AUG 19 1992

Control Chemicals
D/B/A Deatrick & Associates, Inc.
1013 East Taylor Run Parkway
Alexandria, VA 22303

Gentlemen:

Subject: Hypochlor 10 x 70 g Tablets for Klorman Chlorinator
EPA Registration No. 57425-3
USDA Letter Dated November 21, 1991

This is to inform you that we have received a letter from USDA acknowledging your request for authorization to use this product in Federally inspected meat and poultry plants with labeling bearing directions for shell egg sanitization. This letter has been included in the registration records for this product.

Sincerely yours,

Ruth G. Douglas
Product Manager (32)
Antimicrobial Program Branch
Registration Division (H7505C)

62966:I:WP50:Pringle:WP32-2:KEVRIC:07/29/92:08/28/92

CONCURRENCES								
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SURNAME								
DATE								

EPA Form 1320-1 (12-70)

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AUG 19 1992

Control Chemicals
D/B/A Deatrick & Associates, Inc.
1013 East Taylor Run Parkway
Alexandria, VA 22303

Gentlemen:

Subject: Hypochlor 10 x 70 g Tablets for Klorman Chlorinator
EPA Registration No. 57425-3
Your Submission Dated October 14, 1991
Your Agent's Letter Received March 16, 1992

This is to acknowledge receipt of a letter from your Agent requesting withdrawal of your submission dated October 14, 1991

In accordance with this request, no further consideration will be given to your submission of October 14, 1991 regarding a review of the use regulations, comparative chemistry data and comments on the Registration Standard for products containing as the active ingredients Sodium and Calcium Hypochlorite Salts.

If you have any further questions, please contact Ms. Barbara Pringle at (703) 305-6484.

Sincerely yours,

Ruth G. Douglas
Product Manager (32)
Antimicrobial Program Branch
Registration Division (H7505C)

62966:I:WP50:Pringle:WP32-2:KEVRIC:07/29/92:08/28/92

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DATE								

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If you have any questions, please contact Ms. Barbara Pringle at (703) 305-6434.

Sincerely yours,

Ruth G. Douglas
Product Manager (32)
Antimicrobial Program Branch
Registration Division (H7505C)

Enclosure

AUG 19 1992

Control Chemicals
D/B/A Deatrick & Associates, Inc.
1013 East Taylor Run Parkway
Alexandria, VA 22303

Gentlemen:

Subject: Brochure for Hypochlor 10 x 70 G Tablets for Klorman Chlorinator
EPA Registration No. 57425-3
Your Resubmission of June 17, 1992 Adding Egg Washing Directions

This is in response to your submission of revised labeling with an additional request to include egg washing directions for use in USDA federally inspected plants.

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is acceptable subject to the following comments. A stamped copy is enclosed for your records.

1. Revise "Harmful if swallowed" to read "May be fatal if swallowed."

2. Revise the ingestion statement to read: "If swallowed: Drink a large amount of water. Do not induce vomiting. Call a physician or poison control center immediately."

3. Include the "Statement of Practical Treatment" heading.

62966:I:WP50:Pringle:WP32-2:KEVRIC:07/29/92:08/28/92

CONCURRENCES								
SYMBOL								
SURNAME								
DATE								

EPA Form 1320-1 (12-70) OFFICIAL FILE COPY

E.P.A. Standard
USE DIRECTIONS

HIPOCHLOR 10 x 70g TABLETS FOR KLORMAN® CHLORINATOR

ACTIVE INGREDIENT	
CALCIUM HYPOCHLORITE	**65%**
INERT INGREDIENTS	**35%**

HARMFUL IF SWALLOWED

KEEP OUT OF REACH OF CHILDREN
DANGER

If contact with eyes occurs, flush with cold water for at least 15 minutes. Get medical attention.

If contact with skin, brush off excess chemical and flush skin with cold water for at least 15 minutes. If irritation persists, get medical attention.

If swallowed, feed bread soaked in milk, followed by olive oil or cooking oil. Do not induce vomiting. Call a phy. ician immediately.

AUG 1[illegible] 1992

Registered under [illegible]
57425-3

Distributed By

EPA Reg. No. 57425-3
Cartridge net contents: 1lb 5 oz (10x70gm Tablets)

KLORMAN

DIRECTIONS FOR USE

It is a violation of federal law to use this product in a manner inconsistent 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 FOOD CONTACT SURFACES

Adjust KLORMAN®CHLORINATOR to deliver a solution of 100ppm available chlorine (1 oz of this product with 40 gallons of water) using a suitable test kit for available chlorine. Solutions containing 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 50ppm.

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 50ppm available chlorine, as determined by a test kit, adjust KLORMAN®CHLORINATOR as necessary to increase the dosage to establish 50 to 100ppm. 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 200ppm 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 50ppm available chlorine.

CLEAN IN-PLACE METHOD; Thoroughly clean equipment after use. Using a test kit adjust KLORMAN®CHLORINATOR to yield a 200ppm 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 50ppm available chlorine.

SPRAY/FOG METHOD: Pre-clean all surfaces after use. Use a test kit to adjust KLORMAN® CHLORINATOR to yield 200ppm available chlorine sanitizing solution (1 oz of this 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.

