

BIOSPERSE[®] 216

WATER TREATMENT MICROBIOCIDES

FOR INDUSTRIAL USE ONLY

This product is highly effective in controlling the growth of bacteria and algae in industrial recirculating water cooling systems. For use directions refer to the product data sheet.

This product is toxic to fish. Treated effluent should not be discharged where it will drain into lakes, streams, ponds, or public water. Do not contaminate water by cleaning of equipment or disposal of wastes. Do not reuse empty container. Container should be destroyed by perforation or crushing. Discard container in a safe place.

**DO NOT USE, POUR, SPILL OR STORE
NEAR HEAT OR OPEN FLAME.**

**Net Contents – 55 Gallons Liquid
See Markings on Top of Drum For Net Weight**

ACCEPTED
OCT 15 1975
UNDER THE FEDERAL INSECTICIDE,
FUNGICIDE AND ROENTGENIC ACT
FOR ECONOMIC POISON REGISTERED
UNDER NO. 1757-62

EPA EST. NO.
1757-NJ-1
1757-NJ-2
1757-TX-1

DANGER
KEEP OUT OF REACH OF CHILDREN

Corrosive. Causes severe eye and skin damage. Do not get in eyes, on skin or on clothing. Wear goggles or face shield and rubber gloves when handling. May be harmful or fatal if swallowed. Avoid contamination of food.

In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes. For eyes, call a physician. Remove and wash contaminated clothing before reuse.

If swallowed, drink promptly a large quantity of milk, egg whites, gelatin solution or if these are not available, drink large quantities of water. Call a physician immediately.

NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage. Measures against circulatory shock, respiratory depression and convulsion may be needed.

ACTIVE INGREDIENTS

Dioctyl dimethyl ammonium chloride 50%
Ethyl alcohol 10%

INERT INGREDIENTS 40%

EPA Reg. No. 1757-62-AA

Sold by:



Drew Chemical Corporation
701 Jefferson Rd., Parsippany, N.J. 07054

Water & Waste Treatment Division
Drew Chemical Corporation
701 Jefferson Rd., Parsippany, N. J. 07054
subsidiary of United States Fertilizer Corporation

**PRODUCT
DATA SHEET**
BIO-DS-42



BIOSPERSE® 216

GENERAL

BIOSPERSE 216 is a low foaming microbiocide effective in controlling the growth of bacteria and algae commonly found in industrial recirculating water cooling towers, air washers, and evaporative condensers.

BIOSPERSE 216 is not to be used in potable water systems or where contamination of potable water may occur.

DESCRIPTION

Composition:	A blend containing dioctyl dimethyl ammonium chloride and ethyl alcohol.
Appearance:	Clear to Pale Yellow Liquid.
Flash Point (COC):	133 F
pH:	8.1
Freeze Point:	Below -13 F
Weight per U.S. Gallon (per liter):	8.00 lb./gal (9.60 kg./l)
Water Solubility:	Complete in all proportions
Packaging:	55 gallon, lined, steel drums

DOSAGE

The dosage of BIOSPERSE 216 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. Generally doses of 50 to 170 ppm are recommended. (0.4 to 1.4 pints of product per 1000 gallons of water 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.

Cooling Towers and Evaporative Condensers

Dosages for industrial recirculating water cooling towers will depend on the condition of the system prior to the initiation of treatment. Heavily contaminated systems should be cleaned prior to treatment. Apply BIOSPERSE 216 to the cleaned system or when growth is first noticed, according to the following schedule:

Initial Dose:

Apply 1.1 to 1.4 pints (134-170 ppm) of BIOSPERSE 216 per each 1000 gallons of water in the system. This dose may be repeated once, twice or three times weekly or as required to control the growth of slime-forming organisms.

Subsequent Dose:

When microbial control is evident add 0.4 to 0.6 pints (50-75 ppm) of BIOSPERSE 216 per 1000 gallons of water in the system every three days or as needed to maintain good control. Apply half of the subsequent dose of BIOSPERSE 216 when half of the water in the system has been lost by blowdown.

Air Washers

In treating air washer systems preclean by introducing a suitable detergent solution into the system and allow air washer to run with fan off for two hours. Flush. Check all nozzles and manually clean those that are plugged. Add product as specified under dosages for Cooling Towers and Evaporative Condensers.

FEEDING

BIOSPERSE 216 may be fed directly from the drum or diluted with water and fed by any suitable feed system. BIOSPERSE 216 should be dosed directly into the sump or basin or any other location where good distribution can be assured.

When required, your Drew Service Engineer will arrange for microbiological and chemical analyses and offer technical advice concerning your specific problems.

HANDLING PRECAUTIONS

Causes severe eye and skin damage. Do not get in eyes, on skin or on clothing. Wear goggles or face shield and rubber gloves when handling. Harmful or fatal if swallowed. Avoid contamination of food.

In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes. For eyes, call physician.

If swallowed, do not induce vomiting. Drink promptly a large quantity of milk, egg whites, gelatin solution, or if these are not available, drink a large quantity of water. Avoid alcohol. Call physician immediately.

ENVIRONMENTAL CAUTION

This product is toxic to fish. Treated effluent should not be discharged where it will drain into lakes, streams, ponds or public water.

Do not reuse empty container. Container should be destroyed by perforation or crushing. Discard container in safe place.

E.P.A. Reg. No. 1757-62-AA