



BIOSPERSE[®] 214

FOR CONTROL OF THE GROWTH OF ALGAE, BACTERIA AND FUNGI FOR INDUSTRIAL USE ONLY

DANGER

BIOSPERSE 214 is an effective product capable of controlling the growth of bacteria, algae and fungi commonly found in industrial recirculating water cooling towers, air washers, and evaporative condensers.

Apply this product only as specified on BIOSPERSE 214 Product Data Sheet accompanying this product.

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.

Contents — Liquid
Net Weight — As marked on Drum

ACTIVE INGREDIENTS:

Didecyl dimethyl ammonium chloride..... 15.0%
Isopropyl alcohol 6.0%

INERT INGREDIENTS* 79.0%

* Includes solubilizing and dispersing agents

EPA Reg. No. 11591-10

Drew Chemical Corporation

Subsidiary of



UNITED STATES CORPORATION

701 JEFFERSON ROAD, PARSIPPANY, N. J. 07054 • (201) 887-9300

KEEP OUT OF REACH OF CHILDREN

Causes eye damage and skin irritation. 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 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.

ES-214

WATER & WASTE TREATMENT DIVISION
Drew Chemical Corporation

PRODUCT
DATA
SHEET **BIO-DS-7**

BIOSPERSE[®] 214

GENERAL

BIOSPERSE 214 is effective in controlling the growth of bacteria, algae and fungi commonly found in industrial recirculating water cooling towers, air washers, and evaporative condensers.

BIOSPERSE 214 is not to be used in potable water systems or where contamination of potable water may occur.

DESCRIPTION

Composition:	A blend containing didecyl dimethyl ammonium chloride and dispersants
Appearance:	Clear, colorless liquid
Odor:	Slight
Flash Point:	> 130 °F
pH:	1 - 3
Specific Gravity:	0.96 ± 0.02
Weight per U.S. Gallon (per liter):	8.00 lb/gal (9.60 kg/l)
Water Solubility:	Complete in all proportions
Storage:	Avoid extreme heat and freezing
Packaging:	55 gallon, lined, steel drums



DOSAGE

The dosage of BIOSPERSE 214 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 15 to 100 ppm are recommended. (0.12 to 0.8 pints of product per 1000 gallons of contained water.)

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 214 to the cleaned system or when growth is first noticed, according to the following schedule:

Initial Dose:

Apply 0.2 to 0.8 pints (25-100 ppm) of BIOSPERSE 214 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 0.12 to 0.28 pints (15-35 ppm) of BIOSPERSE 214 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 214 when half of the water in the system has been lost by blowdown.

Air Washers

In treating air washer systems pre-clean 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 214 may be fed directly from the drum or diluted with water and fed by any suitable feed system. BIOSPERSE 214 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. 11591-10