

LOT MM



XD-8259

ACTIVE INGREDIENT
2,2-Dibromo-3-nitropropionamide 10%
INERT INGREDIENTS: 90%
EPA Registration No. 464-500 EPA Est. 464-MI-1

Controls bacteria, fungi, and yeasts in paper mills, metalworking fluids, and recirculating water cooling towers and in once-through fresh and sea water.

DANGER

**CAUSES SEVERE BURNS OF EYES
MAY BURN THE SKIN
MAY BE HARMFUL OR FATAL
IF SWALLOWED**

**Do Not Get in Eyes, on Skin, or on Clothing
Wear Chemical Workers' Goggles
when Handling**

FIRST AID: In case of eye contact, flush eyes immediately with plenty of water for at least 15 minutes and get medical attention. In case of skin contact, wash with soap and plenty of water. Wash contaminated clothing before reuse.

If swallowed, induce vomiting immediately 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.

WASH THOROUGHLY AFTER HANDLING

In case of an emergency endangering life or property involving this product, call collect
517-638-4400

**TO MAINTAIN PRODUCT QUALITY, STORE AT
TEMPERATURES BELOW 60°C.
KEEP CONTAINER TIGHTLY CLOSED
WHEN NOT IN USE • FOR INDUSTRIAL USE ONLY**

This product is toxic to fish. Do not contaminate water by cleaning of equipment, or disposal of wastes. Apply this product only as specified on this label. Do not discharge into lakes, streams, ponds, or public waters unless in accordance with a NPDES permit. For guidance, contact your regional EPA office. Do not reuse empty container. Return to drum reconditioner; or destroy it by perforating or crushing, and burying or discarding in a safe place away from water supplies.

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

DIRECTIONS FOR USE

NOTE: ADD XD-8259 ANTIMICROBIAL SEPARATELY TO THE SYSTEM. DO NOT MIX IT WITH OTHER ADDITIVES, IN ORDER TO AVOID DECOMPOSITION OF XD-8259 ANTIMICROBIAL DUE TO THE HIGH pH OF MANY ADDITIVE FORMULATIONS.

PAPER MILLS

For the control of bacterial, fungal, and yeast growths in pulp, paper, and paper-board mills, add XD-8259 at the rate of 0.30-1.0 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 XD-8259 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 0.30-0.70 lb XD-8259/ton of paper (dry basis), as necessary for control.

Moderately fouled systems should be treated continuously with 0.70-1.0 lb XD-8259/ton of paper (dry basis) until the slime accumulation is controlled. Addition rates can then be reduced to 0.30-0.70 lb XD-8259/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 0.30-0.70 lb XD-8259/ton of paper (dry basis) until the slime is controlled, then added on an intermittent basis to maintain control.

INDUSTRIAL RECIRCULATING WATER COOLING TOWERS

Add XD-8259 ANTIMICROBIAL to the basin (recirculating). Addition should be made with a metering pump, intermittent, depending on the severity of the contamination, and the retention time in the system. Optimum performance with this product is achieved with intermittent treatment. If "shock" treatment is used, it should be discontinued for 24-48 hr.

FOR CONTROL OF BACTERIA

Add 0.002-0.02 gal XD-8259/1,000 gal of water to control severity of contamination.

Intermittent or Slug Method

Initial Dose: When the system is noticed contaminated, add 0.002-0.01 gal XD-8259/1,000 gal of water in the system.

Subsequent Dose: When microbial control is achieved, add 0.002-0.01 gal XD-8259/1,000 gal of water in the system every 2-4 weeks.

Badly fouled systems must be cleaned before treatment.

Continuous Feed Method

Initial Dose: When the system is noticed contaminated, add 0.002-0.01 gal XD-8259/1,000 gal of water to system.

Subsequent Dose: Maintain this level by adding 0.002-0.01 gal XD-8259/1,000 gal of water in the system every 2-4 weeks.

Badly fouled systems must be cleaned before treatment.

FOR CONTROL OF FUNGI

Add 0.06-0.20 gal XD-8259/1,000 gal of water to control severity of contamination.

Intermittent or Slug Method

Initial Dose: When the system is noticed contaminated, add 0.06-0.20 gal XD-8259/1,000 gal of water in the system.

Subsequent Dose: When microbial control is achieved, add 0.06-0.20 gal XD-8259/1,000 gal of water in the system every 2-4 weeks.

Badly fouled systems must be cleaned before treatment.

Continuous Feed Method

Initial Dose: When the system is noticed contaminated, add 0.06-0.20 gal XD-8259/1,000 gal of water to the system.

