

US ENVIRONMENTAL PROTECTION AGENCY OFFICE OF PESTICIDES PROGRAMS REGISTRATION DIVISION (TS-767) WASHINGTON, DC 20460	EPA REGISTRATION NO. 1258-1187	DATE OF ISSUANCE NOV. 15 1994
	TERM OF ISSUANCE	
	NAME OF PESTICIDE PRODUCT Thrifty Sticks	

NOTICE OF PESTICIDE: REGISTRATION
 REREGISTRATION
 (Under the Federal Insecticide, Fungicide,
 and Rodenticide Act, as amended)

NAME AND ADDRESS OF REGISTRANT (Include ZIP code)

Olin Corporation
350 Knotter Drive
Cheshire, CT 06410

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

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

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

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

Based on your response to the Reregistration Eligibility Document, EPA has reregistered the above named product subject to the comments recorded in the succeeding paragraph. This action is taken under the authority of section 4(g)(2)(C) of the Federal Insecticide, Fungicide, and Rodenticide Act, as amended. Reregistration under this section does not eliminate the need for continual reassessment of pesticides. EPA may require submission of data at any time to maintain the registration of your product.

Make the following labeling changes before you release the product for shipment:

1. Refer to the enclosed Attachment A for the necessary revisions to the Precautionary Statements for the subject product.
2. Revise the Environmental Hazards to read as follows:

"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

ATTACHMENT IS APPLICABLE

SIGNATURE OF APPROVING OFFICIAL	DATE
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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".

3. Under the directions for swimming pools, spa and hot tub use include the following reentry statement: Reentry into treated swimming pools/spas/hot tubs is prohibited above levels of 3 ppm chlorine.
4. In the center panel on page 4, revise "...for all types of nonporous..." to read "... for sanitizing all types of hard, nonporous...".
5. On page 4, under the directions for egg processing plants, expand the directions to reflect items 2b (1) (2) and (3) as indicated on the attached enclosure.
6. On page 4 and 5 under the use directions for sanitization, expand the directions to reflect items B (3) (6) and (7) of the attached enclosure.

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

Submit one copy of the final printed labeling before releasing the product in channels of trade with the revised labeling.

The acute inhalation study must be reconducted and the requested information on the dermal sensitization study submitted for review within six (6) months from the date of receipt of this letter. Refer to the enclosed review for a complete evaluation of the acute studies.

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



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

Enclosure

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 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. Probable mucosal damage may contraindicate the use of gastric lavage. 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. Get immediate medical attention. If Inhaled: Remove person to fresh air. Get immediate medical attention.

CHEMICAL HAZARDS: DANGER: Strong oxidizing agent. Use only clean, dry utensils. Add only into water. Contamination with moisture, dirt, organic matter or other chemicals may start a chemical reaction with generation of heat, liberation of hazardous gases and possible fire and / or explosion. Avoid any contact with flaming or burning material. Do not use this product in any chlorinating device which has been used with any product other than trichloro-s-triazinetrione tablets or sticks as the active ingredient. Such use may cause fire or explosion.

ENVIRONMENTAL HAZARD: This pesticide is toxic to fish and aquatic organisms. Do not discharge effluent containing this product into lakes, ponds, streams, estuaries, oceans or public waters unless this product is specifically identified and addressed in an NPDES permit. Do not discharge effluent containing this product to sewer systems without previously notifying the sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA.

**THRIFTY
CONCENTRATED POOL
CHLORINATING STICKS**

Active Ingredient:	
Trichloro-s-Triazinetrione	78.6%
Inert Ingredients	21.4%
Total	100%

Available Chlorine 70%

**KEEP OUT OF REACH OF CHILDREN
DANGER!**

**CONTAMINATION MAY CAUSE FIRE
ADD ONLY TO WATER**

SEE SIDE LABEL FOR FIRST AID AND PRECAUTIONS

Net Wt. 25 Lbs.

EPA Reg. No. 1258-1187
EPA Est. No. 9157-MI-1

OLIN CORPORATION
120 LONG RIDGE ROAD
STAMFORD, CT. 06904

(isored\12581187.doc)

ACCEPTED
with COMMENTS
in EPA Letter Dated:

NOV 15 1994

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

1258-1187

STORAGE AND
in tightly closed container
cool dry well-ventilated
flame. Do not reuse
container thoroughly
before discarding. 5
layers of newspaper a

DIRECTIONS FOR USE:
It is a violation of federal law
in a manner inconsistent with
designed to dissolve s
available chlorine in s
growth of algae, kill b
contaminants.

**READ THE PRECAUTIONS
BEFORE USE.**

METHOD OF APPLICATION:
Use in a floating dispenser
feeder designed for this
in a new chlorinating
previously contained
ingredient is trichloro-s-triazinetrione
skimmer, run the pump

DO NOT: REUSE floating dispenser
chlorinating
DO NOT Throw tablets
DO NOT Permit tablets
or metal objects
DO NOT Use with
same skimmer
DO NOT Use in an
been used

WATER BALANCE:

To provide optimum product performance, swimmer comfort and crystal clear water, always maintain pH from 7.2 to 7.8, total alkalinity from 90 to 125 parts per million (ppm), and calcium hardness above 200 ppm. Test frequently using a reliable test kit that measures all these ranges. Make any necessary adjustments promptly with the appropriate Pace Pool Care Products.

ROUTINE CHLORINATION:

Add one stick per 10,000 gallons of pool water every week or as often as needed to maintain a chlorine residual at 1.0 to 3.0 ppm. Follow "Method of Application". This dosage may vary depending upon bather load, water temperature and other conditions. Pool should not be entered until the chlorine residual is 1 to 3 ppm as measured with a reliable test kit.

