

# MB-1000

## ACTIVE INGREDIENTS

1-bromo-3-chloro-5,5-dimethylhydantoin.....	54.2%
1,3-dichloro-5,5-dimethylhydantoin.....	28.9%
1,3-dichloro-5-ethyl-5-methylhydantoin.....	5.9%

OTHER INGREDIENTS ..... 1.0%

TOTAL ..... 100.0%

Total available halogen as bromine ..... 141%

Total available halogen as chlorine ..... 62.8%

EPA Reg. No. 6836-115-66114

## KEEP OUT OF REACH OF CHILDREN

## DANGER

<b>FIRST AID</b>	
Call a poison control center or doctor for treatment advice. Have the product container or label with you when calling a Poison Control Center or doctor or going for treatment.	
<b>IF IN EYES:</b>	Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.
<b>IF ON SKIN OR CLOTHING:</b>	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes.
<b>IF SWALLOWED:</b>	Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.
<b>IF INHALED:</b>	Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.
<b>NOTE TO PHYSICIAN:</b> Probable mucosal damage may contraindicate the use of gastric lavage.	

## FOR INDUSTRIAL USE

Technical advice regarding specific on site problems are available from Check-Mark. A Material Safety Data Sheet relative to the use of this product is also available upon request.

## DIRECTIONS FOR USE

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

## RECIRCULATING COOLING WATER SYSTEMS

MB-1000 aids in the control of bacterial, fungal and algal biofilm in evaporative condensers, heat exchange water towers, influent systems such as flow-through filters, industrial water scrubbing systems, brewery pasteurizers, and paper and paperboard process water.

This product may be added to the systems either continuously or intermittently or as needed. The frequency of feeding and duration of the treatment will depend upon the severity of the problem.

BADLY FOULED SYSTEMS must be cleaned before treatment is begun.

## FOR CONTROL OF BACTERIA AND FUNGI

### INTERMITTENT OR SLUG METHOD

**INITIAL DOSE:** When the system is noticeably fouled, add 0.1 to 1.0 pounds per 1000 gallons (or 12 to 120 ppm) of the water in the system. Repeat until control is achieved.

**SUBSEQUENT DOSE:** When microbial control is evident, add 0.1 to 0.75 pounds per 1000 gallons (or 12 to 90 ppm) of water in the system every 3 days or as needed to maintain control.

### CONTINUOUS FEED METHOD

**INITIAL DOSE:** When a system is noticeably fouled, add 0.1 to 1.0 pound per 1000 gallons (or 12 to 120 ppm) of water in the system.

**SUBSEQUENT DOSE:** Continuously feed to maintain a dosage of 0.1 to 0.75 pounds per 1000 gallons (or 12 to 90 ppm) of water in the system.

## FOR CONTROL OF ALGAE

### INTERMITTENT OR SLUG METHOD

**INITIAL DOSE:** When the system is noticeably fouled, add 0.1 to 1.0 pound per 1000 gallons (or 12 to 120 ppm) of water in the system. Repeat until control is achieved.

**SUBSEQUENT DOSE:** When algae control is evident, add 0.1 to 0.75 pounds per 1000 gallons (or 12 to 90 ppm) daily or as needed to maintain control.

### CONTINUOUS FEED METHOD

**INITIAL DOSE:** When the system is noticeably fouled, add 0.1 to 1.0 pound per 1000 gallons (or 12 to 120 ppm) of water in the system. Repeat until control is achieved.

**SUBSEQUENT DOSE:** Continuously feed to maintain a dosage of 0.1 to 0.75 pounds per 1000 gallons (or 12 to 90 ppm) of water in the system.

## AIRWASHERS

For use only in industrial airwasher systems that maintain effective mist eliminating components.

MB-1000 controls biofilm forming bacteria, fungi and algae in industrial airwasher systems. Add MB-1000 at the rate of 0.1 to 1.0 pound (12 to 120 ppm) per 1000 gallons of water in the system, depending upon the severity of the contamination.

