069105
Shaughnessy No.: 069149

Date out of EAB: 10 SEP 1984

To: Lee
Product Manager #31
Registration Division (TS-767)

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

COPY

Attached, please find the EAB review of:

Reg./File No.: 47371-55

Chemical: n-alkyl (C_{14}50%, C_{12}40%, C_{16}10%)dimethyl benzyl ammonium chloride, 2) didecyl dimethyl ammonium chloride

Type Product: Microbiocide

Product Name: WTM - 1210 Water Treatment Microbiocide

Company Name: H&S Chemicals Division

Submission Purpose: label amendments

ZBB Code: ?

Action Code: 305

Date In: 7/31

EAB No.: 4478

Date Completed: 9/7/84

TAIS (Level II)	Days
64	1.5

Deferrals To:

_____ Ecological Effects Branch

_____ Residue Chemistry Branch

_____ Toxicology Branch

1.0 INTRODUCTION

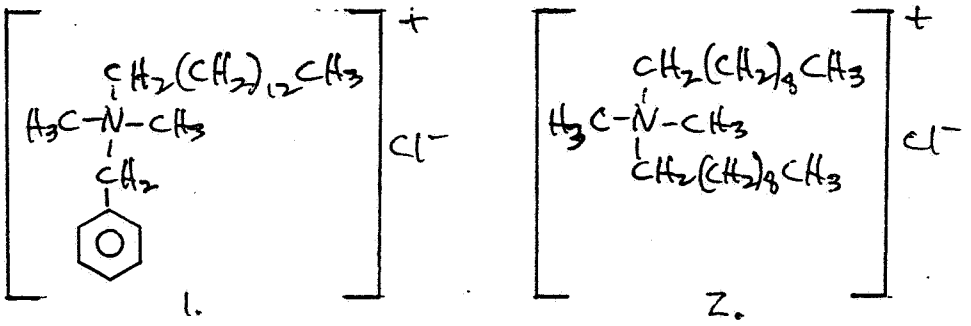
Chemical Name and Type of Pesticide:

1. n-alkyl (C_{14}50%, C_{12}40%, C_{16}10%)dimethyl benzyl ammonium chloride, 20% ai.

2. didecyl dimethyl ammonium chloride, 30% ai.

Trade Name: WTM-1210 Water Treatment Microbiocide

Chemical Structures:



H&S Chemicals is requesting amendments to its WTM-1210 label (see attached Application for Pesticide Amendment). Attachment 1 is the current label; attachment 2 is the proposed label. The label prohibits use in marine and/or estuarine oil fields. Direct discharge into lakes, streams, or ponds must be in accordance with NPDES permit.

2.0 DIRECTIONS FOR USE

See attachment 1 (current label) and attachment 2 (proposed label).

3.0 DISCUSSION OF DATA

No new data was submitted.

4.0 RECOMMENDATION

4.1 EAB does not find the environment fate data we have on these two chemicals to support the proposed label amendments.

Briefly, a summation of the data (memo of 23 April 1975) we have on the alkyl dimethyl benzene quat is as follows:

1. Half-life in soil is about 95 days, as measured by CO_2 evolution.

2. Hydrolyzed half-life in river water is 5 to greater than 25 days.

3. Photolytic half-life in water is about 3 weeks or more.

4. Results of blue-gill fish study questioned.

Other data submitted by Rohm and Haas (11/9/72) were described:

- Soil column leaching restricted to first 2-3 inches.
- Dissipation in soil: this was really a metabolism study. Results questioned.
- Stream dilution and dispersion: study designed faulted.
- River water dissipation: study faulted for several reasons.
- Fish accumulation (blue-gill): deficiencies noted.
- Disappearance of quats in cooling tower waters: influence of adsorption discussed. Both didecyl and alkyl quats tested.

Of all the items above, only the cooling tower study is in our file (reviewed). We do not have an in-depth review of any of the other studies in our file.

4.2 The data requirements for a product used in recirculating water cooling towers and oil field operations depend upon whether there is Direct Discharge, Indirect Discharge, or No Discharge.

