PM 31

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®-24 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 5 to 20 fluid ounces of AMA®-24 per ton of paper produced.

INTERMITTENT FEED METHOD: Apply 12 to 20 fluid ounces of AMA[®]-24 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 5 to 15 fluid ounces of AMA®-24 per ton (dry

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®-24 needed to produce a concentration of 2,080 ppm (0.73 lb/bbl) of AMA®-24 in the drilling mud circulating system. For example, 75 gallons of AMA®-24 per 1000 barrels of drilling fluid will produce the proper concentration. For best results, add AMA®-24 in a thin stream to the mud pit while drilling fluid circulates. As the total volume increases due to greater well depth, add additional AMA®-24 to maintain the proper concentration. Because of the wide variation in drilling mud composition and bacterial contamination, greater or lesser amounts of the AMA®-24 may be prescribed.

FOR THE PRESERVATION OF CLAY SLURRIES, ADHESIVES, COATINGS AND HIGH VISCOSITY SUSPENSIONS: For preservation of slurries and high viscosity suspensions, AMA[®]-24 should be added at a point in the processing system where there will be sufficient time and agitation for good mixing and dispersion. Add AMA[®]-24 at use levels of 0.04 - 0.11% by weight, based on the to^{*}al formulation in slurries of starch, clay, calcium carbonate or titanium dioxide; paper coatings; high viscosity suspensions (e.g. polymers, silica-polymer combinations); volyvinyl alcohol/polyvinyl acetate based adhesives; starch based adhesives; dextrin based idhesives. The exact amount of material to be added for the preservation of any given formulation will depend on the components and local storage conditions. Dosage rates should be determined by actual test.

RECIRCULATING COOLING WATER SYSTEMS: FOR CONTROL OF ALGAE, FUNGI, AND SLIME-FORMING BACTERIA: Dosages for industrial recirculating cooling water systems

will depend on the conditions of the system prior to treatment initiation.

Systems which are heavily contaminated should be cleaned first. Apply AMA[®]-24 to the cleaned system or when growth is first noticed according to the following schedule.

INITIAL DOSAGE: Apply 3.25 - 6.5 fluid ounces (30-60ppm) of AMA®-24 per each 1000 gallons of water in the system. This dosage may be as a continuous treatment or applied once, twice or three times weekly, or as required to control the growth of slime forming organisms.

<u>SUB</u>'EQUENT DOSAGE: When microbial control is evident, add 0.5 - 3.25 fluid ounces (5-30ppm) of AMA®-24 per 1000 gallons of water in the system as a continuous treatment daily or every 3 days or as required to maintain control.



(ANTIMICROBIAL ACENT)

Active Ingredient: Tetrahydro-3,5-dimethyl-2H-1,3,5-thiadiazine-2-thione 24% Inert Ingredients: 76% TOTAL 100%

(POR INDUSTRIAL USE ONLY)

KEEP OUT OF REACH OF CHILDREN

DANGER

STATEMENT OF PRACTICAL TREATMENT

In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes. For eyes, call a physician. Remove and wash contaminated clothing before reuse.

If swallowed, drink promptly a large quantity of milk, egg whites, gelatin solution or if these are not available, drink large quantities of water. Avoid alcohol, Call a physician immediately.

Note to Physician: Probable mucosal damage may contraindicate the use of gastric lavage.

See Side Panel For Additional Precautionary Statements

EPA REGISTRATION NO.9386-3

EPA ESTABLISHMENT No. 9386-GA-1

MANUFACTURED BY VININGS INDUSTRIES, INC. MARIETTA, GEORGIA 30062



PRECAUTIONARY STATEMENTS:

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER: KEEP OUT OF REACH OF CHILDREN. Corrosive. Causes severe eye damage and skin irritation. Do not get in eyes, on skin or on clothing. Wear goggles or face shield and rubber gloves when handling. Harmful if swallowed or absorbed through skin. Avoid contamination of food.

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 sever systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

PHYSICAL OR CHEMICAL HAZARDS: Do not use, Spill, Pour or Store near Open Flame.

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 acutely hazardous. 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 rinac (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 rinac (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.

03/31/95 9.7 LBS/GAL

AWA-24 is an effective, low cost, inquite antimicrobial agent for use in a variety of systems.

