PM32 1258-1187

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

1 of 4

28 SEP 1992

Garrett B. Schifilliti
Olin Chemicals
350 Knotter Drive
P.O. Box 586
Cheshire, CT 06410-0586

Subject: Thrifty Sticks
EPA Registration No. 1258-1187
Thrifty 1" Tablets
EPA Registration No. 1258-1188
Thrifty 3" Tablets
EPA Registration No. 1258-1189
Thrifty Black Algaecide
EPA Registration No. 1258-1190
Your Submission Dated August 24, 1992

Dear Mr. Schifilliti:

This is in regard to your labeling amendment (re-submitted in response to the Agency letter dated August 16, 1992), initially submitted on September 6, 1991, to add uses for cooling tower water, sewage treatment, and food and beverage processing.

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 comment below. Stamped copies are enclosed for your records.

Submit five copies of the finished labeling before you release the product for shipment bearing the amended labeling.

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

Sincerely,

Ruth G. Douglas
Product Manager (32)
Antimicrobial Program Branch
Registration Division (H-7504C)

Enclosures

CONCURRENCES								
SYMBOL								
SURNAME								
DATE								

FM32 12-8-1187 2214

THRIFTY STICKS

ACTIVE INGREDIENT:
TRICHLORO-s-TRIAZINETRIONE.....78.6%
INERT INGREDIENTS.....21.4%
AVAILABLE CHLORINE... 70%
EPA REG. NO. 1258-1187 EPA EST. NO.1258-LA-1

KEEP OUT OF REACH OF CHILDREN

DANGER

See first aid and additional precautionary statements on back panel.

OLIN CHEMICALS
OLIN CORPORATION
120 LONG RIDGE ROAD
STAMFORD, CT. 06904

Net contents 100 #

ACCEPTED
with COMMENTS
In EPA Letter Dated:
28 SEP 1992
Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 1258-1187

(thskfrt)

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER: Highly corrosive. Causes skin and eye damage. May be fatal if swallowed. Do not get in eyes, on skin, or on clothing. Do not handle with bare hands. Wear goggles or face shield and use rubber gloves and only thoroughly clean, dry utensils when handling. Irritating to nose and throat. Avoid breathing dust and fumes. Remove and wash contaminated clothing before reuse.

FIRST AID: (PRACTICAL TREATMENT)

If Swallowed: Drink large quantities of water. Do not induce vomiting. Call a physician immediately. 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 in Eyes: Flush with cold water for at least 15 minutes. Call a physician immediately. If Inhaled: Remove person to fresh air. Call a physician immediately.

CHEMICAL HAZARDS: DANGER: Strong oxidizing agent. Use only clean, dry utensils. Mix only into water. Contamination with moisture, dirt, organic matter or other chemicals (including other pool chemicals) or any other foreign matter may start a chemical reaction with generation of heat, liberation of hazardous gases and possible generation of fire and explosion. Avoid any contact with flaming or burning material, such as a lighted cigarette. Do not use this product in any chlorinating device which has been used with any inorganic or unstabilized chlorinating compounds (e.g. calcium hypochlorite). Such use may cause fire or explosion.

ACCEPTED with COMMENTS in EPA Letter Dated: 28 SEP 1992 Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 1258-1167

ENVIRONMENTAL HAZARD: This product is toxic to fish. Do not contaminate lakes, ponds or streams by cleaning of equipment or disposal of wastes.

STORAGE AND DISPOSAL: Keep product dry in tightly closed container when not in use. Store in a cool, dry, well ventilated area away from heat or open flame. Do not reuse empty container. Rinse empty container thoroughly with water to dissolve all material before discarding. Securely wrap container in several layers of newspaper and discard in trash.

EMERGENCY HANDLING: In case of contamination or decomposition, do not reseal container. If possible, isolate container in open and well ventilated area. Flood with large volumes of water. Dispose of contaminated material in an approved landfill area.

(tccaprec)

DIRECTIONS FOR POOL USE: It is a violation of Federal law to use this product in a manner inconsistent with its labeling. This product is designed to dissolve slowly (3 -7 days), providing a steady source of available chlorine to control growth of algae and kill many harmful bacteria.

