

Antimicrobial 8536

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 and in once-through fresh and sea water industrial cooling water systems; controls slime-forming bacteria and fungi in air-washer systems.

FOR INDUSTRIAL USE ONLY

Active Ingredient(s)

2,2-Dibromo-3-nitriloproplionamide.....	5%
Inert Ingredient(s).....	95%
Total	100%

E.P.A. Registration No. 464-496

E.P.A. Est. 464-MI-1

KEEP OUT OF REACH OF CHILDREN

DANGER

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

DANGER • CAUSES SEVERE BURNS OF EYES • CAUSES SKIN IRRITATION • HARMFUL IF SWALLOWED

Do Not Get In Eyes, On Skin, Or On Clothing • Wear Chemical Worker's Goggles When Handling • Wash Thoroughly After Handling

ENVIRONMENTAL HAZARDS

This product is toxic to fish. Apply this product only as specified on 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.



THE DOW CHEMICAL COMPANY

Midland, Michigan 48674 U.S.A.

1-800-258-CHEM

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ACCEPTED
 AUG - 1 2002
 Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide, registered under EPA Reg. No. 464-496

FIRST AID:	
IF IN EYES	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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 AN EMERGENCY endangering life or property involving this product, call collect 989-636-4400 . 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.	

PESTICIDE STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

Pesticide 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.

Reusable Portable Containers (Totes): Do NOT rinse containers. Do not put any other material(s) in containers. Seal all openings with proper fittings and clean outside of container. Then return container to The Dow Chemical Company.

DIRECTIONS FOR USE

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

NOTE: ADD ANTIMICROBIAL 8536 SEPARATELY TO THE SYSTEM. DO NOT MIX IT WITH OTHER ADDITIVES. IN ORDER TO AVOID DECOMPOSITION OF ANTIMICROBIAL 8536 DUE TO THE HIGH pH OF MANY ADDITIVE FORMULATIONS.

PAPER MILLS

For the control of bacterial, fungal, and yeast growths in pulp, paper, and paperboard mills, add ANTIMICROBIAL 8536 at the rate of 0.06-0.21 gal/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 ANTIMICROBIAL 8536 in the mass of fiber and water, 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 0.06-0.15 gal ANTIMICROBIAL 8536/ton of paper (dry basis), as necessary for control.

MODERATELY FOULED SYSTEMS should be treated continuously with 0.15-0.21 gal ANTIMICROBIAL 8536/ton of paper (dry basis) until the slime accumulation is controlled. Addition rates can then be reduced to 0.06-0.15 gal ANTIMICROBIAL 8536/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 0.06-0.15 gal ANTIMICROBIAL 8536/ton of paper (dry basis) until slime is controlled, then added on an intermittent basis to maintain control.

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 ANTIMICROBIAL 8536 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 1.1 gal ANTIMICROBIAL 8536/1,000 gal of metalworking fluid to the system. Repeat until control is achieved.

SUBSEQUENT DOSE: When microbial control is evident, add 0.44-0.88 gal ANTIMICROBIAL 8536/1,000 gal of metalworking fluid per day, or as needed to maintain control. Additions can be made continuously or intermittently. Slug the system as required.



NOTICE

Do Not Ship or Store with Food, Feeds, Drugs, or Clothing

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 4-320 ppm ANTIMICROBIAL 8536 (0.4-28.6 gal ANTIMICROBIAL 8536 per 2400 barrels of water) depending on the severity of the contamination. Additions should be made with a metering pump either continuously or intermittently.

CONTINUOUS FEED METHOD

When the system is noticeably fouled, add 40-320 ppm ANTIMICROBIAL 8536 (3.6-28.6 gal ANTIMICROBIAL 8536 per 2400 barrels of water) continuously, until the desired degree of control is achieved. Subsequently, treat with 4-60 ppm ANTIMICROBIAL 8536 (0.4-5.4 gal ANTIMICROBIAL 8536 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 40-320 ppm ANTIMICROBIAL 8536 (3.6-28.6 gal ANTIMICROBIAL 8536 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 ANTIMICROBIAL 8536 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 60-320 ppm ANTIMICROBIAL 8536 (5.4-28.6 gal ANTIMICROBIAL 8536 per 2400 barrels of water). Additions of ANTIMICROBIAL 8536 should be made with a metering pump IMMEDIATELY after preparation of the aqueous biopolymer solution to prevent loss of viscosity.

INDUSTRIAL RECIRCULATING WATER COOLING TOWERS

Add ANTIMICROBIAL 8536 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 0.0038-0.038 gal ANTIMICROBIAL 8536/1,000 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 0.019-0.038 gal ANTIMICROBIAL 8536/1,000 gal of water in the system. Repeat until control is achieved.

SUBSEQUENT DOSE: When microbial control is evident, add 0.0095-0.038 gal ANTIMICROBIAL 8536/1,000 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 0.019-0.038 gal ANTIMICROBIAL 8536/1,000 gal of water to the system.

