

# DuroCide C100-G

DBNPA

A MICROBIOCIDAL BACTERICIDE, FUNGICIDE, ALGAECIDE AND SLIMICIDE, USED IN TREATING RECIRCULATING COOLING WATER IN INDUSTRIAL COOLING SYSTEMS, PAPER MILLS, BREWERY PASTEURIZER WATER, NON-POTABLE REVERSE OSMOSIS SYSTEMS, AIR-WASHER SYSTEMS, INDUSTRIAL PRESERVATION APPLICATIONS AND PUBLICLY-OWNED TREATMENT WORKS.

ACTIVE INGREDIENT: 2,2-Dibromo-3-nitropropionamide..... 98%  
OTHER INGREDIENTS: ..... 2%  
TOTAL: ..... 100%

## KEEP OUT OF REACH OF CHILDREN DANGER

### FIRST AID

**If in eyes:**

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. Call a poison control center or doctor for treatment advice.

**If inhaled:**

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. Call a poison control center or doctor for further treatment advice.

**If on skin or clothing:**

Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

**If swallowed:**

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.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

### NOTE TO PHYSICIAN

Probable mucosal damage may contraindicate the use of gastric lavage.

See side panels for [additional precautionary statements.

### MANUFACTURED BY:

**AP Tech**  
GROUP, INC.

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Phone: 866-489-9831

EPA Reg. No. 88714-6-55400

EPA Est. No. 12487-OH-1

LOT#: \_\_\_\_\_

NET CONTENTS: \_\_\_\_\_

Transportation Emergency (Spill) Tel: 800-255-3924 ChemTel



## PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS DANGER

**CORROSIVE:** Causes irreversible eye damage. May be fatal if swallowed. Do not get in eyes, on skin or on clothing. Do not breathe dust. When loading or handling wear protective eyewear (goggles or face shield), wear long-sleeved shirt and long pants, socks, shoes and chemical-resistant gloves. Prolonged or frequently repeated skin contact may cause allergic reaction in some individuals. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

### Personal Protective Equipment: (PPE)

Long sleeve shirt, long pants, shoes plus socks, eye protection, approved respirator, chemical-resistant gloves and a chemical resistant apron must be worn when handling

### User Safety Requirements

Users must wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.

Users must remove clothing immediately if pesticide gets inside.

Wash the outside of gloves before removing.

Keep and wash PPE separately from other laundry. Then wash thoroughly and put on clean clothing.

Users must remove PPE immediately after handling this product.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washable exist, use detergent and hot water.

Keep and wash PPE separately from other laundry.

### ENVIRONMENTAL HAZARDS

This product is toxic to fish and invertebrates. Do not contaminate water by cleaning of equipment or disposal of waste. 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.

### CHEMICAL AND PHYSICAL HAZARDS

Reaction with strong reducing agents may be explosive. Avoid comminution and dusting.

### STORAGE AND DISPOSAL

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

#### PESTICIDE STORAGE

Store in a dark, cool, dry, well-ventilated area, in well-closed original containers, away from energy sources, combustible organic materials, oxidizers, and moisture.

#### 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 label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

### CONTAINER HANDLING:

Non-refillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty remaining contents into application equipment or mix tank. Fill the container ¼ full with water and close tightly. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling, if available, or puncture and dispose of in a sanitary landfill, or by incineration.

Non-refillable container: Do not reuse or refill this container. When all water soluble bags are used, the outer container should be clean and may be disposed of in a sanitary landfill or by incineration. If outer container contacts formulated product in any way, it must be triple rinsed with clean water. Triple rinse as follows: empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water and close tightly. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling, if available, or puncture and dispose of in a sanitary landfill, or by incineration.

### SPILLS

When handling or dealing with spills, use impact-resistant goggles with side shields, or face shield; wear body-covering clothes, including impervious rubber gloves and boots; use a dust respirator if dusting occurs. Sweep up dry spills and dispose of as described for pesticide disposal. Cover wet spills with 10% sodium bicarbonate solution, water and then an inert absorbent before sweeping up and disposing as described for pesticide disposal. If drum contents are contaminated or decomposing, isolate unsealed

drum in the open or in a well-ventilated area; flood with 10% sodium bicarbonate solution and large volumes of water if necessary.

### WARRANTY

Seller warrants that this product conforms to its chemical description and is reasonably fit for the purposes stated on the label when used in accordance with label directions under normal conditions of use, but to the extent consistent with applicable law, neither this warranty nor any other warranty of MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, express or implied, extends to the use of this product contrary to label instructions, or under abnormal conditions, or under conditions not reasonably foreseeable to Seller, and Buyer assumes the risk of any such use.

