

**VININGS**  
*Chemical Company*

ATLANTA, GEORGIA

**AMA 31**

(Anti-Microbial Agent)

(FOR INDUSTRIAL USE ONLY)

ACTIVE INGREDIENTS:

Sodium dimethyl dithiocarbamate . . . . .	.16.0%
Nabam (Disodium ethylene bisdithiocarbamate) . . . . .	.15.0%

INERT INGREDIENTS: . . . . .	.69.0%
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Total 100.0%

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

"Do not reuse empty drum. Return to drum reconditioner or destroy by perforating or crushing and burying in a safe place away from water supplies."

Manufactured By

**VININGS CHEMICAL COMPANY**

ATLANTA, GEORGIA 30339

## DIRECTIONS FOR USE:

PAPER MILL SLIME CONTROL: 6 to 30 fluid ounces of AMA per ton of finished paper is usually effective for control of most undesirable microorganisms in paper mills. AMA is most effective when added to the paper furnish early in the stock preparation system. It is important that organism growths are controlled at their origin, normally at the point where the machine white water mixes with the broke and/or virgin pulp furnish. Methods of addition, either continuous or intermittent, are dictated by mill conditions. AMA 31 is dispersed upon addition to the water system; it is non-corrosive to all metallic surfaces commonly encountered in pulp and paper machine systems with the exception of aluminum, magnesium and their alloys at many times the suggested dosage. AMA 31 is made for specific use in unbleached kraft and neutral sized paper mill furnishes. It should be added to the furnish at a point where the pH is above 7.0. See technical data sheet.

AMA 31 has been found to be an effective agent against the following Bacteria and Fungi.

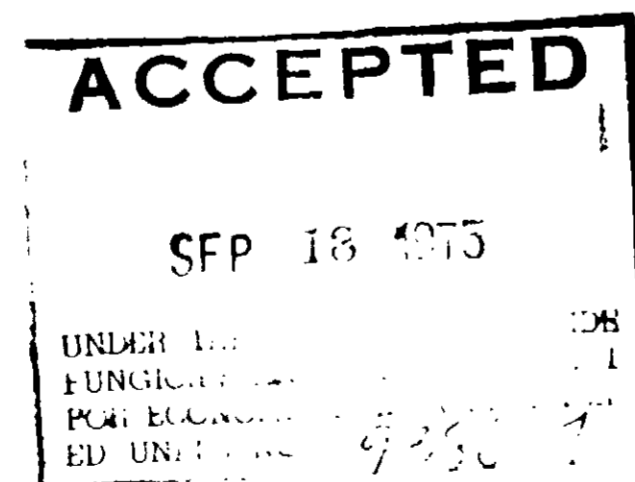
Bacteria:	Fungi:
Flavobacterium sp.	Aspergillus niger
Aerobacter aerogenes	Tricophyton metagraphytis
Bacillus subtilis	Penicillum expansum
Pseudomonas flouescens	Fusarium esphisphaeria
Staphylococcus aureus	

## WARNING:

### KEEP OUT OF THE REACH OF CHILDREN

AMA-31 is harmful if swallowed or absorbed through the skin. Causes eye burns and skin irritation. Wear goggles or face shield and rubber gloves when handling. Keep away from heat and open flames. Keep container closed when not in use. Use with adequate ventilation, avoid breathing vapor or mist. In case of contact with skin or eyes, wash immediately with copious amounts of water for at least 15 minutes and call a physician immediately. If swallowed, induce vomiting by administering milk, beaten egg whites or flour and water; call a physician.

"This product is toxic to fish., Treated effluent should not be discharged where it will drain into lakes, streams, ponds, or public water, Do not contaminate water by cleaning of equipment or disposal of wastes., and apply this product only as specified on this label."



9.57 lbs. per gallon

## VININGS CHEMICAL COMPANY

ATLANTA, GEORGIA 30339

# VININGS

AMA-31

FOR PAPER MILL SLIME CONTROL

(ANTI-MICROBIAL AGENT)

AMA-31 is a blended organic sulfur slimicide used by the pulp and paper industry for controlling the growth of fungi and bacteria.