For Best Results: Place this product in a feeder following manufacturers directions or in a floating dispenser or skimmer. Do not permit this product to contact plastic pool linings or metal objects. Do not throw this product directly into the pool. If used in skimmer run pump and filter until sticks are dissolved.

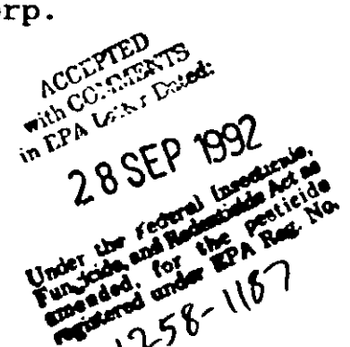
STARTUP:

1. Adjust pH to 7.2 to 7.4 using appropriate product.
2. Shock treat pool with appropriate product to obtain 1-3 ppm free available chlorine.
3. The next day stabilize your pool using appropriate product.

ROUTINE CARE: Add 1 stick of this product for each 10,000 gal. of water every week, or as needed, to maintain chlorine residual at 1-3 ppm. Maintain pH between 7.2-7.6, total alkalinity 90-125 ppm and calcium hardness above 200 ppm. Test with a reliable test kit. Make necessary adjustments with the appropriate pool care product(s). Shock treat weekly with appropriate product.

IN CASE OF: Algae, colored water, unpleasant odors, burning eyes, excess bather load, heavy rains and winds, or high temperatures, shock treat your pool using the appropriate product. If algae are visible, scrub pool surfaces and vacuum. Repeat treatment the following day if necessary. Do not enter pool until chlorine residual is 1-3 ppm.

For additional uses contact Olin Corp.



(thstkdir)

THRIFTY STICKS - EPA REG. NO. 1258-1187

FOR SANITIZATION

Active Ingredient: Trichloro-s-triazinetrione 78.6%
Inert Ingredient:.....21.4%
Available Chlorine: 70%

For Use Throughout Food and Beverage Processing and Food Handling Operations

This product is an effective sanitizing agent. Treatment with this product throughout food and beverage processing and food handling operations can help insure the quality and safety of the final product.

This product is a white product with a mild chemical odor. This odor is caused by its active ingredient, trichloro-s-triazinetrione (known also as trichloroisocyanuric acid).

This product is convenient to use and handle. It requires no complex, expensive metering equipment or large storage tanks.

All commercial sanitizers sold for biocidal applications must be registered by the U.S. Environmental Protection Agency (EPA) and state regulatory agencies. Olin has obtained registrations for all applications discussed in this data sheet. If your specific needs are not covered, contact your nearest Olin sales office. Additional data are on file, or we may be able to help you obtain the necessary government registrations.

This product is authorized by the USDA for use in federally inspected meat, poultry, egg and rabbit plants to sanitize surfaces and to clean, destain and sanitize eggs.

Meat and Poultry Processing Plants

Solutions of this product containing 100 ppm available chlorine will sanitize all equipment and utensils that come into contact with meat, thus helping to prevent contamination.

First, clean equipment and utensils thoroughly, removing all fat and grease. Spray or rinse with this solution (1 ounce per 50 gallons of water). Allow at least one minute contact time before draining. Allow adequate draining before contact with food.

Poultry Houses

The problem of odor control in poultry houses is not completely solved by normal cleaning practices. The regular use of an efficient bactericide and deodorant is strongly recommended and often required by health authorities.

Poultry houses, including feeding space, dropping boards, feeding troughs and watering fountains, should be cleaned and treated regularly with a solution containing 1 ounce of this product for every 50 gallons of water (100 ppm available chlorine). Spray or flush the solution generously on all surfaces and equipment. Rinse all watering fountains with it before they are returned to service.

Food Processing and Canning Plants

This product is a sanitizer recommended for all types of non-porous equipment used in the handling of food products. Spray or rinse a solution containing 1 ounce of this product per 50 gallons of water (100 ppm available chlorine) to sanitize previously cleaned processing and packaging equipment. Allow at least a one minute contact time before draining. Allow adequate draining before contact with food.

