



**COMPANY
NUMBER** 9386.

**PRODUCT
SERIAL NO.** 23

**LABEL
APPROVAL
DATE** 5-28-85

301
12
142099
12

MAY 28 1985

Vinings Chemical Company
3950 Cumberland Parkway
Atlanta, GA 30339

Attention: R. V. Hinton

Gentlemen:

Subject: AMA-9
EPA Registration No. 9386-23
Your Letter Dated November 30, 1984, and July 20, 1984

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, is acceptable subject to the comments listed below. Five copies of the finished labeling must be submitted.

1. In the Technical Data Sheet and on the label, under "Industrial Recirculating Water Cooling Towers," dosage rates for the initial dose and the subsequent dose should be in the same units (ounces or fluid ounces) or both may be given for each dose.
2. On the label, state the weight/gallon of product.
3. The label should also contain the statement "Do not exceed feed rate of 15 gallons (133.7 lbs) of product per 1000 short tons of cane ground per 24 hours."
4. Delete "or wetlands" from the environmental hazards section. Add "Do not apply (or use) in estuarine oil fields where drilling fluids (muds) are discharged in the surface water."

Submit five (5) copies of your final printed label before you release the product for shipment. A stamped copy of the accepted label is enclosed for your records.

Sincerely yours,

Henry M. Jacoby
Product Manager (21)
Fungicide-Herbicide Branch
Registration Division (78-767C)

SYMBOL						
SURNAME						
DATE						
JOB-32947; Jacoby:RD:85/14; Kendrick:898-1270;5/6/85;Del:5/10/85;DAA						
EPA Form 1320-1 (1-81) REVISED: JOB-88604; Jacoby:RD:85/14; Kendrick:898-1270;5/17/85;Del:5/23/85;OFFICIAL FILE COPY						

VININGS

AMA-9
(Antimicrobial Agent)

TECHNICAL DATA

AMA-9 is a highly effective fungicide and bactericide for use in controlling the growth of bacteria and fungi found in Industrial Recirculating Water Cooling Towers, Evaporative Condensers, Sugar Cane Mills, and Drilling Fluids.

COMPOSITION:

Active Ingredients:		
Sodium dimethyl dithiocarbamate		4.5%
Nabam (disodium ethylene bisdithiocarbamate)		4.5%
Inert Ingredients:		91.0%
	TOTAL	<u>100%</u>

TYPICAL PHYSICAL PROPERTIES:

Physical Form:	Liquid	Flash Point:	Over 200°F
Color:	Light to amber	pH:	11.6
Specific Gravity:	1.04 @ 25° C	Density:	8.7 pounds per gallon
Solubility:	Complete in Water		

ACCEPTED
with COMMENTS
in EPA Letter Dated

KEEP OUT OF THE REACH OF CHILDREN

MAY 28 1985

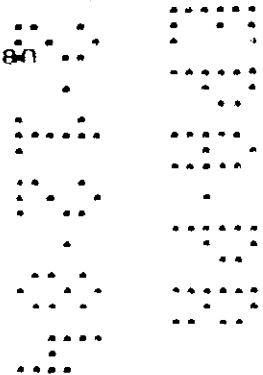
CAUTION

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

STATEMENTS OF PRACTICAL TREATMENT

9386-23

- If on skin: Wash with soap and water. If irritation persists, get medical attention.
- If in eyes: Flush immediately with water. Get medical attention.
- If swallowed: Drink promptly a large quantity of milk, egg whites; gelatin solution or if these are not available, .. .
drink large quantities of water. Call a physician .. .
immediately.



PRECAUTIONARY STATEMENTS:

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION: Harmful or fatal if swallowed or absorbed through the skin. Causes eye damage and skin irritation. In case of contact, remove contaminated clothing immediately and wash with soap and water. Note to user: Long pants, long-sleeved shirt, rubber gloves, face shield and boots must be worn while using this product.

PHYSICAL AND CHEMICAL HAZARDS

DO NOT USE OR STORE NEAR HEAT OR FLAME

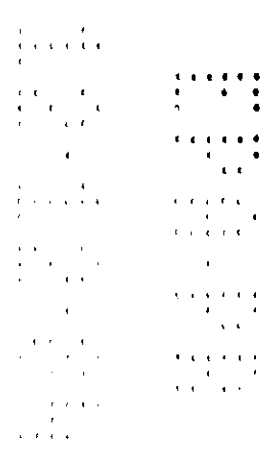
ENVIRONMENTAL HAZARDS: This product is toxic to fish. Do not apply directly to water or wetlands. Do not discharge into lakes, streams, ponds or public water unless in accordance with an NPDES permit. For guidance, contact your regional office of the EPA.

DIRECTIONS FOR USE:

INDUSTRIAL RECIRCULATING WATER COOLING TOWERS AND EVAPORATIVE CONDENSERS: Dosages for industrial recirculating water cooling towers or evaporative condensers will depend on the condition of the system prior to treatment initiation. Systems which are heavily contaminated should be cleaned first. Apply AMA-9 to the cleaned system or when growth is first noticed according to the following schedule:

INITIAL DOSE: Apply 43.5 ounces of product per each 1000 gallons of water in the the system (400 ppm). This dose may be repeated once, twice or three times weekly or as required to control the growth of slime forming organisms.

SUBSEQUENT DOSE: When microbial control is evident add 7.3-14.5 fluid ounces of AMA-9 per 1000 gallons of water (67-133 ppm) in the system every three days or as needed.



