

DIRECTIONS FOR USE:

It is a violation of federal law to use this 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 per 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 produced 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.

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 AMA[®]-31 needed to produce a concentration of 1,600 ppm (0.56lb/bbl) of AMA[®]-31 in the drilling mud circulating system. For example, 59 gallons of AMA[®]-31 per 1,000 barrels of drilling fluid will produce the proper concentration. For best results, add AMA[®]-31 in a thin stream to the mud pit while drilling fluid is circulating. As the total volume increases, due to greater well depth, add additional AMA[®]-31 to maintain the proper concentration.

Because of the wide variation in drilling mud composition and bacterial contamination, greater or lesser amounts of AMA[®]-31 may be prescribed.

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 AMA[®]-31 needed to produce a concentration of approximately 67 ppm AMA[®]-31. For example, 0.84 gallons of AMA[®]-31 per 1,000 gallons of total volume will produce this dilution. 200 ppm AMA[®]-31, added each week is recommended to maintain bacterial control. This may be accomplished by adding 0.17 gallons of AMA[®]-31 to each 1,000 gallons of total volume.

Because of the wide variation in waters found in the oil fields, greater or lesser amounts of AMA[®]-31 may be prescribed.

25-May-95

9.7 LBS/GAL.

AMA[®]-31

ANTIMICROBIAL AGENT FOR INDU

Active Ingredient:

Sodium Dimethyldithiocarbamate

Nabam (Disodium ethylene bisdithiocarbamate)

Inert Ingredients:

TOTAL

KEEP OUT OF REACH OF C

WARNING

STATEMENT OF PRACTICAL TREAT

If on skin: Wash with plenty of soap and water. Get m

If in eyes: Hold eyelids open and flush with a steady, g
15 minutes. Get medical attention.

If swallowed: Call a physician or Poison Control Center. I
water and induce vomiting by touching back
person is unconscious, do not give anything
induce vomiting.

See side panel for additional precautionary

EPA REGISTRATION No. 9386-7 EPA ESTABLISH

MANUFACTURED I
VININGS INDUSTRI
MARIETTA, GEORGIA

ACCEPT
Under the Federal
Fungicide, and Sol
as amended, for the
registered under
EPA Reg. No.

10/5

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AMA[®]-31

ANTIFUNGAL MICROBIAL AGENT FOR INDUSTRIAL USE

Methylthiocarbamate
Sodium ethylene bisdithiocarbamate

10%
15%
69%
100%

KEEP OUT OF REACH OF CHILDREN

WARNING

STATEMENT OF PRACTICAL TREATMENT

Wash with plenty of soap and water. Get medical attention.
Keep eyelids open and flush with a steady, gentle stream of water for 15 minutes. Get medical attention.
Consult a physician or Poison Control Center. Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger. If person is unconscious, do not give anything by mouth and do not attempt to induce vomiting.

See inside panel for additional precautionary statements.

EPA Reg. No. 9386-7 EPA ESTABLISHMENT No. 9386-GA-1

MANUFACTURED BY
MORGAN INDUSTRIES, INC.
MARIETTA, GEORGIA 30062

ACCEPTED

Under the Federal Insecticide,
Fungicide, and Rodenticide Act,
as amended, for the pesticide
registered under
EPA Reg. No. 9386-7

PRECAUTIONARY STATEMENTS:

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

WARNING

Harmful or fatal if swallowed or absorbed through the skin. Causes eye and skin irritation. Do not get in eyes, on skin, or on clothing. All industrial workers applying this product must wear coveralls over a long-sleeved shirt and long pants, shoes, socks, and chemical-resistant gloves. During dilution, a chemical-resistant apron and goggles or a face shield must also be worn. Remove contaminated clothing and wash clothing before reuse. Wash thoroughly with soap and water after handling and before eating, drinking or using tobacco.

ENVIRONMENTAL HAZARDS: 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 effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

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 and dispose of in accordance with local, state and federal 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 directions, 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.

