

BIOSPERSE 250

MICROBIOCIDES

FOR INDUSTRIAL USE ONLY

This product is designed specifically for the control of bacteria, fungi and algae in industrial recirculating cooling water systems such as cooling towers, pasteurizers, air washers and evaporative condensers, for control of slime forming bacteria, sulfate reducing bacteria, yeast and fungi in oil field injection water and for use as a preservative in aqueous metal-working fluids.

DIRECTIONS FOR USE

GENERAL CLASSIFICATION:

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. Refer to the BIOSPERSE[®] 250 microbiocide Product Data Sheet for use directions and other technical information.

STORAGE AND DISPOSAL

STORAGE: Do not contaminate water, food, or feed by storage or disposal. Avoid extreme heat or freezing. Store in ventilated area.

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.

Triple rinse (or equivalent) all containers 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 may also be disposed of by incineration or if allowed by state and local authorities, by burning. If burned, stay out of smoke.



Manufactured in the United States
E.S. 250-R 7/84

Drew Chemical Corporation

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ACTIVE INGREDIENTS:

5-Chloro-2-methyl-4-isothiazolin-3-one 1.15%

2-Methyl-4-isothiazolin-3-one 0.35%

INERT INGREDIENTS: 98.50%

KEEP OUT OF REACH OF CHILDREN DANGER

STATEMENT OF PRACTICAL TREATMENT

If Swallowed: Do not induce vomiting. 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.

If Inhaled: Remove immediately to fresh air. If not breathing, apply artificial respiration. If breathing is difficult, give oxygen. Call a physician.

If On Skin: Wash thoroughly with soap and water. Remove and wash contaminated clothing before reuse.

If In Eyes: Flush with plenty of water for at least 15 minutes. Call physician.

SEE SIDE PANEL FOR ADDITIONAL PRECAUTIONARY STATEMENTS

EPA Reg. No. 1757-67
EPA Est. No. 1757-NJ-1
1757-NJ-2
1757-TX-1

ACCEPTED
OCT 25 1984
Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, by the pesticide registered under
EPA Reg. No. 1757-67

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS
AND DOMESTIC ANIMALS

DANGER

CORROSIVE

CAUSES EYE DAMAGE AND SKIN BURNS
MAY CAUSE ALLERGIC SKIN REACTION
MAY BE HARMFUL IF INHALED
MAY BE FATAL IF SWALLOWED OR
ABSORBED THROUGH THE SKIN

Do not get in eyes, on skin, on clothing. Wear goggles or face shield and rubber gloves when handling. Avoid breathing vapor or mist. Avoid contamination of food. Do not take internally. Wash thoroughly after handling.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish and wildlife. Do not apply in marine and/or estuarine oil fields. Do not discharge treated effluent into lakes, streams, ponds or public waters unless in accordance with an NPDES permit. For guidance contact your Regional Office of the EPA. Do not contaminate water by cleaning of equipment or disposal of waste.

NET CONTENTS MARKED ON DRUM

IMPORTANT NOTICE: Seller warrants that the product conforms to its chemical description and is reasonably fit for the purposes stated on the label under normal conditions of use. THE FOREGOING WARRANTIES ARE EXCLUSIVE AND ARE IN LIEU OF ALL OTHER WARRANTIES, WHETHER WRITTEN OR UNWRITTEN. THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE IN OTHER RESPECTS THAN AS EXPRESSLY SET FORTH HEREIN ARE EXPRESSLY EXCLUDED AND DISCLAIMED.

...specifically for control of bacteria, fungi and algae in industrial recirculating cooling water systems such as cooling towers, pasteurizers, air washers and evaporative condensers and for use as a preservative in aqueous metal working fluids.

BIOSPERSE® 250 is an effective microbiocide for controlling slime forming bacteria, sulfate reducing bacteria, yeast and fungi in oil field injection water and other oil field water systems.

BIOSPERSE® 250 provides:

- a. broad spectrum control of microorganisms in cooling water systems, metal working fluids and oil field injection waters.
- b. easy handling as a liquid form.
- c. effectiveness at low concentrations.
- d. resistance to the inhibitory effect of organic and inorganic compounds.
- e. decomposition in the aquatic environment.

BIOSPERSE® 250 is not recommended for use in potable water systems or where contamination of potable water can occur.

This bulletin is designed to assist you in the use of BIOSPERSE® 250. It includes properties of BIOSPERSE® 250, application rates and procedures and information on toxicity and disposal.

