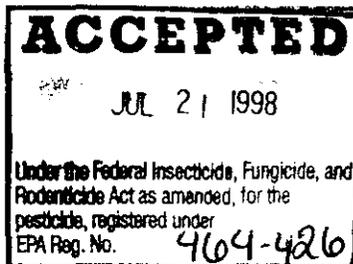


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ANTIMICROBIAL 7287

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 Ingredients:

2,2-Dibromo-3-nitrilopropionamide 20%

Inert Ingredients: 80%

E.P.A. Registration No. 464-426

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

KEEP OUT OF REACH OF CHILDREN

DANGER

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

CAUSES SEVERE BURNS OF EYES • EYE CONTACT MAY CAUSE LOSS OF VISION • MAY BURN THE SKIN • MAY BE HARMFUL OR FATAL IF SWALLOWED

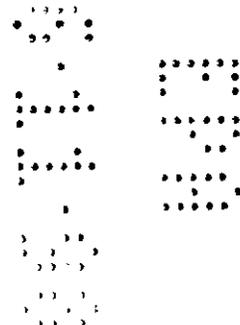
Do Not Get In Eyes, on Skin, or on Clothing • Chemical Worker's Goggles Must be Worn When Handling • Wash Thoroughly After Handling

FIRST AID: In case of eye contact, immediately flush eyes with plenty of water for at least 15 minutes. Call a physician. In case of skin contact, immediately wash skin with soap and plenty of water. Wash contaminated clothing before reuse. Get medical attention if irritation persists. If swallowed, immediately induce vomiting by giving two glasses of water and sticking finger down throat. Repeat until vomit is clear. Call a physician. Never give anything by mouth to an unconscious person.

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



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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.

IN CASE OF AN EMERGENCY endangering life or property involving this product, call collect 517-636-4400.

STORAGE AND DISPOSAL

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.

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 (except uses for which USEPA has accepted the required data and/or citations of data that the formulator has submitted in support of registration) 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.**

DIRECTIONS FOR USE

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

NOTE: ADD ANTIMICROBIAL 7287 SEPARATELY TO THE SYSTEM. DO NOT MIX IT WITH OTHER ADDITIVES, IN ORDER TO AVOID DECOMPOSITION OF ANTIMICROBIAL 7287 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 7287 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

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distribution of ANTIMICROBIAL 7287 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 0.15-0.35 lb ANTIMICROBIAL 7287/ton of paper (dry basis), as necessary for control.

Moderately fouled systems should be treated continuously with 0.35-0.50 ANTIMICROBIAL 7287/ton of paper (dry basis) until the slime accumulation is controlled. Addition rates can then be reduced to 0.15-0.35 lb ANTIMICROBIAL 7287/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 ANTIMICROBIAL 7287/ton of paper (dry basis) until the 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 7287 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 ANTIMICROBIAL 7287/1,000 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 ANTIMICROBIAL 7287/1,000 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 ANTIMICROBIAL 7287 (0.1-6.4 gal ANTIMICROBIAL 7287 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 ANTIMICROBIAL 7287 (0.8-6.4 gal ANTIMICROBIAL 7287 per 2400 barrels of water) continuously until the desired degree of control is achieved. Subsequently, treat with 1-15 ppm ANTIMICROBIAL 7287 (0.1-1.2 gal ANTIMICROBIAL 7287 per 2400 barrels of water) continuously or as needed to maintain control.

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Intermittent or Slug Method

When the system is noticeably fouled, or to maintain control of the system, add 10-80 ppm ANTIMICROBIAL 7287 (0.8-6.4 gal ANTIMICROBIAL 7287 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 7287 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 ANTIMICROBIAL 7287 (1.2-6.4 gal ANTIMICROBIAL 7287 per 2400 barrels of water). Additions of ANTIMICROBIAL 7287 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 7287 to the basin (or any other point of uniform mixing). Additions 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 of 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 ANTIMICROBIAL 7287/1,000 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 ANTIMICROBIAL 7287/1,000 gal of water in the system. Repeat until control is achieved.

Subsequent Dose: When microbial control is evident add 0.0024-0.0095 gal ANTIMICROBIAL 7287/1,000 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 ANTIMICROBIAL 7287/1,000 gal of water to the system.

Subsequent Dose: Maintain this level by pumping a continuous feed of 0.00095-0.0048 gal ANTIMICROBIAL 7287/1,000 gal of water in the system per day.

Badly Fouled Systems must be cleaned before treatment is begun.

FOR CONTROL OF FUNGI AND ALGAE

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Add 0.029-0.095 gal ANTIMICROBIAL 7287/1,000 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 ANTIMICROBIAL 7287/1,000 gal of water in the system. Repeat until control is achieved.

Subsequent Dose: When microbial control is evident, add 0.029-0.095 gal ANTIMICROBIAL 7287/1,000 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 ANTIMICROBIAL 7287/1,000 gal of water to the system.

Subsequent Dose: Maintain this treatment level by pumping a continuous feed of 0.029-0.095 gal ANTIMICROBIAL 7287/1,000 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 microbiological growth in once-through and closed-cycle fresh and sea water cooling systems, cooling ponds, canals, and lagoons, add ANTIMICROBIAL 7287 to the system inlet water or before any other contaminated area in the system. Intermittent addition should be made with a metering pump at a level dependent on the severity of the contamination in the system.

Initial Dose: When the system is noticeably fouled, add 6-12 ppm ANTIMICROBIAL 7287 based on the flow-rate through the system. Additions should be for durations of at least 15 minutes, but with additions not being made for more than a total of 4 hours per day.

Subsequent Dose: When microbial control is evident, add 3-12 ppm ANTIMICROBIAL 7287 intermittently to maintain control. Addition intervals may vary but total time of additions should not exceed 4 hours per day.

Badly Fouled Systems must be cleaned before treatment is begun.

REVERSE OSMOSIS SYSTEMS

ANTIMICROBIAL 7287 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 wastewater treatment.

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ANTIMICROBIAL 7287 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) Antimicrobial 7287. For off-line system disinfection, add 50-170 ppm (6.5-22.0 fl oz/1,000 gallons) ANTMICROBIAL 7287 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 ANTIMICROBIAL 7287 residuals cannot be tolerated, ANTIMICROBIAL 7287 must be slug fed. During and for 30 minutes to 1 hour following chemical addition, permeate and concentrate streams must be diverted to waste.

AIR-WASHER SYSTEMS

Add 0.0015-0.095 gal ANTIMICROBIAL 7287/1,000 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 ANTIMICROBIAL 7287/1,000 gal of water in the system. Repeat until control is achieved.

Subsequent Dose: When microbial control is evident, add 0.0015-0.047 gal ANTIMICROBIAL 7287/1,000 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 0.003-0.095 gal ANTIMICROBIAL 7287/1,000 gal of water in the system.

Subsequent Dose: Maintain this level by pumping a continuous feed of 0.0015-0.047 gal ANTIMICROBIAL 7287/1,000 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

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

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**THE DOW CHEMICAL COMPANY
Midland, Michigan 48674**