

PRECAUTIONARY STATEMENTS

KEEP OUT OF REACH OF CHILDREN

WARNING

AMA-10 IS HARMFUL OR FATAL IF SWALLOWED OR ABSORBED THROUGH THE SKIN. CAUSES EYE DAMAGE AND SKIN IRRITATION. In case of contact remove contaminated clothing and immediately wash skin with soap and water. If irritation persists get medical attention. In case of contact with eyes, immediately flush with water and get medical attention. Wash contaminated clothing before reuse. The use of goggles or face shield and rubber gloves is recommended.

DO NOT USE OR STORE NEAR HEAT OR OPEN FLAME

FISH AND WILDLIFE ENVIRONMENTAL WARNING: This pesticide is toxic to fish. Do not apply in marine and/or estuarine oil fields. 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.

STORAGE AND DISPOSAL

PROHIBITIONS : Do not contaminate water, food, or feed by storage or disposal. Open dumpings prohibited.

CONTAINER DISPOSAL : Reseal container and offer for reconditioning, or triple rinse (or equivalent) and offer for recycling, reconditioning, or disposal in approved landfill, or bury in a safe place.

GENERAL : Consult Federal, State or Local Disposal Authorities for approved alternative procedures.

APPROVED
9386 4

RIGHT PANEL

DIRECTIONS FOR USE

IT IS A VIOLATION OF FEDERAL LAW TO USE THE PRODUCT IN A MANNER INCONSISTENT WITH ITS LABELING.

PAPER MILL SLIME CONTROL : FOR THE CONTROL OF SLIME-FORMING AND/OR SPOILAGE BACTERIA: AMA-10 is added at a point in the system (raw stock chest; beater and/or refiner chest or machine chest - wirepit) where it will be uniformly mixed. Application may be continuous or intermittent for a certain number of hours/day or per shift, depending upon system characteristics. Add 2 to 5 fluid ounces of AMA-10 per ton of paper produced.

INTERMITTENT FEED METHOD: Apply 3.5 to 5 fluid ounces of AMA-10 per ton (dry basis) of pulp or paper for 2 hours every 8 hours. Badly fouled process systems must be cleaned before initial treatment.

CONTINUOUS FEED METHOD: Apply 2 to 4 fluid ounces of AMA-10 per ton (dry basis) of pulp or paper produced on a continuous basis. Badly fouled process systems must be cleaned before initial treatment.

Consult your Vinings representative for technical advice concerning certain site problems.

RECIRCULATING COOLING WATER SYSTEMS: FOR CONTROL OF SLIME-FORMING BACTERIA

(cooling towers, evaporative condensers) Bacterial control: Use 1.6 to 7.9 fluid ounces of AMA-10 per 1000 gallons water (1.25 to 6.20 ppm active) as a continuous treatment, one to three times a week or as required to maintain control.

When the system is just noticeably fouled, use 5.8 to 12.5 fluid ounces of AMA-10 per 1000 gallons water (4.5 to 9.8 ppm active) as a continuous treatment daily or as required to obtain control. Badly fouled systems must be cleaned before treatment is begun.

Apply at a point in the system where uniform mixing and even distribution will occur, such as the cooling tower basin or sump.

OILFIELD DRILLING MUDS AND WORKOVER OR COMPLETION FLUIDS : FOR CONTROL OF SLIME-FORMING AND/OR SPOILAGE BACTERIA : Determine the total volume of the circulating system.

Calculate the number of gallons of Vinings AMA-10 needed to produce a concentration of 5000 ppm (1.75 lb/bbl) of Vinings AMA-10 in the drilling mud circulating system. For example, 211 gallons of Vinings AMA-10 per 1000 barrels of drilling fluid will produce the proper concentration.

For best results add Vinings AMA-10 in a thin stream to the mud pit while the drilling fluid is circulating.

As the total volume increases, due to greater well depth, add additional Vinings AMA-10 to maintain the proper concentration.

OILFIELD WATER TREATMENT AND WATER FLOODS : FOR CONTROL OF SLIME-FORMING AND/OR SPOILAGE BACTERIA : Calculate the total volume of water to be treated. Using this volume, calculate the number of gallons of Vinings AMA-10 needed to produce concentration of approximately 750 ppm Vinings AMA-10. For example, 0.75 gallons of Vinings AMA-10 per each 1000 gallons of total volume will produce this dilution.

WILLIAMS

AMA-10
(ANTIMICROBIAL AGENT)

TECHNICAL DATA

AMA-10 is an excellent, low cost liquid antimicrobial agent for use in a variety of systems.

