

BETZ LABORATORIES, INC.

Slimicide

BETZ WATER MANAGEMENT GROUP

FOR CONTROL OF ALGAL, BACTERIAL AND FUNGAL SLIMES

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND
DOMESTIC ANIMALS

DANGER

CORROSIVE. MAY CAUSE SEVERE SKIN IRRITATION OR CHEMICAL BURNS TO BROKEN SKIN. CAUSES EYE DAMAGE. DO NOT GET IN EYES, ON SKIN/CLOTHING. WEAR GOGGLES, FACE SHIELD & RUBBER GLOVES WHEN HANDLING. AVOID BREATHING VAPOR. VACATE POORLY VENTILATED AREAS AS SOON AS POSSIBLE. DO NOT RETURN UNTIL ODORS HAVE DISSIPATED. IMMEDIATELY REMOVE CONTAMINATED CLOTHING & WASH BEFORE REUSE. WASH THOROUGHLY AFTER HANDLING.

ENVIRONMENTAL HAZARDS

THIS PRODUCT IS TOXIC TO FISH AND AQUATIC ORGANISMS. 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 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.

ACCEPTED
FEB 21 1995

Under Federal Insecticide, Fungicide and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 3976-20001

NET WT. _____ LBS.
LOT NO. _____

FOR INDUSTRIAL USE. Technical advice regarding specific site problems is available from BETZ C701AS 9404 PANEL 1 OF 3

Active Ingredient:
Sodium Hypochlorite..... 12.5%
Inert Ingredients..... 87.5%
Total..... 100.0%

CONTENTS: LIQUID
POUNDS PER GALLON: 10.1 (70F)
EPA REG. NO.: 3976-20001
EPA EST. NO.

DANGER

KEEP OUT OF REACH OF CHILDREN
In case of contact with a physician.
In case of contact with a
Immediately contact physi
IF SWALLOWED, drink large
center immediately.
A Material Safety Data Sh
upon request.

DIRECTIONS FOR USE:

It is a violation of Federal law to use this product in a manner inconsistent with the label directions. Store this product in a cool dry area, away from direct sunlight and heat to avoid deterioration. Product or rinsates that cannot be used should be diluted with water before disposal in order not to contaminate food or feed by storage, disposal or cleaning of equipment.

STORAGE AND DISPOSAL

PHYSICAL AND CHEMICAL

STRONG OXIDIZING AGENT: MIX ONLY WITH WATER. CONTAMINATION WITH MOISTURE, ORGANIC MATTER, SLIMES AND MUCOUS MEMBRANES AND MAY CAUSE FIRE AND EXPLOSION. IN CASE OF CONTAMINATION OR SPILLAGE, FLOOD WITH LARGE VOLUMES OF WATER.

COOLING TOWER/EVAPORATIVE CONDENSER

SLUG FEED METHOD - Initial Dose: When the system is noticeably fouled, apply 52 to 104 oz. of this product per 10,000 gallons of water in the system to obtain from 5 to 10 ppm available chlorine. Repeat until control is achieved.
Subsequent Dose: When microbial control is evident, add 11 oz. of this product per 10,000 gallons of water in the system daily, or as needed to maintain control and keep the chlorine residual at 1 ppm. Badly fouled systems must be cleaned before treatment is begun.

INTERMITTENT FEED METHOD

Initial Dose: When the system is noticeably fouled, apply 52 to 104 oz. of this product per 10,000 gallons of water in the system to obtain 5 to 10 ppm available chlorine. Apply half (or 1/3, 1/4 or 1/5) of this initial dose when half (or 1/3, 1/4 or 1/5) of the water in the system has been lost by blowdown.
Subsequent Dose: When microbial control is evident, add 11 oz. of this product per

QUALITY WAY, TREVOSE, PA 19053 BUSINESS PHONE: 215-355-3300 EMERGENCY (HE

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micide C-70

FOR CONTROL OF ALGAL, BACTERIAL AND FUNGAL SLIMES

GROUP

... 12.5%
... 87.5%
... 100.0%

EPA EST. NO.

DANGER KEEP OUT OF REACH OF CHILDREN STATEMENT OF PRACTICAL TREATMENT

In case of contact with skin, wash immediately with plenty of soap and water. Immediately contact physician.

In case of contact with eyes, flush promptly and thoroughly with clear water for at least 15 minutes. Immediately contact physician.