Restaurant and Institutional Dining Utensils

To sanitize glasses, dishes, mugs, knives, trays, food utensils and equipment: Scrape and then prewash with detergent or compatible cleaner. Rinse in potable water. Sanitize in a solution of 1 ounce of this product per 50 gallons of water (100 ppm available chlorine). Immerse all utensils for at least two minutes, or time specified by the governing sanitary code. When these product solutions are used on food-contact processing equipment and utensils, or on other food contact articles, FDA regulations prescribe adequate draining before contact with food.

Milk Handling and Processing Equipment

The procedures described in this section cover milk handling and processing equipment used on diary farms and in plants processing milk, cream, ice cream, cheese and other dairy products.

Rinse milking machines, utensils and all equipment with cold water to remove excess milk. Clean and rinse before sanitizing.

To Sanitize, spray or rinse all precleaned surfaces with a solution of 1 ounce of this product to 50 gallons of water (100 ppm available chlorine). Allow at least one minute contact time before draining. Allow adequate draining before contact with dairy products.

Bottling Plants and Breweries

This product is recommended for all types of non-porous equipment and utensils used in the production and bottling of beverages. Use 1 ounce of this product to 50 gallons of water (100 ppm available chlorine) to sanitize previously cleaned processing and packaging equipment. Allow at least a one minute contact time before draining. Allow adequate draining before contact with beverages.

To control the growth of bacteria in brewery pasteurizers, badly fouled systems should be cleaned before treatment. When the system is just noticeably fouled, add 8-10 ounces of this product per 10,000 gallons of water contained in the system. Repeat this dosage if necessary until a free available chlorine level (FAC) of 0.5-1.0 ppm is obtained (as determined by use of a reliable test kit). To maintain an FAC of 0.5-1.0 ppm, add 1 - 2 ounces of this product per 10,000 gallons of water, daily or as needed. This product should be added to the system at a point where adequate flow is maintained.

Fish Processing Plants

Scrub all surfaces thoroughly with a cleaning solution. Solutions of this product containing 100 ppm available chlorine (1 ounce of product to 50 gallons of water) will sanitize all hard, non-porous surfaces (tile, formica, stainless steel).

Use the rinse or spray method, and allow at least two minutes contact time. Allow adequate draining before contact with fish products.

Egg Processing Plants

To clean egg shells, spray with a solution containing 1 ounce of this product per 50 gallons of water (100 ppm available chlorine) at 90°F to 120°F. Spray-rinse the cleaned eggs with warm potable water.

To destain egg shells, immerse the eggs in a solution containing 100 ppm available chlorine at 90°F to 120°F. After destaining, the eggs must be cleaned by spraying with an acceptable cleaner. Follow with potable water rinse.

For shell egg sanitizing, spray the eggs with warm potable water containing 100 ppm available chlorine. Eggs should be reasonably dry before casing or breaking.

All egg cups, breaking knives, trays and other equipment that come into contact with "off" eggs should be thoroughly cleaned and sanitized. First, clean all equipment. Before placing back in use, spray with a solution containing 100 ppm available chlorine. Allow surfaces to drain thoroughly before contact with egg products.

To sanitize egg freezers and dryers (tanks, pipelines and pumps), use the spray (or fog) method of treatment. This procedure is generally used to sanitize large, non-porous surfaces that have already been freed of physical soil.

Prepare a solution containing 100 ppm available chlorine. Apply spray heavily to all surfaces the eggs will touch. All treated surfaces, corners and turns should be thoroughly sprayed. Allow at least a one minute contact time before draining. Allow equipment to drain adequately before contact with eggs.

Methods of Application of Solutions of This Product

All sanitizing solutions should be freshly prepared. Solutions should be tested during use to make sure the concentration does not drop below the recommended level. Keep in properly labeled containers to protect against contamination. Unused solutions should be discarded.

Method of Sanitizing Equipment. This method is commonly used to sanitize closed systems, such as fluid milk cooling and handling equipment. It is also appropriate for sanitizing weigh tanks, coolers, short-time pasteurizers, pumps, homogenizers, fillers, sanitary piping and fittings, and bottle and can fillers.

First, clean all equipment thoroughly, immediately after use. Then place back in operating position.

Prepare a solution containing 100 ppm available chlorine (1 ounce to 50 gallons of water) in a volume sufficient to fill the equipment. Allow a 10% excess for waste.