COMPOSITION:

Active ingredients: Methylene bis(thiocyanate) 10%
Inert ingredients: 90%
TOTAL 100%

TYPICAL PHYSICAL PROPERTIES:

Physical form: Liquid
Specific gravity: 1.00@25°C
Flash Point: 127°F (TOC)
pH: 6.3 (1% water solution)

Color: Amber
Solubility: Complete at use concentration
Density: 8.3 lbs/gal

EFFICACY:

AMA-10 has been found to be an effective agent against many bacteria and fungi.

Following is a tabulation showing the ppm of AMA-10 required to give complete inhibition at 96 hours:

<u>MICROORGANISM</u>	<u>PPM</u>	<u>MICROORGANISM</u>	<u>PPM</u>
<u>BACTERIA</u>		<u>FUNGI</u>	
1. <u>Flavobacterium capsulatum</u>	2.2	5. <u>Aspergillus niger</u>	20.5
2. <u>Enterobacter aerogenes</u>	40.0	6. <u>Penicillium expansum</u>	40.0
3. <u>Bacillus subtilis</u>	20.0	7. <u>Fusarium oxysporium</u>	40.0
4. <u>Pseudomonas fluorescens</u>	12.5		
<u>COMBINATION OF BACTERIA</u>		<u>COMBINATION OF FUNGI</u>	
1, 2, and 4 (Bacterial Combination)	40.0	5, 6, and 7 (Fungal Combination)	30.3
<u>SULFATE-REDUCING BACTERIA</u>		<u>PPM</u>	
<u>Desulfovibrio desulfuricans</u>	5		

DIRECTIONS FOR USE:

PAPER MILL SLIME CONTROL: FOR THE CONTROL OF SLIME-FORMING AND/OR SPOILAGE BACTERIA: AMA-10 is added at a point in the system (raw stock chest, beater and/or refiner chest or machine chest - wirepit) where it will be uniformly mixed. Application may be continuous or intermittent for a certain number of hours/day or per shift, depending upon system characteristics. Add 2 to 5 fluid ounces of AMA-10 per ton of paper produced.

INTERMITTENT FEED METHOD: Apply 3.5 to 5 fluid ounces of AMA-10 per ton (dry basis) of pulp or paper for 2 hours every 8 hours. Badly fouled process systems must be cleaned before initial treatment.

CONTINUOUS FEED METHOD: Apply 2 to 4 fluid ounces of AMA-10 per ton (dry basis) of pulp or paper produced on a continuous basis. Badly fouled process systems must be cleaned before initial treatment.

Consult your Vinings representative for technical advice concerning certain site problems.

RECIRCULATING COOLING WATER SYSTEMS : FOR CONTROL OF SLIME-FORMING BACTERIA (cooling towers, evaporative condensers) Bacterial control: Use 1.6 to 7.9 fluid ounces of AMA-10 per 1000 gallons water (1.25 to 6.20 ppm active) as a continuous treatment, one to three times a week or as required to maintain control.

When the system is just noticeably fouled, use 5.8 to 12.5 fluid ounces of AMA-10 per 1000 gallons water (4.5 to 9.8 ppm active) as a continuous treatment daily or as required to obtain control. Badly fouled systems must be cleaned before treatment is begun.

Apply at a point in the system where uniform mixing and even distribution will occur, such as the cooling tower basin or sump.

OILFIELD DRILLING MUDS AND WORKOVER OR COMPLETION FLUIDS : FOR CONTROL OF SLIME-FORMING AND/OR SPOILAGE BACTERIA : Determine the total volume of the circulating system.

Calculate the number of gallons of Vinings AMA-10 needed to produce a concentration of 5000 ppm (1.75 lb/bbl) of Vinings AMA-10 in the drilling mud circulating system. For example, 211 gallons of Vinings AMA-10 per 1000 barrels of drilling fluid will produce the proper concentration.

For best results add Vinings AMA-10 in a thin stream to the mud pit while the drilling fluid is circulating.

As the total volume increases, due to greater well depth, add additional Vinings AMA-10 to maintain the proper concentration.

OILFIELD WATER TREATMENT AND WATER FLOODS : FOR CONTROL OF SLIME-FORMING AND/OR SPOILAGE BACTERIA : Calculate the total volume of water to be treated. Using this volume, calculate the number of gallons of Vinings AMA-10 needed to produce concentration of approximately 750 ppm Vinings AMA-10. For example, 0.75 gallons of Vinings AMA-10 per each 1000 gallons of total volume will produce this dilution.

Add Vinings AMA-10 as a slug treatment or intermittently.

