Manufactured & Distributed by:
Control Chemicals
Deatrick and Associates Inc.
3345A Wakefield Street
Arlington VA 22206

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