SUBSEQUENT DOSE: Maintain this level by pumping a continuous feed of 0.0038-0.019 gal ANTIMICROBIAL 8536/1,000 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 0.116-0.380 gal ANTIMICROBIAL 8536/1,000 gal of water in the system depending on the severity of the contamination.

INTERMITTENT or SLUG METHOD

INITIAL DOSE: When the system is noticeably fouled, add 0.192-0.380 gal ANTIMICROBIAL 8536/1,000 gal of water in the system. Repeat until control is achieved.

SUBSEQUENT DOSE: When microbial control is evident, add 0.116-0.380 gal ANTIMICROBIAL 8536/1,000 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 0.192-0.380 gal ANTIMICROBIAL 8536/1,000 gal of water to the system.

SUBSEQUENT DOSE: Maintain this treatment level by pumping a continuous feed of 0.116-0.380 gal ANTIMICROBIAL 8536/1,000 gal of water in the system per day.

BADLY FOULED SYSTEMS must be cleaned before treatment is begun.

ONCE-THROUGH INDUSTRIAL COOLING WATER SYSTEMS

For controlling bacteria, fungi, and algae in once-through and closed-cycle fresh and sea water cooling systems, cooling ponds, canals, and lagoons, add ANTIMICROBIAL 8536 to the system inlet water or before any other contaminated area in the system. 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.

FOR CONTROL OF BACTERIA

Add 4-48 ppm ANTIMICROBIAL 8536 based on the flow rate through the system, depending on the severity of contamination.

INTERMITTENT METHOD

INITIAL DOSE: When the system is noticeably fouled, add 24-48 ppm ANTIMICROBIAL 8536. Minimum treatment intervals should be 15 minutes. Repeat until control is achieved.

SUBSEQUENT DOSE: When microbial control is evident, add 12-48 ppm ANTIMICROBIAL 8536 intermittently 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 24-48 ppm ANTIMICROBIAL 8536 continuously to the system.

SUBSEQUENT DOSE: When microbial control is evident, pump a continuous feed of 4-24 ppm ANTIMICROBIAL 8536 to the system.

BADLY FOULED SYSTEMS must be cleaned before treatment is begun.

FOR CONTROL OF FUNGI AND ALGAE

Add 144-472 ppm ANTIMICROBIAL 8536 based on the flow rate through the system, depending on the severity of contamination.

INTERMITTENT METHOD

INITIAL DOSE: When the system is noticeably fouled, add 240-472 ppm ANTIMICROBIAL 8536 to the system. The minimum treatment interval should be 15 minutes. Repeat until control is achieved.

SUBSEQUENT DOSE: When microbial control is evident, add 144-472 ppm ANTIMICROBIAL 8536 to the system daily or as needed to maintain control. The minimum treatment interval should be 15 minutes.

BADLY FOULED SYSTEMS must be cleaned before treatment is begun.

CONTINUOUS FEED METHOD

INITIAL DOSE: When the system is noticeably fouled, add 240-472 ppm ANTIMICROBIAL 8536 to the system.

SUBSEQUENT DOSE: When microbial control is evident, pump a continuous feed of 144-472 ppm ANTIMICROBIAL 8536 to the system.

BADLY FOULED SYSTEMS must be cleaned before treatment is begun.

AIR-WASHER SYSTEMS

Add 0.0078-0.250 gal ANTIMICROBIAL 8536/1,000 gal of water in the system, depending upon the severity of contamination to control slime-forming bacteria and fungi in industrial air-washing systems.

INTERMITTENT or SLUG METHOD

INITIAL DOSE: When the system is noticeably fouled, add 0.156-0.250 gal ANTIMICROBIAL 8536/1,000 gal of water in the system. Repeat until control is achieved.

SUBSEQUENT DOSE: When microbial control is evident, add 0.0078-0.125 gal ANTIMICROBIAL 8536/1,000 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.

CONTINUOUS FEED METHOD

INITIAL DOSE: When the system is noticeably fouled, add 0.156-0.250 gal ANTIMICROBIAL 8536/1,000 gal of water in the system.

SUBSEQUENT DOSE: Maintain this level by pumping a continuous feed of 0.0078-0.125 gal ANTIMICROBIAL 8536/1,000 gal of water in the system per day.

BADLY FOULED SYSTEMS must be cleaned before treatment is begun.

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

Notice: Seller warrants that the product conforms to its chemical description as contained on this label and is reasonably fit for the purposes stated on this label when used in accordance with directions under normal conditions of use. THE WARRANTIES MADE IN THIS PARAGRAPH ARE SELLER'S SOLE WARRANTIES WITH RESPECT TO THE PRODUCT AND ARE MADE EXPRESSLY IN LIEU OF AND EXCLUDE ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE AND ALL OTHER EXPRESS OR IMPLIED REPRESENTATIONS AND WARRANTIES.