4.3 Direct discharge means "the release, treatment, or application of a pesticide product directly to water at sites within or directly connected to bodies of water to which wild animals, birds, fish, and similar organisms have free access." The requirements for this type of discharge are:

Hydrolysis
Photodegradation-water
Aerobic aquatic metabolism
Anaerobic aquatic metabolism
Leaching (Adsorption/desorption)
Water field dissipation
Fish accumulation
Aquatic nontarget accumulation

4.4 Indirect Discharge means "release, treatment, or application of a pesticide product to water at sites not directly connected to bodies of water to which wild animals, birds, fish, and similar organisms have free access."

The data requirement for this type of discharge is a hydrolysis study only.

4.5 No Discharge - A hydrolysis study is still required.

4.6 If direct discharge of WTM-1210 residues occurs (in accordance with NPDES permit) then the data required are those in Section 4.3.

Herbert L. Manning

Herbert L. Manning, Ph.D.
Microbiologist
EAB/HED

Form Approved OMB No. 2000-0483. Approval expires 7-31-84

EPA

U.S. ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF PESTICIDE PROGRAM (TS-767)
WASHINGTON, D.C. 20460

APPLICATION FOR PESTICIDE:

☐ REGISTRATION
☒ AMENDMENT A

Please read instructions on reverse before completing.

SECTION I

1. COMPANY/PRODUCT NO.	2. DATE	3. PRODUCT MANAGER	4. PROPOSED CLASSIFICATION
47371-55	July 19, 1984	John Lee, PM-31	☒ GENERAL ☐ RESTRICTED

5. NAME AND ADDRESS OF APPLICANT (Include ZIP Code)

H&S Chemicals Division
970 East Tipton Street
Huntington, IN 46750

☐ CHECK IF THIS IS A NEW ADDRESS

6. PRODUCT NAME

WTM-1210 Water Treatment Microbicide

SECTION II

1. SUBJECT OF AMENDMENT

☐ RESUBMISSION IN RESPONSE TO AGENCY LETTER DATED _____

☐ FINAL PRINTED LABEL IN RESPONSE TO AGENCY LETTER DATED _____

☒ OTHER (explain below) Amendment via:

1. Addition of paper mill algaecide claims on labeling
2. Additional brand name "WTM-1210"
3. Additional brand name "WTM-1210 Paper Mill Algaecide"

SECTION III

1. WILL THIS PRODUCT BE PACKAGED IN:

CHILD-RESISTANT PACKAGING ☐ YES ☐ NO

UNIT PACKAGING ☐ YES ☐ NO

If YES, unit pkg. wt. _____ No. per container _____

WATER-SOLUBLE PACKAGING ☐ YES ☐ NO

If YES, pkg. wt. _____ No. per container _____

2. TYPE OF CONTAINER

☐ METAL
☐ PLASTIC
☐ GLASS
☐ PAPER
☐ OTHER (Specify)

3. LOCATION OF NET CONTENTS

☐ LABEL ☐ CONTAINER

4. SIZE(S) OF RETAIL CONTAINER

5. LOCATION OF LABEL DIRECTIONS

☐ ON LABEL
☐ ON MATERIAL ACCOMPANYING PRODUCT

6. MANNER IN WHICH LABEL IS AFFIXED TO PRODUCT

☐ LITHOGRAPH ☐ OTHER (Specify)
☐ PAPER GLUED
☐ STENCILED

SECTION IV

1. CONTACT POINT (Complete items directly below for identification of individual to be contacted, if necessary, to process this application).

NAME: Richard D. Sheets

TITLE: Nat'l. Distributor Sales Mgr.

