

VININGS  
*Chemical Company*

ATLANTA, GEORGIA

9386-7

**AMA-31**

(Antimicrobial Agent)

(FOR INDUSTRIAL USE ONLY)

ACTIVE INGREDIENTS:

Sodium dimethyl dithiocarbamate ..... 16%  
Nabam (Disodium ethylene bisdithiocarbamate) ..... 15%

INERT INGREDIENTS: ..... 69%

Total 100%

EPA REGISTRATION NO. 9386-7  
EPA ESTABLISHMENT NO. 9386-GA-1

SEE SIDE PANEL FOR PRECAUTIONARY STATEMENTS

Manufactured By

**VININGS CHEMICAL COMPANY**

MARIETTA, GEORGIA 30066

**PRECAUTIONARY STATEMENTS**

**KEEP OUT OF REACH OF CHILDREN**

**WARNING**

AMA-31 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 (or use) in estuarine oil fields where drilling fluids (muds) are discharged in the surface water. 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 flames 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.

**SPECIFICS :** On contact with strong acids and/or extreme temperature (325°F and over) may produce hydrogen sulfide if heated violently -- may produce carbon sulfide on contact with strong acids. Keep containers tightly closed when not in use. Material is easily oxidized.

#### 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-31 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 6 to 30 fluid ounces of AMA-31 per ton of paper produced.

INTERMITTENT FEED METHOD : Apply 18 to 30 fluid ounces of AMA-31 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 6 to 20 fluid ounces of AMA-31 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.

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-31 needed to produce a concentration of 1600 ppm (0.56 lb/bbl) of Vinings AMA-31 in the drilling mud circulating system. For example, 59 gallons of Vinings AMA-31 per 1000 barrels of drilling fluid will produce the proper concentration.

For best results add Vinings AMA-31 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-31 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-31 needed to produce a concentration of approximately 967 ppm Vinings AMA-31. For example, 0.84 gallons of Vinings AMA-31 per each 1000 gallons of total volume will produce this dilution.

200 ppm Vinings AMA-31, added each week, is recommended to maintain bacterial control. This may be accomplished by adding 0.17 gallons of Vinings AMA-31 to each 1000 gallons of total volume.

9.7 lbs. per gallon

VININGS CHEMICAL COMPANY

Atlanta, Georgia 30339

9386-2

# VININGS

AMA-31  
(ANTIMICROBIAL AGENT)

## TECHNICAL DATA

AMA-31 is an effective, low cost, liquid antimicrobial agent for use in a variety of systems.

### COMPOSITION :

Active ingredients : Sodium dimethyl dithiocarbamate	16%
Nabam (Disodium ethylene bis dithiocarbamate)	15%
Inert ingredients :	69%
TOTAL	100%

### TYPICAL PHYSICAL PROPERTIES :

Physical form:	liquid	Color:	Amber
Specific Gravity :	1.166 at 25°C	Solubility :	Complete in water
Flash Point :	over 200°F(TOC)	Density :	9.7 lbs/gal
pH :	11.6		

9386-7

### EFFICACY :

AMA-31 has been found to be an effective agent against many bacteria and fungi.

Following is a tabulation showing the ppm of AMA-31 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>	10	5. <u>Aspergillus niger</u>	17
2. <u>Aerobacter aerogenes</u>	90	6. <u>Penicillium expansum</u>	40
3. <u>Bacillus subtilis</u>	40	7. <u>Fusarium oxysporium</u>	40
4. <u>Pseudomonas fluorescens</u>	125		

<u>COMBINATION OF BACTERIA</u>	<u>PPM</u>	<u>COMBINATION OF FUNGI</u>	<u>PPM</u>
1,2, and 4 (Bacterial Combination)	125	5,6 and 7(Fungal Combination)	42

### SULFATE REDUCING BACTERIA

Desulfovibrio desulfuricans 5

# VININGS

AMA-31  
Page 2

## DIRECTIONS FOR USE :

PAPER MILL SLIME CONTROL : FOR THE CONTROL OF SLIME-FORMING AND/OR SPOILAGE BACTERIA : AMA-31 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 6 to 30 fluid ounces of AMA-31 per ton of paper produced.

INTERMITTENT FEED METHOD : Apply 18 to 30 fluid ounces of AMA-31 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 6 to 20 fluid ounces of AMA-31 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.

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-31 needed to produce a concentration of 1600 ppm (0.56 lb/bbl) of Vinings AMA-31 in the drilling mud circulating system. For example, 59 gallons of Vinings AMA-31 per 1000 barrels of drilling fluid will produce the proper concentration.

For best results add Vinings AMA-31 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-31 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-31 needed to produce a concentration of approximately 967 ppm Vinings AMA-31. For example, 0.84 gallons of Vinings AMA-31 per each 1000 gallons of total volume will produce this dilution.

Add Vinings AMA-31 as a slug treatment or intermittently.

200 ppm Vinings AMA-31, added each week, is recommended to maintain bacterial control. This may be accomplished by adding 0.17 gallons of Vinings AMA-31 to each 1000 gallons of total volume.

## 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.

# VININGS

AMA-31  
Page: 3

## 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.

**SPECIFICS :** On contact with strong acids and/or extreme temperatures (325°F and over) may produce hydrogen sulfide if heated violently -- may produce carbon sulfide on contact with strong acids. Keep containers tightly closed when not in use. Material is easily oxidized.

## PRECAUTIONARY STATEMENTS :

AMA-31 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 (or use) in estuarine oil fields where drilling fluids (muds) are discharged in the surface water. 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-31 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 21CFR176.300.

### SHIPPING POINT :

Marietta, Georgia

### PACKAGING :

55 gallon drums  
350 gallon portabins  
Bulk

### WEIGHT PER GALLON :

9.7 pounds per gallon

VININGS CHEMICAL COMPANY  
2555 CUMBERLAND PARKWAY,  
SUITE 200  
ATLANTA, GEORGIA 30339

9/82

9386-1

04 MAY 1982

Vininga Chemical Company  
2555 Cumberland Parkway  
#200  
Atlanta, GA 30339

Attention: R. V. Hinton

Gentlemen:

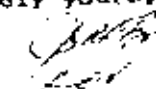
Subject: Label and Technical Data Sheet for AMA-31  
EPA Registration No. 9386-7  
Amendment Application Dated September 3, 1982

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, is acceptable. A stamped copy is enclosed for your records.

At the next printing, the following revisions should be made:

- a. Change the heading "Fish and Wildlife Environmental Warning" to read "Environmental Hazards."
- b. Include the heading "Physical or Chemical Hazards" directly above the statement "Do not use or store near heat or open flame."
- c. Revise the Container Disposal statement in accordance with the enclosure. ~~Select~~ the appropriate statement. Also, include the Pesticide Disposal statement as indicated on the same enclosure.

Sincerely yours,

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

Enclosure

TS-767C:LEE:DCR-03504:WANG-0870C:lee:Raven:479-2013:10/27/82