SANITIZATION OF POROUS FOOD CONTACT SURFACES

RINSE METHOD: Using a test kit adjust KLORMAN®CHLORINATOR to yield a sanitizing solution containing approximately 600ppm available chlorine (3 oz of this product with 20 gallons of water). Clean surfaces in the normal manner. Rinse all surfaces thoroughly with the 600ppm solution, maintaining contact for at least 2 minutes. Prior to using the equipment, adjust the

KLORMAN® CHLORINATOR to prepare a 200ppm 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.

SPRAY/FOG METHOD: Preclean all surfaces after use and before sanitizing them. Using a test kit adjust KLORMAN® CHLORINATOR to yield a 600ppm available chlorine solution (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. Thoroughly spray or fog all surfaces until wet, allowing excess sanitizer to drain. Vacate area for at least 2 hours. Adjust KLORMAN® CHLORINATOR to yield a 200ppm available chlorine solution (1 oz of this product with 20 gallons of water) checking solution with a test kit. Use with solution to rinse all surfaces prior to use.

SANITIZATION of NON-POROUS NON-FOOD CONTACT SURFACES

RINSE METHOD: Using a testkit adjust KLORMAN® CHLORINATOR to yield a solution containing 200ppm 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.

SPRAY/FOG METHOD: Pre-clean all surfaces after use. Using a test kit adjust the KLORMAN® CHLORINATOR to yield 200ppm available chlorine sanitizing solution (1 oz of this product with 20 gallons of water). Use spray or fogging equipment which can resist hypochlorite solutions. Thoroughly spray or fog all surfaces until wet, allowing excess sanitizer to drain. Vacate area for at least 2 hours.

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 600ppm 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 600ppm 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.

SPRAY/FOG METHOD: Pre-clean all surfaces after use. Use a test kit to adjust KLORMAN® CHLORINATOR to yield 600ppm available chlorine (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/fogging 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 0.5ppm after 15 minutes contact. Although the chlorine residual is the critical factor in disinfection, the important 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.

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) 1000ppm 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 15ppm 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 not less than 0,2ppm and not more than 0,6ppm available chlorine (1 oz of this product with 6000 gallons of water). Check water frequently with a chlorine test kit. Bacteriological sampling must be conducted at a frequence 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 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 0.2ppm 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 0.2ppm 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 chlorine solution (1 oz of this product with 5 gallons of water) and rinse with potable water after 5 minutes. During the filling of the containers, use test kit to adjust KLORMAN®CHLORINATOR to yield 0.2ppm 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 50ppm available chlorine. Stop water for 24 hours 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: Use a test kit to adjust KLORMAN®CHLORINATOR to yield to 5 to 10ppm available chlorine (10 to 20 oz of this product with 10,000 gallons of water). Repeat until control is achieved. Subsequent dose: when microbial control is evident, use a test kit to adjust KLORMAN®CHLORINATOR to yield 1ppm available chlorine (2 oz of this product with 10,000 gallons of water). Badly fouled systems must be cleaned before treatment is begun.

INTERMITTENT FEED METHOD - Initial Dose: When the system is noticeably fouled, use a test kit to adjust KLORMAN®CHLORINATOR to yield 5 to 10 ppm available chlorine (10 to 20 oz of this product with 10,000 gallons of water). Apply half (or 1/3, 1/4, or 1/5) of this initial dose when half (or 1/3, 1/4, 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, use test kit to adjust KLORMAN®CHLORINATOR to yield 5 to 10ppm available chlorine (10 to 20 oz of this product with 10,000 gallons of water). Subsequent dose: Maintain this treatment level by starting a continuous feed to maintain 1ppm available chlorine (1 oz of this product with 3,000 gallons of water) use test kit to adjust KLORMAN®CHLORINATOR.

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 1000ppm 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 500ppm 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 25ppm 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 200ppm available chlorine solution (0.2 to 0.4 oz of this product with 10 gallons of water) prior to watering mushroom production surfaces. First application should begin when pins form, and thereafter, between breaks on a need basis depending on the 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 500ppm 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.

FOOD EGG SANITIZATION: Thoroughly clean all eggs. Use a test kit to adjust KLORMAN® CHLORINATOR to yield 200ppm 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 25ppm chlorine residual. Remove fish from treated water 24 to 48 hours before filleting. After scaling the fish are again washed in a 25ppm chlorine solution, and are ready for filleting.

PECAN CRACKING AND DYEING: Use a test kit and adjust KLORMAN® CHLORINATOR to yield 1000ppm available chlorine soaking solution (1 oz of this product with 5 gallons of water). Soak for a minimum of 10 minutes. After removal, age pecans for 24 hours. Before bleaching, pecans are placed in a rotary cleaner where they are washed, drained and soaked in a 2% sulphuric acid bath at 80 to 90°F for 1 minute. Use a test kit to adjust KLORMAN® CHLORINATOR to yield 5000ppm available chlorine (100 oz of this product with 100 gallons of water) and transfer pecans to the solution. After 4 to 8 minutes, they are drained and washed in a 1% sulphuric acid bath at 80 to 90°F. They are then dried.

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

Manufactured by

CONTROL CHEMICALS, D/B/A/ DEATRICK & ASSOCIATES, INC.
1013E Taylor Run Pkwy, Alexandria, VA. 22303