COMPOSITION:

Active Ingredient:

Tetrahydro-3,5-dimethyl-2H-1,3,5-thiadiazine-2-thione Inert Ingredients: TOTAL



TYPICAL PROPERTIES:

Appearance:Yellow to light green liquidFlash Point:>200°F (Pensky-Martens)pH:13.4Freeze Point:<'4°F</td>

Solubility:Complete at use
concentrationDensity:9.7 lb/gal

24%

<u>76%</u>

100%

EFFICACY:

AMA®-24 has been found to be an effective agent against many bacteria and fungi.

Following is a tabulation showing the ppm of AMA®-24 required to give complete inhibition at 96 hours:

MICROORGANISM	<u>PPM</u>	MICROORGANISM	<u>PPM</u>
 <u>Flavobacterium capsulatum</u> <u>Enterobacter aerogenes</u> <u>Bacillus subtilus</u> <u>Pseudomonas fluorescens</u> 	167 1000 333 1000	 <u>Aspergillus niger</u> <u>Penicillium expansum</u> <u>Fusarium oxysporum</u> 	333 500 1000
COMBINATION OF BACTERIA	<u>PPM</u>	COMBINATION OF FUNGI	<u>PPM</u>
1,2&4(Bacterial Combination)	1000	5,6&7(Fungal Combination)	500
SULFATE-REDUCING BACTERIA			

Desulfovibrio desulfuricans

120-130

DIRECTIONS FOR USE:

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FOR THE PRESERVATION OF CLAY SLURRIES, ADHESIVES, COATINGS AND HIGH VISCOSITY

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Sale

<u>SUSPENSIONS</u>: For preservation of slurries and high viscosity suspensions, AMA®-24 should be added at a point in the processing system where there will be sufficient time and agitation for good mixing and dispersion. Add AMA®-24 at use levels of 0.04-0.11%, by weight, based on the total formulation in slurries of starch, clay, calcium carbonate or titanium dioxide; paper coatings; high viscosity suspensions (e.g. polymers; silica-polymer combinations); polyvinyl alcohol/polyvinyl acetate based adhesives; starch based adhesives; dextrin based adhesives. The exact amount of material to be added for the preservation of any conditions. Dosage rates should be determined by actual tests.

PAPER MILL SLIME CONTROL: FOR THE CONTROL OF SLIME FORMING AND/OR SPOILAGE

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CONTINUOUS FEED METHOD: Apply 5 to 15 fluid ounces of AMA[®]-24 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 THE CONTROL OF ALGAE, FUNGI, AND

SLIME FORMING BACTERIA: Dosages for industrial recirculating cooling water systems will depend on the conditions of the system prior to treatment initiation. Systems which are heavily contaminated should be cleaned first. Apply AMA®-24 to the cleaned system or when growth is first noticed according to the following schedule.

INITIAL DOSAGE: Apply 3.25-6.5 fluid ounces (30-60 ppm) of AMA®-24 per each 1000 gallons of water in the system. This dose may be as a continuous treatment or applied once, twice, or three times weekly or as required to control the growth of slime-forming organisms.

SUBSEQUENT DOSAGE: When microbial control is evident add 0.5 to 3.25 fluid ounces (5-30 ppm) of AMA®-24 per 1000 gallons of water in the system as a continuous treatment daily or every 3 days or as required to maintain control.

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ACCEPTED AUG 16 July Under the Federal Insection in, Fungioi su en ERolemme le Act. as amondad, for the pesticide registored under G EFA Reg No.

AMA[®]-24 Page 3 HOUS

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 300-347-1542.

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

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HAZARD TO HUMANS AND DOMESTIC ANIMALS

DANGER. KEEP OUT OF REACH OF CHILDREN. Corrosive. Causes severe eye damage and skin irritation. Do not get in eyes, on skin, or on clothing. Wear goggles or face shield and rubber gloves when handling. Harmful if swallowed. Avoid contamination of food.

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NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.

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PHYSICAL OR CHEMICAL HAZARDS:

Do not use, spill, pour or store near open flame.

ACCEPTED
AUG 6 1995
Under the Federal Interaction Fungicide, and Released areas as amended, for the polymer registered under 9386-3 EPA Reg. No.

AMA[®]-24 Page 4

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.

FOOD AND DRUG REGULATIONS:

The ingredients in AMA[®]-24 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 and 21 CFR 176.230

SHIPPING POINT:

Marietta, Georgia Washougal, Washington PACKAGING: 55 gallon drums 350 gallon portabins Bulk

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ACCEPTED Under the Fede Fungleila an as amended, for 1 Togistered under EPA Reg. No.

:gmh Form: AMA24.TDS Date: 03/95 Revision: 2

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