

9386-44

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JUN 15 2010

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

Kemira Chemicals, Inc.
1950 Vaughn Road
Kennesaw, GA 30144

Attention: Dale A. Bauer
Environmental Manager

Subject: AMA-500D – Amendment to remove Once-Through Cooling Water Site from
Label
EPA Reg. No. 9386-404
Amendment Dated May 14, 2010

The amendment referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is acceptable. The Agency approves your company's removal of Once-Through Cooling Water Site from the label of the aforementioned product, per Agency request.

A stamped copy of the accepted labeling is enclosed. Submit three copies of your final printed labeling to the Agency before distributing or selling the product bearing the revised labeling.

If you have any questions concerning this letter, please contact Abigail Downs at (703) 305-5259.

Sincerely,

A handwritten signature in black ink that reads "M Swindell".

Marshall Swindell
Product Manager (33)
Regulatory Management Branch I
Antimicrobials Division (7510P)

AMA®-500D

To Control Coliform and Other Bacteria in Publicly-Owned Treatment Works; controls bacteria, fungi, and yeasts in paper mills, metalworking fluids containing water, and enhanced oil recovery systems; controls bacteria, fungi, and algae in industrial recirculating water cooling towers, once-through fresh and sea water industrial cooling water systems, and reverse osmosis systems; controls slime-forming bacteria and fungi in air-washer systems.

FOR INDUSTRIAL USE ONLY

Active Ingredient:
2,2-Dibromo-3-nitrilopropionamide.....20%
Inert Ingredients:80%
TOTAL.....100%

KEEP OUT OF REACH OF CHILDREN

DANGER

| First Aid | |
|---|--|
| If in eyes: | - Hold eye open and rinse slowly and gently with water for 30 minutes. - Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. - Call a poison control center or doctor for treatment advice. |
| If on skin or clothing: | - Take off contaminated clothing. - Rinse skin immediately with plenty of water for 15-20 minutes. - Call a poison control center or doctor for treatment advice. |
| If swallowed: | - Call poison control center or doctor immediately for treatment advice. - Have person sip a glass of water if able to swallow. - Do not induce vomiting unless told to do so by the poison control center or doctor. |
| HOT LINE NUMBER | |
| IN CASE OF EMERGENCY endangering life or property involving this product, call CHEMTREC at 800-424-9300. Have the product container or label with you when calling a poison control center or doctor or going for treatment. | |
| Note to physician: Probable mucosal damage may contraindicate the use of gastric lavage. | |

**ACCEPTED
with COMMENTS
EPA Letter Dated:**

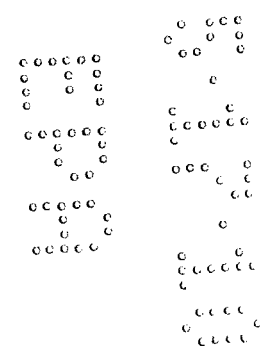
JUN 15 2010

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended for the pesticide, registered under EPA Reg. No. 9386-4

See side panel for additional precautionary statements
EPA REG. No. 9386-44 EPA EST. No. 9386-GA-3
EPA EST. No. 74922-GA-1

Manufactured By

**KEMIRA CHEMICALS, INC.
1950 Vaughn Road
KENNESAW, GA 30144**



PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CORROSIVE. Causes irreversible eye damage or skin burns. Do not get in eyes, on skin or on clothing. May cause loss of vision. Fatal if absorbed through skin. Harmful if swallowed or inhaled. Avoid breathing vapor. Wear goggles or face shield (safety glasses). Wear protective clothing (long-sleeve shirt and long pants, socks plus shoes and chemical resistant gloves such as waterproof gloves). Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco. Remove contaminated clothing and wash before reuse.

ENVIRONMENTAL HAZARDS: This pesticide is toxic to fish and aquatic organisms. Apply this product only as specified on this label. Do not contaminate water by cleaning of equipment, or disposal of wastes. **NOTE:** 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

PESTICIDE STORAGE AND DISPOSAL

Nonrefillable container. Do not reuse or refill this container.
Do not contaminate water, food or feed by storage or disposal

Storage: To maintain product quality, store at temperatures below 60° C. Keep container tightly closed when not in use.

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 instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Container Disposal: Do not reuse empty container. 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.