As a preventative treatment, you should shock treat your pool once per week to prevent pool problems. In addition to weekly shock treatment, you should shock treat to remedy problems which may occur when bathing loads are high, water appears hazy or dull, unpleasant odors or eye irritation occur, after heavy wind and rainstorms, or if algae does develop with resulting green color and slimy feeling.

SHOCK TREATMENT:

Adjust pH to 7.2 to 7.4 with Pace pH Plus or Pace pH Minus per label directions. Shock treat weekly with a product such as Pace Super Chlorinator & Shock Treatment to kill bacteria, control algae, burn out organic material and to keep water sparkling clear. Follow label directions.

ALGAE CONTROL:

If pool surface develops algae or feels slippery, follow shock treatment directions. Immediately after shock treatment, thoroughly clean pool by scrubbing surface of algae growth, vacuum and cycle through filter. If necessary, repeat the procedure. Pool should not be entered until the chlorine residual is 1.0 to 3.0 ppm.

OPENING YOUR POOL:

Balance pool water, shock treat, and stabilize your pool using Pace Stabilizer and Conditioner. Then follow "Routine Chlorination" directions.

TO DETERMINE YOUR POOL CAPACITY IN U.S. GALLONS, USE THE APPROPRIATE FORMULA BELOW: (Use measurements in feet only)

RECTANGULAR:

LENGTH X WIDTH X AVERAGE DEPTH X 7.5
= TOTAL GALLONS

ROUND:

DIAMETER X DIAMETER X AVERAGE DEPTH X
5.9 = TOTAL GALLONS

OVAL:

MAXIMUM LENGTH X MAXIMUM WIDTH X
AVERAGE DEPTH X 5.9 = TOTAL GALLONS

FREEFORM: SURFACE AREA (SQ. FEET) X
AVERAGE DEPTH X 7.5 = TOTAL GALLONS

DIRECTIONS FOR SPA AND TUB USE: Each half ounce of this product will provide approximately 4 ppm available chlorine in 500 gallons of water. Using an appropriate test kit, test and adjust the water to the following values: pH: 7.2-7.8, total alkalinity 90-125 ppm, calcium hardness 200 ppm minimum. Maintain these conditions for proper spa and hot tub operation by frequent testing with a test kit. Do not allow cyanuric acid level to exceed 150 ppm. It is recommended that spas and hot tubs be drained every 30-90 days, more often under heavy use. Consult manufacturer's recommendations concerning the compatibility of chlorine sanitizers with their equipment. Some oils, lotions, fragrances, cleansers, etc., may cause foaming or cloudy water and may react with chlorine sanitizers to reduce their efficacy.

START-UP (FRESHLY FILLED)

1. Before use, read installation instructions and operating manual for the appropriate feeder or dissolving container.

1. Turn on the circulation system and ensure that it is operating properly. Fill feeder or dissolving container with this product and maintain 3 ppm free available chlorine (FAC). Spa or Hot Tub should not be entered until the FAC is 3 ppm or less.

REGULAR USE

Maintain 1-3 ppm FAC while the spa or hot tub is in use. After each use, shock treat to control odors and algae by dosing with a 10 ppm FAC residual. Repeat as needed. Spa or hot tub should not be entered until FAC reaches 1-3 ppm.

EXTENDED NON-USE PERIOD

During extended periods when the spa or hot tub is not being used, maintain 1-3 ppm free available chlorine.

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For Use in Industrial Recirculating Water Cooling Towers, Air Washers & Evaporative Condensers.

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.

1. Badly fouled systems should be cleaned prior to initiating treatment.
2. Initial Dosage - When the system is just noticeably fouled, add 8 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 0.8 - 1.6 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.

BADLY FOULED SYSTEMS should be cleaned prior to initiating treatment.

1. Initial Dosage - When the system is just noticeably fouled, add 0.4 - 0.5 lbs. 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 0.8 - 1.6 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.

For Use in Sewage Treatment

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 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: (a) 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.

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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.

Applications 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. Where 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 sedimentation 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. Product is 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

For Use Throughout Food & Beverage Processing and Food Handling Operations.

This product is recommended for all types of non-porous equipment and utensils used in Food Processing & Canning Plants, Bottling Plants & Breweries, Fish Processing Plants, Meat & Poultry Processing Plants, Milk Handling & Processing Plants, Restaurant & Institutional Dining Establishments and Poultry Houses.

Use 1 ounce of this product to 67 gallons of water (100 ppm available chlorine) to sanitize previously cleaned processing and packaging equipment. Allow at least a two minute contact time before draining. Allow adequate draining before contact with beverages or food.

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.

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 only clean, whole eggs with warm (not exceeding 130 deg. F.)

potable water containing 100 ppm available chlorine. 1 oz. per 67 gal. of water. Eggs should be reasonably dry before casing or breaking. Do not reuse the solution for sanitizing eggs.

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 (1 oz. per 67 gal. of water). 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.

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Clean-In-Place 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 67 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.

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.

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or safety glasses. Wear protective clothing and rubber gloves. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse."

3. The statements of Practical Treatment should read:

"If in eyes: Hold eyelids open and flush with a steady gentle stream of water for 15 minutes. Get medical attention."

" If on Skin: Wash with plenty of soap and water. Get medical attention."

" If swallowed: Drink promptly a large quantity of water. Avoid alcohol. Get medical attention. "

Note to physician: Probable mucosal damage may contraindicate use of gastric lavage."

4. The Environmental Hazards Statement should include the following: "Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark".

Additional labeling requirements may be needed upon submission of outstanding studies.