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TECHNICAL DATA

AMA[®]-31
(ANTIMICROBIAL AGENT)

DESCRIPTION:

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 PROPERTIES:

Appearance: Pale yellow to amber liquid	Density: 9.7 lb/gal
Flash Point: >2000F (Pensky-Martens)	Solubility: Complete in water
pH: 11.6	

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. <i>Flavobacterium capsulatum</i>	10	5. <i>Aspergillus niger</i>	17
2. <i>Aerobacter aerogenes</i>	90	6. <i>Penicillium expansum</i>	40
3. <i>Bacillus subtilis</i>	40	7. <i>Fusarium oxysporium</i>	40
4. <i>Pseudomonas fluorescens</i>	125		
<u>COMBINATION OF BACTERIA</u>		<u>COMBINATION OF FUNGI</u>	
1,2 & 4(Bacterial Combination)	125	5,6 & 7(Fungal Combination)	42
<u>SULFATE REDUCING BACTERIA</u>		<u>PPM</u>	
<i>Desulfovibrio desulfuricans</i>	<5		

ACCEPTED
 AUG 16 1995
 Under the Federal Insecticide, Fungicide, and Rodenticide Act,
 as amended by the FIFRA Act of 1990,
 this product is registered under
 EPA Reg. No. 9386-7

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DIRECTIONS FOR USE:

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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.

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

For best results add 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 AMA[®]-31 to maintain the proper concentration. Because of the wide variation in drilling mud composition and bacterial contamination, greater or lesser amounts of AMA[®]-31 may be proscribed.

OIL FIELD 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 AMA[®]-31 needed to produce a concentration of approximately 967 ppm AMA[®]-31. For example, 0.84 gallons of AMA[®]-31 per each 100 gallons of total volume will produce this dilution.

Add AMA[®]-31 as a slug treatment or intermittently.

200 ppm of AMA[®]-31, added each week, is recommended to maintain bacterial control. This may be accomplished by adding 0.17 gallons of AMA[®]-31 to each 1000 gallons of total volume. Because of the wide variation in waters found in the oil fields, greater or lesser amounts of AMA[®]-31 may be proscribed.

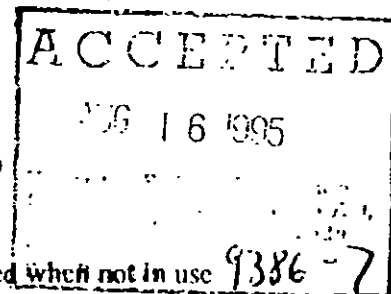
TECHNICAL ASSISTANCE:

Our technical staff is available to assist in the application of Vinings' products. You may request assistance through your sales representative or by contacting Vinings Industries at 800-347-1542.

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.



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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.

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PRECAUTIONARY STATEMENTS:
HAZARD TO HUMANS AND DOMESTIC ANIMALS

Warning. Harmful or fatal if swallowed or absorbed through the skin. Causes eye and skin irritation. Do not get in eyes, on skin, or on clothing. All industrial workers applying this product must wear coveralls over a long-sleeved shirt and long pants, shoes, socks, and chemical-resistant gloves. During dilution, a chemical-resistant apron and goggles or a face shield must also be worn. Remove contaminated clothing and wash clothing before reuse. Wash thoroughly with soap and water after handling and before eating, drinking or using tobacco.

ENVIRONMENTAL HAZARDS:

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 effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA..

STATEMENTS OF PRACTICAL TREATMENT:

If on skin: Wash with plenty of soap and water. Get medical attention.

If in eyes: Hold eyelids open and flush with a steady, gentle stream of water for 15 minutes. Get medical attention.

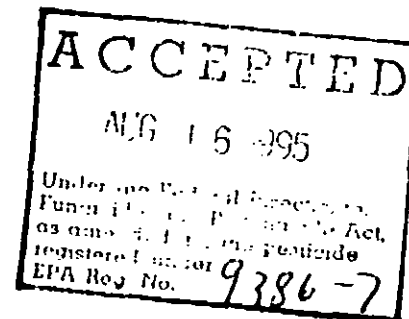
If swallowed: Call a physician or Poison Control Center. Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger. If person is unconscious, do not give anything by mouth and do not induce vomiting.

SHIPPING POINT:

Marietta, Georgia
Washougal, Washington

PACKAGING:

30 and 55 gallon drums
275 and 350 gallon portabins
Bulk



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