Drew Chemical Corporation offers the services of trained professional personnel to assist in the determination of levels and rates of treatment to provide an efficient and economical slime-control program

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BIO-05-48

Rev. 1

TYPICAL CHEMICAL AND PHYSICAL PROPERTIES

Composition:	A combination of 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one
Appearance:	Liquid - pale green-yellow
Odor:	Little or none
pH:	2.0-5.0 (neat)
Specific Gravity:	1.02
Weight per U.S. gallon:	8.6 lbs.
Solubility:	BIOSPERSE® 250 is soluble in water in all proportions
Storage Stability:	BIOSPERSE® 250 is stable at least 6 months at 50°C

DOSAGE

The dosage of BIOSPERSE® 250 required for a specific application will depend upon a number of factors including: the nature and extent of the microbiological contamination, the type and volume of the system being treated, the degree of control desired, and retention time in the system. Where necessary, your Drew Representative will arrange for microbiological and chemical analysis, so that technical advice can be given concerning specific site problems.

APPLICATION

Industrial Recirculating Cooling Water Systems

For control of microorganisms add 25-100 ppm (0.21-0.84 pounds or 3.1-12.6 fluid ounces per 1000 gallons of water) of BIOSPERSE® 250 to the system. The amount of antimicrobial required will depend on the nature and extent of contamination, quality of the makeup water, and the degree of control required.

Intermittent or Slug Method

Initial Dose: When the system is noticeably fouled, apply 50-100 ppm (0.42-3.84 pounds or 6.3-12.6 fluid ounces per 1000 gallons of water) of BIOSPERSE® 250 to the system. Repeat periodically until control is achieved. Badly fouled systems must be cleaned before treatment is begun.

Subsequent Dose: When microbial control is evident, add 25-50 ppm (0.21-0.42 pounds or 3.1-6.3 fluid ounces per 1000 gallons of water) of BIOSPERSE® 250 to the system weekly or as needed to maintain control.

Pasteurizers

Dosages for industrial recirculating cooling water systems associated with pasteurizers will vary depending upon the condition of the pasteurizer when treatment is begun, and the retention time in the system.

In general, BIOSPERSE® 250 should be slug fed at dosages of 0.21 to 0.84 pounds (3.1 to 12.6 fluid ounces) per each 1000 gallons of water in the system.

For pasteurizers, BIOSPERSE® 250 should be added into the pre-cool reservoir or any other convenient point in the system which will allow for good distribution.

Enhanced Oil Recovery

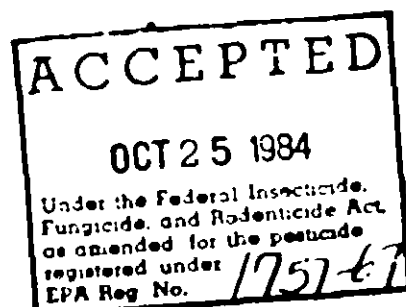
Initial Dose: Apply 50-100 ppm (17.45-34.90 pounds or 2.03-4.06 gallons per each 1000 barrels of water) of BIOSPERSE® 250 one to four times per week or as needed to achieve control.

Maintenance Dose: When microbial control is evident, add 10-80 ppm (3.44-27.95 pounds or 0.40-3.20 gallons per each 1000 barrels of water) of BIOSPERSE® 250 one to four times per week or as needed to maintain control.

Additions of BIOSPERSE® 250 may be made at the free water knockouts, before or after the injection pumps and injection well headers or at any point from which uniform mixing throughout the system can be achieved.

METAL WORKING FLUIDS

To maintain an uncontaminated system, a minimum dosage level of approximately 225 ppm (1.93 pounds or 29 fluid ounces per 1000 gallons of water) of BIOSPERSE® 250 every four weeks would be appropriate. Every eight to twelve weeks, 250-1200 ppm (2.07-9.94 pounds or 31-148 fluid ounces per 1000 gallons of water) of BIOSPERSE® 250 would be appropriate. For a noticeably fouled system, an initial treatment at a dosage range of 500-1160 ppm (4.14-9.63 pounds or 62-143 fluid ounces per 1000 gallons of water in the system) would be suitable followed by maintenance dosages. Higher dosages and more frequent treatments may be needed, depending on the rate of dilution of the preservative in the makeup fluid, the nature and severity of contamination, the level of control required, the effectiveness of filtration and the system design.



SUGGESTED HANDLING OF SPILLS

Personnel cleaning up spills should wear impervious overshoes in addition to the usual protective clothing. The spilled material is diked and absorbed in an inert solid such as clay or vermiculite. The absorbent (and surface soil to a depth sufficient to remove all microbiocide) is then shoveled into a pail or drum and treated with enough decontaminant solution to wet the solid thoroughly. Let these containers stand open for 48 hours to avoid the buildup of pressure; then seal and dispose of by burying as landfill. The decontaminated area is washed with additional decontaminant solution and then flushed into a chemical or municipal sewer. Do not discharge spills and cleaning runoffs into open bodies of water. Remove contaminated clothing promptly; launder before reuse. Wash skin with soap and water.

E.P.A. Reg. No. 1757-67