LABEL DATE: 13-May-10

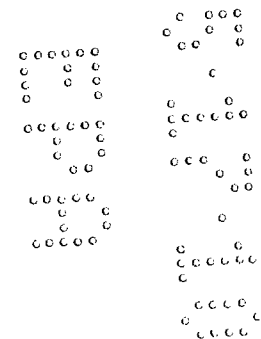
LOT#

NET WT. X,XXX Pounds

DOT Shipping Name: UN3265, Corrosive liquid, Acidic, Organic, N.O.S., (2,2-Dibromo-3-Nitrilopropionamide), 8, PGIII

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DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

NOTE: ADD AMA®-500D SEPARATELY TO THE SYSTEM. DO NOT MIX IT WITH OTHER ADDITIVES, IN ORDER TO AVOID DECOMPOSITION OF AMA®-500D DUE TO THE HIGH pH OF MANY ADDITIVE FORMULATIONS.

INDUSTRIAL RECIRCULATING WATER COOLING TOWERS: Add AMA®-500D to the basin (or any other point of uniform mixing). Addition should be made with a metering pump; it may be continuous or intermittent, depending on the severity of the contamination when treatment is begun, and the retention time in the system. Optimum performance with this product is attained by continuous or intermittent treatment. If "shock" treatment is used, the blowdown should be discontinued for 24-48 hours.

FOR CONTROL OF BACTERIA: Add 0.00095-0.0095 gal AMA®-500D/1,000 gal of water in the system, depending on the severity of contamination.

INTERMITTENT or SLUG METHOD: INITIAL DOSE: When the system is noticeably fouled, add 0.0048-0.0095 gal AMA®-500D/1,000 gal of water in the system. Repeat until control is achieved.

SUBSEQUENT DOSE: When microbial control is evident, add 0.0024-0.0095 gal AMA®-500D/1,000 gal of water in the system every 4 days, or as needed to maintain control. BADLY FOULED SYSTEMS must be cleaned before treatment is begun.

CONTINUOUS FEED METHOD: INITIAL DOSE: When the system is noticeably fouled, add 0.0048-0.0095 gal AMA®-500D/1,000 gal of water to the system.

SUBSEQUENT DOSE: Maintain this level by pumping a continuous feed of 0.00095-0.0048 gal AMA®-500D/1,000 gal of water in the system per day. BADLY FOULED SYSTEMS must be cleaned before treatment is begun.

FOR CONTROL OF FUNGI AND ALGAE: Add 0.029-0.095 gal AMA®-500D/1,000 gal of water in the system depending on the severity of contamination.

INTERMITTENT or SLUG METHOD: INITIAL DOSE: When the system is noticeably fouled, add 0.048-0.095 gal AMA®-500D/1,000 gal of water in the system. Repeat until control is achieved.

SUBSEQUENT DOSE: When microbial control is evident, add 0.029-0.095 gal AMA®-500D/1,000 gal of water in the system daily, or as needed to maintain control. BADLY FOULED SYSTEMS must be cleaned before treatment is begun.

CONTINUOUS FEED METHOD: INITIAL DOSE: When the system is noticeably fouled, add 0.048-0.095 gal AMA®-500D/1,000 gal of water to the system.

SUBSEQUENT DOSE: Maintain this treatment level by pumping a continuous feed of 0.029-0.095 gal AMA®-500D/1,000 gal of water in the system per day. BADLY FOULED SYSTEMS must be cleaned before treatment is begun.

PAPER MILLS: For the control of bacterial, fungal, and yeast growths in pulp, paper, and paperboard mills, add AMA®-500D at the rate of 0.15-0.50 lb/ton of pulp or paper (dry basis). Addition may be continuous or intermittent, depending upon the type of system and the severity of contamination. It should be made with a metering pump at a location that will insure uniform distribution of AMA®-500D in the mass of fiber, such as the beaters, jordan inlet or discharge, broke chests, furnish chests, save-alls, and white-water tanks.

Heavily fouled systems should be boiled out, then treated with 0.35-0.50 lb AMA®-500D /ton of paper (dry basis), as necessary for control.

Moderately fouled systems should be treated continuously with 0.35-0.50 lb AMA®-500D /ton of paper (dry basis) until the slime accumulation is controlled. Addition rates can then be reduced to 0.15-0.35 lb AMA®-500D/ton of paper on a continuous or intermittent basis, as needed for control. Dislodged slime may cause breaks in the paper and a clean-up of the paper machine may be advisable.