TELEPHONE NO. (Include Area Code): 219/356-8100

2. SIGNATURE: Richard D Sheets

3. TITLE: Nat'l. Dist. Sales Mgr.

4. TYPED NAME: Richard D. Sheets

5. DATE SIGNED: July 19, 1984

6. DATE APPLICATION RECEIVED (Stamped)

Attachment 1

Sep 26, 82

ACCEPTED
47371-55
SEP 20 1982
Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 47371-55

WTM-1210
WATER TREATMENT MICROBICIDE

Water Treatment Microbicide for Building and Industrial Cooling Towers and Oil Field Water Flood or Salt Water Disposal Systems

RECEIVED JUL 30 1982 Registration Division (TS-767)

ACTIVE INGREDIENTS:

n-alkyl (C_{14} 50%, C_{12} 40%, C_{16} 10%) dimethyl benzyl ammonium chloride	20.0%
didecyl dimethyl ammonium chloride	30.0%
INERT INGREDIENTS:	50.0%

DANGER: KEEP OUT OF REACH OF CHILDREN ONLY FOR SALE TO, USE AND STORAGE BY SERVICE PERSONS.

(see back inside panel for additional precautionary or first aid statements)

WTM-1210 WATER TREATMENT MICROBICIDE will control algae and bacterial slimes found in recirculating cooling tower waters. WTM-1210 WATER TREATMENT MICROBICIDE helps clean and loosen slime debris from cooling system surfaces. When used in slug doses, no other microbicide is required.

WTM-1210 WATER TREATMENT MICROBICIDE is economical to use because it is concentrated. It should be handled with care.

DIRECTIONS FOR USE
GENERAL CLASSIFICATION

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

To control algae and bacterial slimes, use WTM-1210 as directed. For best results, slug feed. The frequency of addition of microbicide needed depends on many factors. To optimize your use of WTM-1210 follow this procedure.

Recirculating Cooling Towers

1. Initially use 6 fluid ounces per 1000 gallons of water to be treated (20 ppm active quaternary). Should the above dosage not give satisfactory results, use 9 fluid ounces per 1000 gallons of water. Repeat the initial dose every seven days or increase the frequency if needed.
2. When the above treatment level is successful, use 2 to 3 fluid ounces per 1000 gallons of water to maximize efficiency. Repeat weekly as needed. Should slime develop again, go back to initial dosage.

Cooling tower waters that are inherently low in algae growth and bacteria count may be adequately controlled by the lower range of these dosages; slug fed every seven days. Dilute the appropriate amount of WTM-1210 in 1 or 2 gallons of water, then add to the tower. Should tower be heavily fouled, a precleaning is required.

Oil Field Water Flood or Salt Water Disposal Systems: (Do not apply in Marine and Estuarine Oil Fields).

1. For the control of slime forming and sulfate reducing bacteria in oilfield water flood or salt water disposal systems, add 5-10 ppm (active) WTM-1210 (1½-3 gallons per 3000 barrels of water) continuously. Levels for effective control will vary depending on conditions at the site.
2. For intermittent use, dose at a rate of 5-20 ppm (active) WTM-1210 (1½-6 gallons per 3000 barrels of water) for 4-8 hours per day, one to four times a week as needed to maintain control.

Add WTM-1210 directly from the drum with the proper type of metering equipment.

STATEMENT OF PRACTICAL TREATMENT

In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes. For eyes, call a physician. If swallowed, drink promptly a large quantity of milk, egg whites, gelatin solution, or if these are not available, drink large quantities of water. Avoid alcohol. Call a physician immediately.

NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage. Measures against circulatory shock, respiratory depression, and convulsion may be needed.

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS

Corrosive. Causes severe eye and skin damage. Do not get in eyes or on skin. Wash contaminated clothing before reuse. Wear goggles or face shield and rubber gloves when handling the concentrate. Harmful or fatal if swallowed. Avoid contamination of food.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish. Do not apply in marine and/or estuarine oil fields. Do not discharge into lakes, streams, ponds or public waters unless in accordance with an NPDES permit. For guidance, contact your Regional Office of the Environmental Protection Agency.

PHYSICAL AND CHEMICAL HAZARDS

WTM-1210 is a cationic germicide. Do not mix with soap or anionic materials.