Control the application by measuring the free chlorine residual in the treated water. There is no need to exceed 1.0 ppm as free chlorine.

Badly fouled systems must be cleaned before treatment is begun.

### INTERMITTENT OR SLUG METHOD

**INITIAL DOSE:** When system is noticeably fouled, add to airwasher sump or chill water sump to ensure uniform mixing. Add 0.1 to 1.0 pound per 1000 gallons (or 12 to 120 ppm) of water.

**SUBSEQUENT DOSE:** When microbial control is evident, add 0.1 to 0.60 pounds per 1000 gallons (or 12 to 72 ppm) of water.

### CONTINUOUS FEED METHOD

**INITIAL DOSE:** When system is noticeably fouled, add to airwasher sump or chill water sump to ensure uniform mixing. Add 0.1 to 1.0 pound per 1000 gallons (or 12 to 120 ppm) of water.

**SUBSEQUENT DOSE:** When microbial control is evident, add 0.1 to 0.6 pounds per 1000 gallons (or 12 to 72 ppm) of water.

## ONCE-THROUGH INDUSTRIAL COOLING WATER SYSTEMS

When used as directed, MB-1000 effectively controls algal, bacterial, fungal biofilm and mollusks in open or closed-cycle, fresh or salt water, once-through cooling systems. Treat cooling water with MB-1000 at the system intake or other critical areas, where mixing is uniform.

## DOSAGE RATES

**INITIAL DOSE:** When system is noticeably fouled, add 0.2 to 0.6 pounds per 1000 gallons of water contained in the system. Repeat initial dosage until one to three ppm (mg/L) bromine residual is established for at least 4 hours.

**SUBSEQUENT DOSE:** When microbial control is evident, add 0.1 to 0.3 pounds per 1000 gallons of water contained in the system. Repeat as needed to maintain one to three ppm bromine residual for at least 4 hours.

## FOR USE IN CANISTERS

**TO INSTALL CANISTER:** Take feeder cap off. Remove canister cut offs. Hold canister so the open end faces down. Insert into feeder. The end of the canister must align with the L-key located inside the feeder at the bottom. DO NOT FORCE. Replace feeder cap. To achieve the proper halogen residual, turn the control dial to the appropriate setting and add the required product dosage. Refer to use directions for recirculating cooling water systems or airwasher systems, as appropriate.

Check the canister periodically and replace when empty. Do not attempt to open or refill this canister. DO NOT REUSE.

**PRECAUTION:** The warranty will be void if this canister is not used with the appropriate feeder. Fire or explosion may result if this canister is used with an incorrect chemical feeder.

**NOTE:** Some settling may occur during shipment.

## PAPER AND PAPERBOARD PROCESS WATER

MB-1000 is a patented biocidal formulation for application in the paper industry.

MB-1000 prevents bacterial biofilm formation and deposition through the rapid delivery of an ideal balance of free and combined halogen. When used properly, MB-1000 can reduce microbiologically induced corrosion, paper spots, holes, breaks and odors. By limiting microbial growth and bacterial biofilm formation, MB-1000 increases machine runnability reducing unscheduled maintenance and lost production.

The patented MB-1000 composition provides high solubility, fast dissolution and high halogen content without added binders or inert materials for maximum efficiency and product delivery.

MB-1000 can be used in the manufacture of both food and non-food contact paper and paperboard.

## APPLICATION

MB-1000 should be added to process water streams at or immediately prior to a point of sufficient mixing such as the fan pump or wire pit.

Standard dissolution feeders can be used for MB-1000 applications. Make-up, machine white waters and returning clarified dilution waters are examples of acceptable treatment waters.

**INITIAL DOSE:** When the system is noticeably fouled, apply 0.5 to 2.0 pounds of MB-1000 per ton of paper produced to achieve 0.1 to 1.0 ppm total available halogen as chlorine. Repeat treatment until residual is achieved.