Slightly fouled systems should be treated continuously with 0.15-0.35 lb AMA®-500D/ton of paper (dry basis) until the slime is controlled, then added on an intermittent basis to maintain control.

AIR-WASHER SYSTEMS: Add 0.0015-0.095 gal AMA®-500D/1,000 gal of water in the system, depending upon the severity of contamination to control slime-forming bacteria and fungi in industrial air-washer systems.

INTERMITTENT or SLUG METHOD: INITIAL DOSE: When the system is noticeably fouled, add 0.003-0.095 gal AMA®-500D/1,000 gal of water in the system. Repeat until control is achieved.

SUBSEQUENT DOSE: When microbial control is evident, add 0.0015-0.047 gal AMA®-500D/1,000 gal of water in the system every 2 days or as needed to maintain control. BADLY FOULED SYSTEMS must be cleaned before treatment is begun.

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93 86-4

CONTINUOUS FEED METHOD: INITIAL DOSE: When the system is noticeably fouled, add 0.003-0.095 gal AMA®-500D/1,000 gal of water in the system.

SUBSEQUENT DOSE: Maintain this level by pumping a continuous feed of 0.0015-0.047 gal AMA®-500D/1,000 gal of water in the system per day. **BADLY FOULED SYSTEMS** must be cleaned before treatment is begun.

NOTE: For use in industrial air-washer systems that maintain effective mist eliminating components.

REVERSE OSMOSIS SYSTEMS: AMA®-500D may be used to control bacteria and reduce biofouling in industrial membrane systems (reverse osmosis, ultrafiltration, microfiltration). Acceptable applications include reverse osmosis for the production of boiler makeup water, rinsing of electric components, and industrial waste water treatment. AMA®-500D may be fed continuously to the membrane system feed water at a rate of 10-100 ppm (1.3-13.0 fl. oz./1,000 gallons or 0.4 to 4.0 ml/min per 10 gpm of feed water) AMA®-500D. For off-line system disinfection, add 50-170 ppm (6.5-22.0 fl. oz./1,000 gallons) AMA®-500D to the off-line cleaning feed tank and re-circulate for 30 minutes to 3 hours. Frequency of addition should be every 5 days or as needed.

Note: For industrial systems in which AMA®-500D residuals cannot be tolerated, AMA®-500D must be slug fed. During and for 30 minutes to 1 hour following chemical addition, permeate and concentrate streams must be diverted to waste.

METALWORKING FLUIDS CONTAINING WATER: This product is effective in metalworking fluid concentrates which have been diluted in water at ratios of 1:100-1:4.

For controlling (or inhibiting) the growth of bacteria, fungi, and yeasts that may deteriorate metalworking fluids containing water, add AMA-500D to the fluid in the collection tank. Additions should be made with a metering pump.

INITIAL OR SLUG DOSE: When the system is just noticeably fouled, add 0.25 gal AMA®-500D /1,000 gal of metalworking fluid to the system. Repeat until control is achieved.

SUBSEQUENT DOSE: When microbial control is evident, add 0.1-0.2 gal AMA-500D/1,000 gal of metalworking fluid per day, or as needed to maintain control. Additions can be made continuously or intermittently. Slug the system as required.

ENHANCED OIL RECOVERY SYSTEMS: For controlling slime-forming bacteria, sulfide-producing bacteria, yeasts, and fungi in oil field water, polymer or micellar floods, water-disposal systems, or other oil field water systems, add 1-80 ppm AMA®-500D (0.1-6.4 gal AMA®-500D per 2400 barrels of water) depending on the severity of contamination. Additions should be made with a metering pump either continuously or intermittently.

CONTINUOUS FEED METHOD: When the system is noticeably fouled, add 10-80 ppm AMA®-500D (0.8-6.4 gal AMA®-500D per 2400 barrels of water) continuously until the desired degree of control is achieved. Subsequently, treat with 1-15 ppm AMA®-500D (0.1-1.2 gal AMA-500D per 2400 barrels of water) continuously or as needed to maintain control.

INTERMITTENT OR SLUG METHOD: When the system is noticeably fouled, or to maintain control of the system, add 10-80 ppm AMA®-500D (0.8-6.4 gal AMA®-500D per 2400 barrels of water) intermittently for 4-8 hours per day, and from 1-4 times per week, or as needed depending on the severity of contamination.