86-1336 PRINTED IN U.S.A. IN DECEMBER, 1979. REPLACES SPECIMEN LABEL 86-1336 PRINTED IN JUNE, 1977. DISCARD PREVIOUS SPECIMEN LABELS. REVISIONS INCLUDE: (1) NEW USES ADDED: PAPER MILLS; INDUSTRIAL RECIRCULATING WATER COOLING TOWERS; ONCE-THROUGH INDUSTRIAL COOLING WATER SYSTEMS; ENHANCED OIL RECOVERY SYSTEMS; AIR-WASHER SYSTEMS; (2) NPDES DISCHARGE STATEMENT ADDED; (3) CONTAINER DISPOSAL INSTRUCTIONS REVISED; (4) NOTE AGAINST MIXING WITH OTHER ADDITIVES ADDED.

171

XD-8259 ANTIMICROBIAL

...gi, and yeasts in paper mills, metalworking fluids containing water, and enhanced oil recovery systems; controls bacteria, fungi, and algae in cooling towers and in once-through fresh and sea water industrial cooling water systems; controls slime-forming bacteria and fungi in air-wash systems.

...minate water by cleaning of equipment only as specified on this label. ... or public waters unless in accordance with your regional EPA office. ... drum reconditioner; or destroy it by incinerating in a safe place away from ...

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

USE INSTRUCTIONS FOR USE
... SEPARATELY TO THE SYSTEM. ... ES, IN ORDER TO AVOID DECOMPOSITION DUE TO THE HIGH PH OF MANY ...

PAPER MILLS
...st growths in pulp, paper, and paper. ... 30-1.0 lb/ton of pulp or paper (dry weight), depending upon the type of growth. It should be made with a metering pump. Distribution of XD-8259 in the mass of the pulp or discharge, broke chests, furnaces, etc.
... out, then treated with 0.30-0.70 lb XD-8259 daily for control.
... treated continuously with 0.70-1.0 lb XD-8259/ton of paper on a continuous basis. Dislodged slime may cause paper machine to be advisable.
... continuously with 0.30-0.70 lb XD-8259/ton of paper on an intermittent basis.

INDUSTRIAL RECIRCULATING WATER COOLING TOWERS

Add XD-8259 ANTIMICROBIAL to the basin for 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 hr.

FOR CONTROL OF BACTERIA

Add 0.002-0.02 gal XD-8259/1,000 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 0.01-0.02 gal XD-8259/1,000 gal of water in the system. Repeat until control is achieved.
Subsequent Dose: When microbial control is evident, add 0.005-0.02 gal XD-8259/1,000 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 0.01-0.02 gal XD-8259/1,000 gal of water to system.
Subsequent Dose: Maintain this level by pumping a continuous feed of 0.002-0.01 gal XD-8259/1,000 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 0.06-0.20 gal XD-8259/1,000 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 0.10-0.20 gal XD-8259/1,000 gal of water in the system. Repeat until control is achieved.
Subsequent Dose: When microbial control is evident, add 0.06-0.20 gal XD-8259/1,000 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 0.10-0.20 gal XD-8259/1,000 gal of water to the system.

Subsequent Dose: Maintain this treatment level by pumping a continuous feed of 0.06-0.20 gal XD-8259/1,000 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 XD-8259 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 2-24 ppm XD-8259 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 12-24 ppm XD-8259. Minimum treatment intervals should be 15 minutes. Repeat until control is achieved.
Subsequent Dose: When microbial control is evident, add 6-24 ppm XD-8259 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 12-24 ppm XD-8259 continuously to the system.
Subsequent Dose: When microbial control is evident, pump a continuous feed of 2-12 ppm XD-8259 to the system.
Badly fouled systems must be cleaned before treatment is begun.

FOR CONTROL OF FUNGI AND ALGAE

Add 72-236 ppm XD-8259 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 120-236 ppm XD-8259 to the system. The minimum treatment interval should be 15 minutes. Repeat until control is achieved.
Subsequent Dose: When microbial control is evident, add 72-236 ppm XD-8259 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 72-236 ppm XD-8259 to the system.
Subsequent Dose: When microbial control is evident, add 72-236 ppm XD-8259 to the system.
Badly fouled systems must be cleaned before treatment is begun.

METALWORKING FLUIDS COOLING SYSTEMS

This product is effective in metalworking fluids diluted in water at ratios of 1:100-1:4.
For controlling (or inhibiting) the growth of bacteria, fungi, and algae in metalworking fluids containing water, add XD-8259 to the collection tank. Additions should be made with a metering pump.
Initial or Slug Dose: When the system is noticeably fouled, add 12-24 ppm XD-8259/1,000 gal of metalworking fluid to the system.
Subsequent Dose: When microbial control is evident, add 6-24 ppm XD-8259/1,000 gal of metalworking fluid per day. Additions can be made continuously or intermittently as required.