**SUBSEQUENT DOSE:** When microbial control is evident, apply 0.5 to 2.0 pounds of MB-1000 per ton of paper produced to achieve 0.1 to 1.0 ppm total available halogen as chlorine. Repeat periodically as needed to maintain control.

## BEVERAGE CAN RINSING OPERATIONS

MB-1000 controls the growth of odor causing bacteria, of fungal and algal slime, and spoilage bacteria of economic significance in water used for beverage can rinse operations. After rinsing, the cans are dried thoroughly at approximately 350°F and then coated with an impervious lacquer finish.

This product may be added to the rinse water either continuously or intermittently or as needed. The frequency of feeding and duration of the treatment will depend upon the severity of the problem.

BADLY FOULED SYSTEMS must be cleaned before treatment is begun.

Apply MB-1000 to the rinse water at a concentration ranging from 12-100 ppm.

## DECORATIVE FOUNTAINS

When used as directed, MB-1000 controls algae, microbial biofilm, and bacterial biofilm in decorative fountains. MB-1000 may be fed continuously or on an intermittent basis depending on the degree of fouling. For maximum effectiveness, fountains containing heavy algae growth should be cleaned prior to using MB-1000.

**INITIAL DOSE:** Fountains having visible algae growth require an initial dose of 0.1 to 1.0 lbs per 1000 gallons of water (or 12 to 120 ppm active). Repeat the initial dose until control is achieved.

**SUBSEQUENT DOSE:** Once control is achieved, add 0.1 to 0.75 lbs per 1000 gallons

of water daily or as needed to maintain control, by feeding continuously or on an intermittent basis.

## STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

**PESTICIDE STORAGE:** Keep container tightly closed. Store in a cool, dry, well-ventilated place. Do not store in direct sunlight. Do not store at temperatures above 100°F.

**PESTICIDE 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 the label instructions contact your state pesticide or environmental control agent or the hazardous waste representative at the nearest EPA regional office for guidance.

## CONTAINER DISPOSAL

Nonrefillable container. Do not reuse or refill this container. Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose in sanitary landfill, or incinerate or burn if allowed by state and local authorities. If burned, stay out of smoke. If not tripled rinsed, these containers are acute hazardous wastes and must be disposed in accordance with local, state, and federal regulations. DO NOT cut or weld metal containers.

## PRECAUTIONARY STATEMENTS

### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**DANGER: HIGHLY CORROSIVE.** Causes irreversible eye damage and skin burns. May be fatal if swallowed. Do not take internally. Irritating to nose and throat. Avoid breathing dust. Use with adequate ventilation. Do not get into eyes, on skin or on clothing. Wear protective clothing, chemical resistant gloves and protective eyewear (goggles, face shield or safety glasses). Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove contaminated clothing and wash clothing before reuse.

### ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish. 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.

### PHYSICAL AND CHEMICAL HAZARDS

**CHEMICAL HAZARD: STRONG OXIDIZING AGENT.** Mix only with water. Use clean, dry utensils. Do not add this product to any dispensing device containing remnants of any other product. Such use may cause a violent reaction, leading to fire or explosion. Contamination with moisture, organic matter, or other chemicals may start a chemical reaction with generation of heat, liberation of hazardous gases and possible generation of fire and explosion. In case of contamination or decomposition, do not reseal container. If possible, isolate container in open air or a well-ventilated area. Flood with large volumes of water, if necessary.

For medical or environmental emergencies, call CHEMTREC® at 1-800-424-9300.

MADE IN THE U.S.A.

4630CMB

1M104



# CHECK-MARK™

Packed for  
**CHECK-MARK™**  
A Division of DM Resources, Inc.  
1310 E. Northgate Drive, Irving, TX  
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**TO REORDER, Call TOLL-FREE:**  
**1-800-527-9919**  
**FAX: 1-972-438-0634**



Net Weight: (as marked on container)

EPA Est. No.							
4140 -							
CA-1	IN-1	NJ-1	PR-1	TX-1	TX-2	TX-4	CAN-1