Addition of AMA®-500D may be made at the free water knockouts, before or after the injection pumps and injection well headers.

NOTE: For control of bacteria, yeast, and fungi in aqueous solutions of biopolymer used in flooding operations, add 15-80 ppm AMA®-500D (1.2-6.4 gal AMA®-500D per 2400 barrels of water). Additions of AMA®-500D should be made with a metering pump immediately after preparation of the aqueous biopolymer solution to prevent loss of viscosity.

DIRECTIONS FOR TREATING OILFIELD AND PETROCHEMICAL SYSTEMS: AMA®-500D may be used either in slug treatment or in continuous application. Dosages may vary from as much as 200 ppm of AMA®-500D in slug application to 10 to 50 ppm of AMA®-500D in continuous treatment (1/4 pint AMA®-500D per 1,000 gallons of water equals approximately 30 ppm). A typical slug treatment is to add 1 pint of AMA®-500D per 1,000 gallons at intervals as needed to prevent growth of microbial slime. Badly fouled systems may be slug treated to establish control, followed by continuous treatment to maintain control.

HYDROTESTING: FOR CONTROL OF BACTERIA. Water used to hydrotest pipelines or vessels should contain 100 to 1,000 ppm of AMA®-500D per 1,000 gallons water) depending on water quality and length of time the equipment will remain idle.

PUBLICLY-OWNED TREATMENT WORKS: TO CONTROL COLIFORM AND OTHER BACTERIA: Add AMA®-500D at a concentration of 1.0 to 10.0 ppm by weight of water being treated, depending on the severity and contamination in the system. Addition should be CONTINUOUS and should be made with a metering pump at a point in the system where mixing will be rapid and thorough. Add AMA®-500D to the system in a location where contact time will be 30 minutes or greater before reaching the outfall.

TO USE AS A CO-TREATMENT WITH CHLORINE: Add 0.4-1.5 ppm AMA®-500D Antimicrobial by weight of water treated. Chlorination should result in a minimum detectable residual (i.e., greater than zero but less than the NPDES permit level). Addition should be CONTINUOUS and made at a point just after initial chlorine mixing. Rapid mixing is necessary for maximum effectiveness. AMA®-500D should be added at a location where a contact time of 10 minutes or longer will be provided before reaching the outfall.

DIRECTIONS FOR INDUSTRIAL PRESERVATION APPLICATIONS: AMA®-500D may be used to reduce microbiological contamination in raw materials and/or products such as: aqueous paints and coatings, polymers, slurries, adhesives, latex and resin emulsions, sizing, caulk, process water, along with specialty industrial products including: inks, dyes, waxes, detergents, and cleansers.

ACCEPTED WITH COMMENTS
EPA Letter Dated: 9/11/15 2015
Under the Federal Insecticide, Fungicide and Rodenticide Act as amended for the pesticide, registered under EPA Reg. No. 9386-44

TO REDUCE MICROBIOLOGICAL CONTAMINATION: Add AMA®-500D to the material or product at a concentration of 25 to 2,000 ppm by weight. This concentration is equivalent to 2.8 to 224.0 fluid ounces AMA®- 500D per 1,000 gallons or 21.4 to 1,712.0 milliliters AMA®- 500D per 1,000 liters. The required concentration will depend on the material being treated and the level of contamination present.

DIRECTIONS FOR TREATING BREWERY PASTEURIZER WATER: For controlling (or inhibiting) the growth of bacteria, fungi and yeasts in brewery pasteurizing water systems, add AMA®-500D at a point in the system to insure uniform mixing. Initial or Slug Dose: When the system is noticeably fouled, add AMA®-500D at the rate of 0.25 gal (2.65 lbs) per 1000 gals of water in the system. Repeat until control is achieved. Subsequent Dose: When microbial control is evident, add AMA®-500D at the rate of 0.1 to 0.2 gal (1.06 to 2.12 lbs) per 1000 gals of water per day, or as needed to maintain control. Additions of AMA®-500D product can be made continuously or intermittently. Slug the system as required. Badly fouled systems must be cleaned before treatment is begun.

**ACCEPTED
with COMMENTS
EPA Letter Dated:**

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