Pump the solution through the system until it is filled and air excluded. Close final drain valves and hold under pressure for two minutes to insure proper contact with all surfaces. Then drain the solution.

Spray method of Sanitizing Equipment. The spray (or fog) method is generally used to sanitize large, non-porous surfaces that have already been freed of physical soil. It is appropriate for batch pasteurizers, holding tanks, weigh tanks, tank trucks and cars, vats, tile walls, ceilings and floors.

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Prepare solution containing 100 ppm available chlorine, If possible, use pressure spraying or fogging equipment designed to resist chlorine-containing solutions (e.g. rubber-coated, plastic or stainless steel). When using any other kind of spraying equipment, be sure to empty and rinse thoroughly with fresh water immediately after treatment.

Apply spray or fog heavily to all surfaces the product will touch. All treated surfaces, corners and turns should be thoroughly sprayed. Allow at least a one minute contact time before draining. Allow excess solution to drain off thoroughly, then place in service.

General Rinse Method. This product containing 100 ppm available chlorine will sanitize plant floors, walls and ceilings, and also control odors in refrigerated areas and drain platforms.

Flush or swab surfaces generously with the solution. After two minutes contact time allow solution to drain thoroughly.

Technical Assistance

Technical assistance is available to facilitate your further investigation of this product. If you have a question or need more information, please call or write your nearest Olin sales office.

KEEP OUT OF REACH OF CHILDREN
DANGER!

See principal label for complete precautionary information, storage and handling instructions.

Olin Corporation
120 Long ridge Road
Stamford, CT 06904

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THRIFTY STICKS - EPA REG. NO. 1258-1187

Active Ingredient: Trichloro-s-triazinetrione 78.6%
Inert Ingredient:..... 21.4%
Available Chlorine:.....70%

Treatment with this product is an effective way to control the growth of bacterial and algae in industrial recirculating water cooling towers, air washers and evaporative condensers.

Directions for Use

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

1. Badly fouled systems should be cleaned prior to initiating treatment.

2. Initial Dosage - When the system is just noticeably fouled, add 10 oz. of this product per 10,000 gallons of water contained in the system. Repeat this dosage, if necessary, until free available chlorine level (FAC) of 0.5 - 1.0 ppm is obtained (as determined by use of a reliable test kit).

3. Maintenance Dosage - To obtain a FAC of 0.5 - 1.0 ppm, add 1 - 2 oz. of this product per 10,000 gallons of water daily or as needed.

4. This product should be added to the system at a point where adequate flow is maintained. Variations in water temperature, chlorine demand and flow rate will affect the dissolution rate. Warmer seasons may require an upward adjustment of the FAC.

Air Washers

For use only in industrial air washer systems that maintain effective mist eliminating components. Hypo-chlorite controls slime forming bacteria and fungi in air washer systems. This product may be added to the system either continuously or intermittently or as needed. The frequency of feeding and duration of the treatment will depend on the severity of the problem.

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Badly fouled systems should be cleaned prior to initiating treatment.

1. Initial Dosage - When the system is just noticeably fouled, add 8 - 10 oz.. of this product per 10,000 gallons of water contained in the system. Repeat this dosage, if necessary, until a free available chlorine level (FAC) of 0.5 - 1.0 ppm is obtained (as determined by use of a reliable test kit).

2. Maintenance Dosage - To maintain a FAC of 0.5 - 1.0 ppm, add 1 - 2 oz. of this product per 10,000 gallons of water, daily or as needed.

3. This product should be added to the system at a point where adequate flow is maintained. Variations in water temperature, chlorine demand and flow rate will affect the dissolution rate. Warmer seasons may require an upward adjustment of the FAC.

Other Uses

Write to Olin Corporation for specific literature on other accepted uses.

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Olin Corporation
120 Long Ridge Road
Stamford, CT 06904

12414

THRIFTY STICKS - EPA REG. NO. 1258-1187

Active Ingredient: Trichloro-s-triazinetrione 78.6%
Inert Ingredient:.....21.4%
Available Chlorine:.....70%

For Use in Sewage Treatment

Directions for Use

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

1. Disinfection of Effluents - Disinfection by chlorination or hypochlorination does not occur instantaneously. A suitable detention basin must be provided to expose the sewage effluent to the effects of this product for a sufficient period of time (usually a minimum of 15 minutes). Where mechanical stirring or other agitation is not present, chlorination for disinfection should be introduced before primary or secondary sedimentation treatments, if these are used.