500 ppm Vinings AMA-10, added each week, is recommended to maintain bacterial control. This may be accomplished by adding 0.50 gallons of Vinings AMA-10 to each 1000 gallons of total volume.

VININGS

AMA-10

Page 3

LEATHER PROCESSING LIQUORS: AMA-10 may be used to prevent the growth of bacteria and fungi in the pickling and tanning processes of skins and hides. Depending upon the holding time, AMA-10 should be added at the rate of 0.025% to 0.25% (0.25 to 2.5 lbs. of AMA-10 per 1000 lbs.) of white weight stock.

TECHNICAL ASSISTANCE :

The service of our engineers is available at any time, upon request, to assist in solving problems pertaining to 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.

STORAGE AND DISPOSAL :

PROHIBITIONS : Do not contaminate water, food, or feed by storage or disposal. Open dumpings prohibited.

CONTAINER DISPOSAL : Reseal container and offer for reconditioning, or triple rinse (or equivalent) and offer for recycling, reconditioning, or disposal in approved landfill, or bury in a safe place.

GENERAL : Consult Federal, State or Local Disposal Authorities for approved alternative procedures.

PRECAUTIONARY STATEMENTS :

AMA-10 IS HARMFUL OR FATAL IF SWALLOWED OR ABSORBED THROUGH THE SKIN. CAUSES EYE DAMAGE AND SKIN IRRITATION. In case of contact remove contaminated clothing and immediately wash skin with soap and water. If irritation persists get medical attention. In case of contact with eyes, immediately flush with water and get medical attention. Wash contaminated clothing before reuse. The use of goggles or face shield and rubber gloves is recommended.

DO NOT USE OR STORE NEAR HEAT OR OPEN FLAME

FISH AND WILDLIFE ENVIRONMENTAL WARNING :

This pesticide is toxic to fish. Do not apply in marine and/or estuarine oil fields. 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.

FOOD AND DRUG REGULATIONS :

The ingredients in AMA-10 are cleared by the United States Food and Drug Administration for use in the manufacture of pulp and paper to be used for food packaging in accordance with 21 CFR 176.300.

9386-4

04 JUN 1982

Vinings Chemical Company
2555 Cumberland Parkway
Suite 200
Atlanta, GA 30339

Attention: R. V. Hinton

Gentlemen:

Subject: Label and Technical Data Sheet For:
AMA 10
EPA Registration No. 9396-4
Amendment Application Dated June 17, 1982

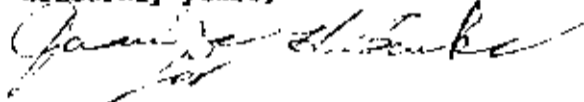
The amendment referred to above, submitted in connection with registration under FIFRA sec. 3(c)(7)(A), is acceptable, provided that you:

1. Submit and/or cite all data required for registration/re-registration of your product under FIFRA sec. 3(c)(5) when the Agency requires all registrants of similar products to submit such data.
2. Make the labeling changes listed below before you release the product for shipment bearing the amended labeling:
 - a. The signal word "DANGER" must appear on the front panel beneath the statement "Keep Out of Reach of Children." (Refer to the enclosure for guidance in meeting the type size requirements.)
 - b. Use the heading "Environmental Hazards" instead of "Fish and Wildlife Environmental Warning."
 - c. Correct the spelling of "violation" in the statement "It is a violation of Federal law xxx labeling."
 - d. Include the heading "Physical or Chemical Hazards" directly above the statement "Do not use or store near heat or open flame" on the label and Technical Data Sheet.
3. Submit five (5) copies of your final printed labeling before you release the product for shipment.

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

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

Sincerely yours,



John H. Lee
Product Manager (31)
Disinfectants Branch
Registration Division (28-767C)

Enclosure

28-767C:J. Lee:LCR-03502:WAG-0802C:lvj:Raven:479-2013:10/22/82

VININGS
Chemical Company

ATLANTA, GEORGIA

AMA-10

(Antimicrobial Agent)

(FOR INDUSTRIAL USE ONLY)

ACTIVE INGREDIENT:

Methylene bis (thiocyanate) 10%

INERT INGREDIENTS: 90%

Total 100%

EPA REGISTRATION NO. 9388-4
EPA ESTABLISHMENT NO 9386-GA-1

SEE SIDE PANEL FOR PRECAUTIONARY STATEMENTS

Manufactured By

VININGS CHEMICAL COMPANY

MARIETTA, GEORGIA 30066

ACCEPTED
FOR INDUSTRIAL USE

REG. NO.

9388-4

U
S
D
E
P
T
O
F
A
G
R
I
C
U
L
T
U
R
E

S
D
S

L

3

.

17722 5/22/75