

US EPA ARCHIVE DOCUMENT

Shaughnessy No.: 00631-?

Date out EAB: 13 AUG 1984

To: Castillo/Laird
Product Manager #32
Registration Division (TS-767)

From: Samuel M. Creeger, Chief *SMC*
Environmental Chemistry Review Section 1
Exposure Assessment Branch
Hazard Evaluation Division (TS-769c)

Attached, please find the EAB review of:

Reg./File No.: 8959-UN

Chemical: 1-bromo-3-chloro-5,5-dimethylhydantoin

Type Product: M

Product Name: Spa-Trine Bromine

Company Name: Applied Biochemistry

Submission Purpose: registration in spas and hot tubs

ZBB Code: other

Action Code: 160

Date In: 7/23/84

EAB No.: 4467

Date Completed: 13 AUG 1984

TAIS (Level II) Days

Deferrals To: 62 1

Ecological Effects Branch

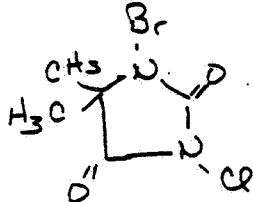
Residue Chemistry Branch

Toxicology Branch

1.0 INTRODUCTION

Applied Biochemists has submitted data in support of the product Spa-Trine Bromine for use as a microbiocide in spas and hot tubs.

2.0 Spa-Trine Bromine: 1-bromo-3-chloro-5,5-dimethylhydantoin.



3.0 DISCUSSION

EAB has not received any environmental fate data for review in this submission. Nor does EAB have any environmental fate data in the files.

4.0 RECOMMENDATIONS

EAB does not concur with the registration of Spa-Trine Bromine until the following data gaps are filled:

- ° EAB recommends that a hydrolysis study on the active ingredient be required. If hydrolysis data already exists, it should be submitted for review.
- ° On the basis that Spa-Trine Bromine may be used in outdoor tubs, EAB is requiring an aqueous photolysis study.
- ° EAB recommends that an activated sludge study be conducted since regular drainage of spas could result in an indirect discharge into wastewater treatment plants.
- ° EAB recommends that the label contain a statement restricting drainage of treated water onto lawns or soil. If the restriction cannot be accommodated, then additional data may be needed.

Note to PM:

EAB notes that a similar request was reviewed by EAB (7/28/81) for Spa Brom, same active ingredient as Spa-Trine Bromine (registrant: Aquabrom/Tesco).

Richard V. Moraski
Chemist

SPA-trine®

EPA Est. No. 6959 WI-1
EPA Reg. No. 6959

BROMINE FOR SPAS & HOT TUBS

ACTIVE INGREDIENTS:

1-Bromo-3-chloro-5,5-dimethylhydantoin
More Than 90%

INERT INGREDIENTS . . . Less Than 10%

(Available Bromine, 66%-68% [33%-34% By Weight], Available Chlorine, 24%-26% [12%-13% By Weight])

DANGER

KEEP OUT OF REACH OF CHILDREN
See first aid and other precautions on side panel

Net Contents:

(Grams)

Manufactured by
Applied Biochemists, Inc.
Madison, Wisconsin 53707, USA

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. When used as directed, SPA-trine™ BROMINE can keep your spa or hot tub sparkling clear and healthful. BROMINE is a very effective disinfectant throughout the entire pH range commonly found in bathwater.

BROMINE Residual: . . . 0.5-2.0 ppm: Maintain a bromine residual of 0.5-2.0 parts per million at all times. Add one SPA-trine™ BROMINE PAK to your spa or hot tub for each 250 gallons of capacity, or fill your bromine feeder with SPA-trine™ BROMINE and adjust as per the feeder manufacturer's directions. Test for bromine residual of your spa or hot tub regularly prior to using it, after heavy use, and on a daily basis. If the bromine residual is below 0.5 ppm, adjust to the proper operating range of 0.5-2.0 ppm by adding an additional SPA-trine™ PAK directly to the water, to the summer or the bromine feeder. Operate your spa or hot tub circulation and filtration system a minimum of 2 hours per day when not in use. Due to the low solubility rate of SPA-trine™ BROMINE, additional circulation of the water may be required to increase the bromine residual to the proper operating range. Proper circulation, filtration and chemistry of your spa or hot tub is mandatory for obtaining optimum benefits from the chemicals and equipment. If any problem persists, have your local pool professional analyze your water. Under normal use, your spa or hot tub should be drained and refilled with fresh water at least once every two months. Heavy use will require draining and refilling your spa or hot tub monthly.

PRECAUTIONARY STATEMENTS HAZARD TO HUMANS AND DOMESTIC ANIMALS

DANGER

Corrosive - causes eye damage and burns skin. Causes irritation of nose and throat. Harmful if swallowed. Do not get on skin or on clothing. Use clean dry utensils and wear goggles or face shield and rubber gloves when handling. Avoid breathing dust or fumes.

First Aid (Practical Treatment)

On skin: immediately brush off excess chemical and flush with plenty of water. Remove contaminated clothing. Wash clothing before reuse. If irritation persists, call a physician.

In eyes: immediately flush with plenty of water for at least 15 minutes and call a physician.

If swallowed: drink milk, water or raw egg whites. Call a physician.

Inhaled: remove person to fresh air. Call a physician.

PHYSICAL OR CHEMICAL HAZARD

Strong oxidizer. Contact with organic matter may cause fire. Will burn with evolution of chlorine and equally toxic gases. Avoid contact with organic material. Decomposes at 450° to 480°F with liberation of harmful gases. In case of contamination or decomposition, do not reuse container.

CONTAINER HANDLING AND STORAGE

Storage and Disposal: Keep product dry in closed container when not in use. Store in a cool dry, well-ventilated area away from heat, open flames and organic chemicals. Place empty container in trash collection in approved landfill area, or bury in safe place. Do not reuse pesticide container.

ENVIRONMENTAL HAZARD

This product is toxic to fish. Do not discharge into lakes, streams, ponds or public waters unless in accordance with NPDES Permit. For guidance, contact the regional office of EPA.

NOTICE

Buyer assumes all risks of use of this material when such use is contrary to label instructions.