ENHANCED OIL RECOVERY SYSTEMS

For controlling slime forming bacteria, sulfide-forming bacteria, fungi, and algae in oil field water, polymer or micellar flood water systems add 2-160 ppm XD-8259 to the 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 20-160 ppm XD-8259 per 2400 barrels of water continuously until control is achieved. Subsequently, treat with 2-160 ppm XD-8259 per 2400 barrels of water continuously until control is achieved.
Intermittent or Slug Method
When the system is noticeably fouled or to maintain control, add 20-160 ppm XD-8259 (1.7-13.7 gal XD-8259 per 2400 barrels of water) continuously for 4-8 hours per day, and from 1-4 times per day depending on the severity of contamination.
Addition of XD-8259 may be made at the free water injection pumps and injection well heads.

...BEL 86-1336 PRINTED IN JUNE, 1977.
...S ADDED: PAPER MILLS; INDUSTRIAL
...G WATER SYSTEMS; ENHANCED OIL
...MENT ADDED; (3) CONTAINER DISPOSAL
...S ADDED.

171

171-A

SPECIMEN LABEL
REDUCED TO 87%

ACCEPTED

464-500

APR 2 1980

UNDER THE FEDERAL INSECTICIDE
FUNGICIDE AND RODENTICIDE ACT
FOR ECONOMIC POISON REGISTERED
UNDER NO.

MICROBIAL

covery systems; controls bacteria, fungi, and algae in industrial
controls slime-forming bacteria and fungi in air-washer systems.

by pumping a continuous feed
me system per day.
treatment is begun.

COOLING WATER

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as, canals, and lagoons, add
other contaminated area in the
ng pump; it may be continuous
contamination when treatment

BACTERIA

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treatment is begun.

led, add 12-24 ppm XD-8259

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treatment is begun.

AND ALGAE

through the system, depending

led, add 120-236 ppm XD-8259
should be 15 minutes. Repeat

is evident, add 72-236 ppm
maintain control. The minimum

Badly fouled systems must be cleaned before treatment is begun

Continuous Feed Method

Initial Dose: When the system is noticeably fouled, add 120-236 ppm XD-8259 to the system.

Subsequent Dose: When microbial control is evident, pump a continuous feed of 72-236 ppm XD-8259 to the system

Badly fouled systems must be cleaned before treatment is begun

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 and yeasts that may deteriorate metalworking fluids containing water, add XD-8259 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 0.5 gal XD-8259/1,000 gal of metalworking fluid to the system. Repeat until control is achieved.

Subsequent Dose: When microbial control is evident, add 0.2-0.4 gal XD-8259/1,000 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 2-160 ppm XD-8259 (0.17-13.7 gal XD-8259 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 20-160 ppm XD-8259 (1.7-13.7 gal XD-8259 per 2400 barrels of water) continuously until the desired degree of control is achieved. Subsequently, treat with 2-30 ppm XD-8259 (0.17-2.6 gal XD-8259 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 20-160 ppm XD-8259 (1.7-13.7 gal XD-8259 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 XD-8259 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 30-160 ppm XD-8259 (2.6-13.7 gal XD-8259 per 2400 barrels of water). Additions of XD-8259 should be made with a metering pump immediately after preparation of the aqueous biopolymer solution to prevent loss of viscosity

AIR-WASHER SYSTEMS

Add 0.003-0.20 gal XD-8259/1,000 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 0.006-0.20 gal XD-8259/1,000 gal of water in the system. Repeat until control is achieved

Subsequent Dose: When microbial control is evident, add 0.003-0.10 gal XD-8259/1,000 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 0.006-0.20 gal XD-8259/1,000 gal of water in the system.

Subsequent Dose: Maintain this level by pumping a continuous feed of 0.003-0.10 gal XD-8259/1,000 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 dust eliminating components

NOTICE: Seller warrants that the product conforms to its chemical description and is reasonably fit for the purposes stated on the label when used in accordance with directions under normal conditions of use but neither this warranty nor any other warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE, express or implied, extends to the use of this product contrary to label instruction, or under abnormal conditions or under conditions not reasonably foreseeable to seller, and buyer assumes the risk of any such use

kg/

lb net

THE DOW CHEMICAL COMPANY

AND SUBSIDIARIES

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CORAL GABLES, FLORIDA 33134 USA SARNIA ONTARIO CANADA

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