DRILLING FLUIDS: AMA-9 is a highly effective microbiocide for use in controlling the growth of fungi and bacteria found in water based drilling muds. It is especially useful in muds containing starches, xanthanate gums and wood sugars. The uncontrolled growth of these fungi and bacteria can cause increased corrosion, undesirable odors, and degradation of the drilling mud, especially fluid loss properties.

AMA-9 is used at the rate of 3.7 to 18.7 gallons per 100 barrels of mud (0.067% to 0.33%). It may be used directly from the shipping container or prediluted with water. It can be added through the mud hopper or directly to the pump suction.

CANE SUGAR MILLS: AMA-9 is a liquid which should be fed directly into the cane juice so that the treated juice circulates to all parts of the mill tandem. The point or points of addition will depend upon mill design. Frequently the dosage will be split between the crusher juice and juice from the last mill. The best addition point is to the juice which is circulated back to the crusher from the first mill. Do not add this product to the maceration water.

AMA-9 should be fed continuously at the rate of 33.3 - 66.7 parts of product per million parts of cane ground per day. 33.33 ppm of product is the standard dosage. This may be raised up to a maximum of 66.7 ppm, if necessary. Conditions warranting, some increase would be warranted when grinding cane damaged through freezing, poor weather or delays between cutting and grinding. See Feeding Directions which follow.

Proper feed of AMA-9 is best obtained through the use of a chemical feed pump such as the adjustable proportioning type, the variable speed, positive displacement type; or the reciprocating type. The required dosage will depend on the average daily rate of cane ground. Refer to the Composite Table I. for the proper dosage in milliliters and ounces of AMA-9 to be used per minute.

Do not exceed feed rate of 15 gallons (133.7 lbs.) of product per 1000 short tons of cane ground per 24 hours.

The use of AMA-9 does not replace good housekeeping. This should include regular cleaning at least once per shift. Regular hosing of mills bagacillo conveyors, and screens with hot water and steam is essential for maintaining efficient control of microbiological slime and sucrose losses.

COMPOSITE TABLE I.

Short Tons of Cane Ground
Rate of Feed of AMA-9 per day

Tons	33.3 ppm		66.7 ppm	
	Oz/Min.	Ml/Min	Oz/Min	Oz/Min
1000	18.3	0.620	36.7	1.240
2000	36.7	1.240	73.3	2.480
3000	55.0	1.860	109.9	3.716
4000	73.3	2.480	146.7	4.956
5000	91.7	3.100	183.3	6.196
6000	110.0	3.716	220.0	7.436
7000	128.3	4.336	256.6	8.676
8000	146.7	4.956	293.3	9.912
9000	165.0	5.576	330.0	11.152
10000	183.3	6.196	366.6	12.392

This product complies with Title 21 Code of Federal Regulations, Section 173.320 (Chemicals Used for the Control of Microorganisms in Cane Sugar Mills) of the Food Additive Regulations and they may be used under the conditions specified in the regulations.

STORAGE AND DISPOSAL:

DO NOT CONTAMINATE WATER, FOOD, OR FEED
BY STORAGE OR DISPOSAL

STORAGE: Protect from freezing and temperatures in excess of 140°F. Keep container closed when not in use. If contents are spilled or leaked due to container damage, collect liquid with absorbent material and dispose of in accordance with local, state and federal pesticide disposal regulations.

PESTICIDE DISPOSAL: Pesticide wastes are toxic. 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: 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. 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.

TECHNICAL ASSISTANCE:

The service of our engineers is available at any time upon request to assist in solving problems pertaining to the use of Vinings' products. Information concerning this service is available from your regular sales representative or may be obtained by writing to Vinings Chemical Company, Atlanta, Georgia 30339.

SHIPPING POINT:

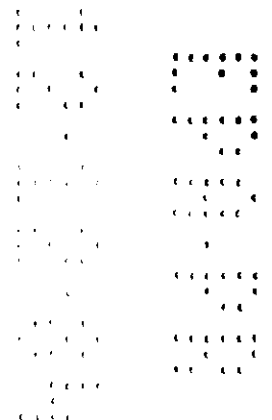
Marietta, GA.

PACKAGING

55 gallon drums
350 gallon portabins
Bulk

VININGS CHEMICAL COMPANY
3950 Cumberland Parkway
Atlanta, GA 30339

11/84
ksw



HAZARDS TO HUMANS AND DOMESTIC ANIMALS

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PHYSICAL AND CHEMICAL HAZARDS

DO NOT USE OR STORE NEAR HEAT OR FLAME

ENVIRONMENTAL HAZARDS: This pesticide is toxic to fish. Do not apply directly to water or wetlands. Do not discharge treated effluent into lakes, streams, ponds or public waters unless in accordance with NPDES permit. For guidelines, contact your regional office of the Environmental Protection Agency.

DIRECTIONS FOR USE

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

STORAGE AND DISPOSAL

DO NOT CONTAMINATE WATER, FOOD, OR FEED BY STORAGE OR DISPOSAL

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VINING
Chem

ACTIVE INGREDIENTS ...
Sodium dimethyl dithiocarbamate
Nabam (Disodium ethylenebis(dithiocarbamate))
INERT INGREDIENTS ...

KE

IF ON SKIN: Wash with soap and water.
IF IN EYES: Flush immediately with water.
IF SWALLOWED: Drink plenty of water. Do not induce vomiting unless directed by a physician. Do not take any more food or drink until advised by a physician.

EPA REGISTRATION NO. 100-100000

VINING

M

CANE SUGAR MILLS

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MAY 28 1985

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

9386-23

BEST AVAILABLE COPY

8.7 lbs./gal.

VININGS CHEMICAL COMPANY

ATLANTA, GEORGIA