STORAGE AND DISPOSAL

This product must be kept under locked storage sufficient to make it inaccessible to children or persons unfamiliar with its proper use. Do not contaminate water, food, or feed by storage or disposal. Open dumping is prohibited. Do not reuse empty container.

PESTICIDE DISPOSAL: Pesticide, spray mixture or rinsate that cannot be used or chemically reprocessed should be disposed of in a landfill approved for pesticides or buried in a safe place away from water supplies.

CONTAINER DISPOSAL: Triple rinse (or equivalent) and dispose in an incinerator or landfill approved for pesticide containers, or bury in a safe place. Consult federal, state or local disposal authorities for approved alternative procedures such as limited open burning.

GENERAL

Consult federal, state or local authorities for approved alternative procedures such as limited open burning.

BEST DOCUMENT AVAILABLE

E.P.A. Reg. No. 47371-55 E.P.A. Est. No. 47371-IN-01

H&S Chemicals Division

Huntington T.M.

HS-1

Attachment 2

WTM-1210

WATER TREATMENT MICROBICIDE

Water treatment microbicide for
Building And Industrial Cooling Towers
And Oil Field Water Flood or
Salt Water Disposal Systems

ACTIVE INGREDIENTS:

n-alkyl (C_{14} 50%, C_{12} 40%, C_{16} 10%) dimethyl benzyl ammonium chloride	20.0%
didecyl dimethyl ammonium chloride	30.0%
INERT INGREDIENTS:	50.0%

DANGER: KEEP OUT OF REACH OF CHILDREN ONLY FOR SALE TO, USE AND STORAGE BY SERVICE PERSONS.

(see right panel for additional precautionary or practical treatment statements)

WTM-1210 WATER TREATMENT MICROBICIDE will control algae and bacterial slimes found in recirculating cooling tower waters. WTM-1210 WATER TREATMENT MICROBICIDE helps clean and loosen slime debris from cooling system surfaces. When used in slug doses, no other microbicide is required.

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Oil Field Water Flood or Salt Water Disposal Systems: (Do not apply in Marine and Estuarine Oil Fields).

1. For the control of slime forming and sulfate reducing bacteria in oilfield water flood or salt water disposal systems, add 5-10 ppm (active) WTM-1210 (1½-3 gallons per 3000 barrels of water) continuously. Levels for effective control will vary depending on conditions at the site.
2. For intermittent use, dose at a rate of 5-20 ppm (active) WTM-1210 (1½-6 gallons per 3000 barrels of water) for 4-8 hours per day, one to four times a week as needed to maintain control.

Add WTM-1210 directly from the drum with the proper type of metering equipment.

PAPER MILLS: Dosage will vary from 4.7 to 70 fluid ounces of WTM-1210 per ton of finished paper depending on the type of stock, complexity of the system, quality of raw water, and type and degree of contamination.

FEEDING: WTM-1210 may be drip fed continuously from the drum or fed by suitable chemical pumps such as adjustable proportioning types; variable speed, positive displacement type; or by the reciprocating type. This product should be fed as early as possible in the system at such points including the hydropulper, machine chest or broke system.

STATEMENT OF PRACTICAL TREATMENT

In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes. For eyes, call a physician. If swallowed, drink promptly a large quantity of milk, egg whites, gelatin solution, or if these are not available, drink large quantities of water. Avoid alcohol. Call a physician immediately.

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PESTICIDE DISPOSAL

Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL

PLASTIC CONTAINERS

Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

FIBER DRUMS WITH LINERS

Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application equipment. Then dispose of liner in a sanitary landfill or by incineration if allowed by State and local authorities. If drum is contaminated and cannot be reused, dispose of in the same manner.

METAL CONTAINERS

Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

GENERAL

Consult federal, state or local authorities for approved alternative procedures such as limited open burning.

E.P.A. Reg. No. 47371-55 E.P.A. Est. No. 47371-IN-01

HS-11

H&S Chemicals Division
Huntington T.M.
970 East Tipton, Huntington, Indiana 46750 219 6-8100