   The amount of product solution required will vary, depending on the concentration and conditions of the final effluent. The sewage should be treated before it has reached a septic state. Experiments indicate that about 30% of the chlorine demand of raw sewage is attributed to settle solids; 40% to suspended and colloidal solids; and 30% to dissolve solids.

   Whenever possible, disinfection should be controlled by laboratory checks. Disinfection can be achieved when the chlorine residual (after 15 - 30 minutes contact time) is between 0.6 and 1.0 ppm. Experience with different types of treated sewage will generally establish a relationship between the residual chlorine content of the final effluent and the contact time necessary to insure the desired bacteriological results, after which the residual chlorine and time of contact may be made the controlling factors for operation. Occasional bacteriological checks should be practiced as a safeguard.

   Hypochlorinators used to treat sewage in small communities should always be located near the influent of the detention basin. To conform with the requirements

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mentioned above, the feed rate must be adjusted to the higher dosages usually required for sewage practices. In cases where sewage is to be temporarily disinfected before being diluted in a body of water, the following conditions will usually provide satisfactory protection against pollution of receiving waters: () Raw sewage, 10 - 30 ppm available chlorine. (b) Primary treated sewage, 5 - 20 ppm available chlorine. (c) Sewage which has undergone primary and secondary treatment, or secondary alone, 2 - 5 ppm. Bacteriological tests should be made frequently as a safeguard. The available chlorine level in the discharge effluent should be between 0.6 and 1.0 ppm or in accordance with an NPDES permit. For guidance, contact the regional office of EPA.

2. Slime Control - When ponding of the filters is excessive, stoppage of the distributing filter can occur. The continual feeding of a hypochlorite solution into the effluent at a point above the filter nozzles will clean the filter satisfactorily. Dosages will depend on the amount of excess slime accumulated on the nozzles and filter stone. Extreme cases may require dosages as high as 10 ppm available chlorine.

   Once the desired cleaning has been achieved, an intermittent application of hypochlorite solution to the dosing tanks, just ahead of the filter, is usually successful. The amount and frequency of the dosage needed to give satisfactory continuous operation of the trickling filters depends on the severity of the microbiological problem.

   In activated sludge plants, "bulking sludge" can be caused by the presence of slime which interrupts proper settling. A solution of hypochlorite introduced at some point on the return sludge line can be an effective control measure. Normal dosage rates are 2 - 8 ppm available chlorine.

3. B.O.D. Reduction - The condition can usually be avoided by applying a solution of hypochlorite to the effluent until a substantial residual is obtained. Application should be made at a point which will permit 10 - 20 minute contact time prior to the discharge of the effluent into the stream. A dosage which leaves a residual available chlorine of about 0.2 ppm after a contact time of at least 10 minutes, will afford a reduction of about 1/3 of the effluents B.O.D. When more permanent or greater B.O.D. reduction is necessary dosing to higher available chlorine residuals is recommended.

4. *Coagulation and Sedimentation* - A great deal of the finer divided suspended matter and most of the colloidal matter in sewage does not readily respond to plain sedimentation. The job of removing substantial portions of this kind of matter is usually accomplished either by chemical precipitation, by filtration, or by the use of both processes. Research has proven that pre-hypochlorination will improve secimentation and coagulation in sewage treatment operations.

5. Treating Effluent from Mobile Sewage Treatment Units - Only human waste, toilet paper and water should enter the mobile sewage treatment unit. Solids are retained in the unit for later removal, while the liquid portion is filtered, disinfected and discharged. Hypochlorite tablets are placed in a flow-thru container where the liquid effluent passes over them before being discharged.

   Disinfection by chlorination or hypochlorination does not occur instantly and a suitable detention basin must be provided to expose the sewage effluent to the effects of this product for a sufficient period of time (usually a minimum of 15 minutes). Tests should be made frequently as a safeguard. The available chlorine level in the discharge effluent should be between 0.6 and 1.0 ppm or in accordance with an NPDES permit. For guidance, contact the regional office of EPA

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