IF SWALLOWED, drink large amounts of water. DO NOT induce vomiting. Call a physician or poison control center immediately.

A Material Safety Data Sheet containing more detailed information relative to this product is available upon request.

USE: It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Keep away from direct sunlight and heat to avoid deterioration. In case of spill, flood areas with large quantities of water. Residue should be diluted with water before disposal in a sanitary sewer. Do not reuse empty container but place in trash collection. Storage, disposal or cleaning of equipment.

PHYSICAL AND CHEMICAL HAZARDS

WATER CONTAMINATION WITH MOISTURE, ORGANIC MATTER, OR OTHER CHEMICALS MAY GENERATE HEAT, LIBERATE HAZARDOUS GASES IRRITATING TO EYES, AND CAUSE FIRE AND EXPLOSION. IN CASE OF CONTAMINATION OR DECOMPOSITION, DO NOT RESEAL CONTAINER. IF POSSIBLE, ISOLATE CONTAINER IN OPEN AIR/VENTILATED AREAS. USE LARGE VOLUMES OF WATER.

COOLING TOWER/EVAPORATIVE CONDENSER WATER

When the system is noticeably fouled, apply 52 to 104 gallons of water in the system to obtain from 5 to 10 ppm residual until control is achieved.

If control is evident, add 11 oz. of this product per 10,000 gallons daily, or as needed to maintain control and badly fouled systems must be cleaned before treatment is begun.

10,000 gallon. of water in the system to obtain a 1 ppm residual. Apply half (or 1/3, 1/4 or 1/5) of this initial dose when half (or 1/3, 1/4 or 1/5) of the water in the system has been lost by blowdown. Badly fouled systems must be cleaned before treatment is begun.

CONTINUOUS FEED METHOD - Initial Dose: When the system is noticeably fouled, apply 52 to 104 oz. of this product per 10,000 gallons of water in the system to obtain 5 to 10 ppm available chlorine.

Subsequent Dose: Maintain this treatment level by starting a continuous feed of 1 oz. of this product per 1,000 gallons of water lost by blowdown in the system to obtain a 1 ppm residual. Badly fouled systems must be cleaned before treatment is begun.

When the system is noticeably fouled, apply 52 to 104 gallons of water in the system to obtain from 5 to 10 ppm residual. Apply half (or 1/3, 1/4 or 1/5) of this initial dose when half (or 1/3, 1/4 or 1/5) of the water in the system has been lost by blowdown.

If control is evident, add 11 oz. of this product per 10,000 gallons daily, or as needed to maintain control and badly fouled systems must be cleaned before treatment is begun.

USE DIRECTIONS CONTINUED ON SECOND PANEL.

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ATTACH PANEL TWO HERE

USE DIRECTIONS CONTINUED FROM PANEL ONE

SEWAGE AND WASTEWATER EFFLUENT TREATMENT

The disinfection of sewage effluent must be evaluated by determining the total number of coliform bacteria and/or fecal coliform bacteria, as determined by the Most Probable Number (MPN) procedure, of the chlorinated effluent has been reduced to or below the maximum permitted by the controlling regulatory jurisdiction.

On the average, satisfactory disinfection of secondary wastewater effluent can be obtained when the chlorine residual is 0.5 ppm after 15 minute contact. Although the chlorine residual is the critical factor in disinfection, the importance of correlating chlorine residual with bacterial kill must be emphasized. The MPN of the effluent, which is directly related to the water quality standards requirements, should be the final and primary standard and the chlorine residual should be considered an operating standard valid only to the extent verified by the coliform quality of the effluent.

The following are critical factors affecting wastewater disinfection.

1. **Mixing:** It is imperative that the product and the wastewater be instantaneously and completely flash mixed to assure reaction with every chemically active soluble and particulate component of the wastewater.
2. **Contacting:** Upon flash mixing, the flow through the system must be maintained.
3. **Dosage/Residual Control:** Successful disinfection is extremely dependent on response to fluctuating chlorine demand to maintain a predetermined, desirable chlorine level. Secondary effluent should contain 0.2 to 1.0 ppm chlorine residual after a 15 to 30 minute contact time. A reasonable average of residual chlorine is 0.5 ppm after 15 minutes contact time.