## COMPOSITION:

Active Ingredients:	Sodium dimethyl dithiocarbamate	16.0%
	Nabam (disodium ethylene bis-dithiocarbamate)	15.0%
Inert Ingredients:		69.0%
	TOTAL	<u>100.0%</u>

## TYPICAL PHYSICAL PROPERTIES:

Physical Form:	Light Amber Liquid	pH:	12.0
Specific Gravity:	1.15 @ 25°C	Viscosity:	6.0 cps
Solubility:	Complete In Water	Density:	9.57 Lbs./Gal. @ 25°C

## APPLICATION:

Paper Machines - Six to thirty fluid ounces of AMA-31 per ton of finished paper along with Dispel, an effective chemical dispersant, will successfully aid in controlling system biota growth and maintain bio-chemical equilibrium within the mill system. This reduces unsightly spots, wet-end breaks and subsequently, facilitates easier and more rapid washups during wire changes. AMA-31 is most effective in the control of biota metabolism in unbleached kraft and neutral sized paper mill furnishes where the pH is above 7.0.

AMA-31 has been found to be an effective agent against the following bacteria and fungi:

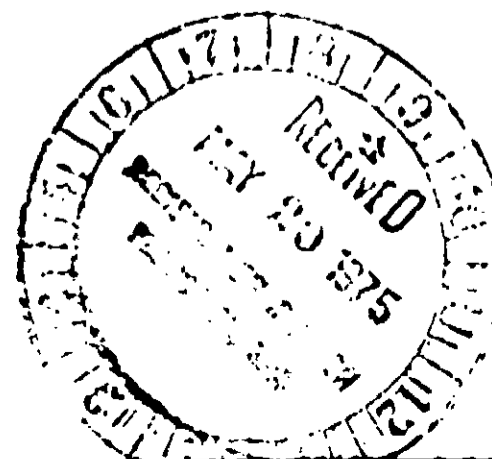
### BACTERIA

PPM OF AMA-31 REQUIRED TO GIVE COMPLETE INHIBITION AS COMPARED TO WATER CONTROL

1. Flavobacterium sp.	10
2. Aerobacter aerogenes	90
3. Bacillus subtilis	40
4. Pseudomonas fluorescens	125
5. Staphylococcus aureus	5

### FUNGI

6. Aspergillus niger	17
7. Tricophyton metagrophytis	7
8. Penicillium expansum	40
9. Fusarium esphisphaeria	40



9386-1

COMBINED BACTERIAL AND FUNGAL COMBINATIONPPM OF AMA-31 REQUIRED TO GIVE COMPLETE INHIBITION AS COMPARED TO WATER CONTROL

1,2,4 (Bacterial Combination)	125
6,8,9 (Fungal Combination)	42

TECHNICAL ASSISTANCE: The services of our engineers are available at any time to assist in solving problems pertaining to uses of Vinings' products. Information concerning this service is available from your regular sales representative or may be obtained by writing to Vinings Chemical Company, Vinings, Georgia 30080.

HANDLING: AMA-31 is harmful if swallowed or absorbed through the skin. Causes eye burns and skin irritation. Wear goggles or face shield and rubber gloves when handling. Keep away from heat and open flames. Keep container closed when not in use. Use with adequate ventilation, avoid breathing vapor or mist. In case of contact with skin or eyes, wash immediately with copious amounts of water for at least 15 minutes and call a physician immediately. If swallowed, induce vomiting by administering milk, beaten egg whites or flour and water; call a physician.

FISH & WILDLIFE ENVIRONMENTAL WARNING: This product is toxic to fish. Treated effluent should not be discharged where it will drain into lakes, streams, ponds or public water. Do not contaminate water by cleaning of equipment or disposal of wastes. Apply this product only as specified on the label.

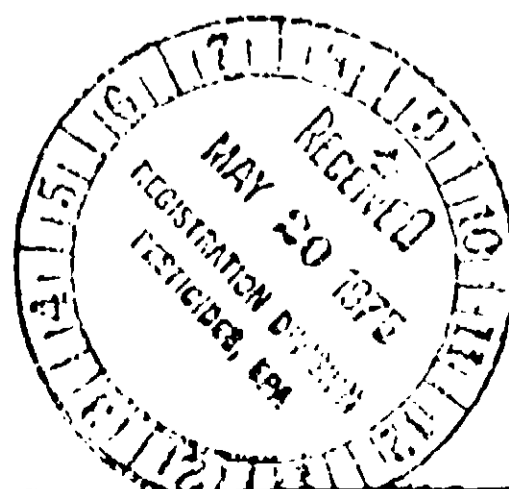
FOOD & DRUG REGULATIONS: The ingredients in AMA-31 are authorized for use by the United States Food & Drug Administration in the manufacture of pulp and paper to be used for food packaging in accordance with Food Additive Regulation Subpart F-121.2505.

SHIPPING POINT:

Marietta, Georgia

PACKAGING:55 Gallon Drums  
350 Gallon PortabinsWEIGHT PER GALLON

9.57 Pounds Per Gallon

VININGS CHEMICAL COMPANY  
Vinings, Georgia 30080