SEWAGE AND WASTEWATER TREATMENT

EFFLUENT SLIME CONTROL - Apply a 100 to 1000 ppm available chlorine solution at a location which will allow complete mixing. Prepare this solution by mixing 10 to 100 oz. of this product with 100 gallons of water. Once control is evident, apply a 15 ppm available chlorine solution. Prepare this solution by mixing 3 oz. of this product with 100 gallons of water.

FILTER BEDS - SLIME CONTROL - Remove filter from service, drain to a depth of 3 ft. above filter sand, and add 80 oz. of product per 10 sq/ft evenly over the surface. Wait 30 minutes before draining water to a level that is even with the top of the filter. Wait for 4 to 6 hours before completely draining and backwashing filter.

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PANEL 2 OF 2

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ONCE-THROUGH AND
When used as directed, this pro
through and closed-cycle fresh
this product to the system inle
BADLY FOULED SYSTEMS must be el

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INITIAL DOSE: When the system i
1000 gallons of water in the sy
weight. Repeat until control is

SUBSEQUENT DOSE: When microbial
1000 gallons of water in the sy
weight. Apply treatment weekly

imicide C-70

FOR CONTROL OF ALGAL, BACTERIAL
AND FUNGAL SLIMES

ONCE-THROUGH INDUSTRIAL COOLING WATER SYSTEMS

When used as directed, this product effectively controls algal, bacterial & fungal slimes in once-through and closed-cycle fresh and sea water cooling systems, cooling ponds, canals and lagoons. Add this product to the system inlet water or before any contaminated area in the system. **BADLY FOULED SYSTEMS** must be cleaned before treatment is begun.

FOR THE CONTROL OF BACTERIAL, FUNGI AND ALGAE

INITIAL DOSE: When the system is noticeably fouled, add this product at the rate of 8 to 16 ounces per 1000 gallons of water in the system to achieve 7.5 to 15.0 parts per million available chlorine by weight. Repeat until control is achieved.

SUBSEQUENT DOSE: When microbial control is evident, add this product at the rate of 4 to 8 oz. per 1000 gallons of water in the system to achieve 3.75 to 7.5 parts per million available chlorine by weight. Apply treatment weekly or as needed to maintain control.

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Chloricide C-70

MANAGEMENT GROUP

FOR CONTROL OF ALGAL, BACTERIAL
AND FUNGAL SLIMES

PULP AND PAPER MILL PROCESS WATER

This product aids in the control of objectionable bacteria and fungi in pulp, paper mill & the additive system.

Additions can be made on a continuous or intermittent basis, depending upon the severity of the problem.

BADLY FOULED SYSTEMS must be cleaned before treatment is begun.

FOR SLIME CONTROL

This product should be added directly to the pulp and paper mill systems. Apply at a point in the system where the product will be uniformly mixed.

SLUG FEED METHOD--INITIAL DOSE: When the system is noticeably fouled, apply 52 to 104 ounces of this product per 10,000 gallons of water in the system to obtain from 5 to 10 ppm available chlorine. Repeat until control is achieved.

SUBSEQUENT DOSE: When microbial control is evident, add 11 ounces of this product per 10,000 gallons of water in the system daily, or as needed to maintain control and keep the chlorine residual at 1 ppm.

BADLY FOULED SYSTEMS must be cleaned before treatment is begun.

INTERMITTENT FEED METHOD--INITIAL DOSE: When the system is noticeably fouled, apply 52 to 104 ounces of this product per 10,000 gallons of water in the system to obtain 5 to 10 ppm available chlorine. Apply half (or 1/3, 1/4 or 1/5) of this initial dose when half (or 1/3, 1/4 or 1/5) of the water in the system has been lost by blowdown.

SUBSEQUENT DOSE: When microbial control is evident, add 11 ounces of this product per 10,000 gallons of water in the system to obtain a 1 ppm residual. Apply half (or 1/3, 1/4 or 1/5) of this initial dose when half (or 1/3, 1/4 or 1/5) of the water in the system has been lost by blowdown.

BADLY FOULED SYSTEMS must be cleaned before treatment is begun.

CONTINUOUS FEED METHOD--INITIAL DOSE: When the system is noticeably fouled, apply 52 to 104 ounces of this product per 10,000 gallons of water in the system to obtain 5 to 10 ppm available chlorine.

SUBSEQUENT DOSE: Maintain this treatment level by starting a continuous feed of 1 ounce of this product per 1,000 gallons of water lost by blowdown to maintain a 1 ppm residual.

BADLY FOULED SYSTEMS must be cleaned before treatment is begun.

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