## DIRECTIONS FOR USE

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

### TREATING RECIRCULATING COOLING WATER IN INDUSTRIAL OR COMMERCIAL COOLING SYSTEMS

**NOTE:** Add this product separately to the system. Do not mix it with other additives, so as to avoid decomposition of this product due to the high pH of many additive formulations. Add this product to the basin (or any other point of uniform mixing). Addition must be made via a metering pump or chemical feed dispenser with control release mechanism that accompanies this product's container; it may be continuous or intermittent, depending on the severity of the contamination when treatment is begun, and the in-system retention time. Optimum performance with this product is achieved by continuous or intermittent treatment. If "shock" treatment is used, the blowdown must be discontinued for 24-48 hours.

### FOR CONTROL OF BACTERIA

Add sufficient of this product to reach a concentration in the system of 0.2 – 2.3 ppm active ingredient, depending on the severity of contamination.

#### INTERMITTENT OR SLUG METHOD

**Initial Dose:** When the system is noticeably fouled, add sufficient of this product to reach a concentration in the system of 1.2 – 2.3 ppm active ingredient. Repeat until control is achieved.

**Subsequent Dose:** When microbial control is evident, add 0.6 – 2.3 ppm of this product to the system every 4 days, or as needed to maintain control. Badly fouled systems must be cleaned before treatment is begun.

#### CONTINUOUS FEED METHOD

**Initial Dose:** When the system is noticeably fouled, add sufficient of this product to achieve a concentration in the system of 1.2 – 2.3 ppm.

**Subsequent Dose:** Maintain a concentration of 0.2 – 1.2 ppm of this product in the system. Badly fouled systems must be cleaned before treatment is begun.

### FOR CONTROL OF FUNGI AND ALGAE

Add sufficient of this product to reach a concentration in the system of 7.0 – 23.0 ppm active ingredient, depending on the severity of contamination.

#### INTERMITTENT OR SLUG METHOD

**Initial Dose:** When the system is noticeably fouled, add sufficient of this product to achieve a concentration in the system of 11.6 – 23.0 ppm active ingredient. Maintain until control is achieved.

**Subsequent Dose:** When microbial control is evident, add sufficient of this product daily to maintain a concentration in the system of 7.0 – 23.0 ppm active ingredient, or as needed to maintain control. Badly fouled systems must be cleaned before treatment is begun.

#### CONTINUOUS FEED METHOD

**Initial Dose:** When the system is noticeably fouled, add sufficient of this product to reach a concentration in the system of 11.6 – 23.0 ppm active ingredient.

**Subsequent Dose:** Maintain a continuous feed of 7.0 – 23.0 ppm of this product in the system. Badly fouled systems must be cleaned before treatment is begun.

### TREATING PULP AND PAPER MILL SYSTEMS

**NOTE:** Add this product separately to the system. Do not mix it with other additives, so as to avoid decomposition of this product due to the high pH of many additive formulations. For the control of slime-forming bacterial, fungal, and yeast growth in pulp, paper, and paperboard mills, add this product at levels of 0.03 – 0.10 lb./ton (dry) of pulp or paper produced. Addition can be continuous or intermittent, depending upon the type of system and the severity of contamination. Addition is via a metering pump at a point in the system that will ensure uniform distribution of this product in the mass of fiber and water, such as the beaters, Jordan inlet or discharge, broke chests, furnish chests, save-alls and white-water tanks. Heavily fouled systems must be first boiled out, then treated with 0.03 – 0.07 lb. of this product/ton (dry) of paper or pulp as necessary for control. Moderately fouled systems must be treated continuously with 0.07 – 0.10 lb. of this product/ton (dry) of paper or pulp until the slime accumulation is controlled. Subsequent rates can then be reduced to 0.03 – 0.07 lb. of this product/ton (dry) of paper on a continuous or intermittent basis as needed for control. Dislodged slime may cause breaks in the paper and a clean-up of the paper machine may be advisable. Slightly fouled systems must be treated continuously with 0.03 – 0.07 lb. of this product/ton (dry) of paper or pulp, until the slime is controlled, then added on an intermittent basis to maintain control.

### **TREATING NON-POTABLE REVERSE OSMOSIS SYSTEMS**

For controlling bacteria, fungi and algae slimes in non-potable Reverse Osmosis Systems and peripheral equipment, add this product to the system inlet water or before any other contamination area ahead of the Reverse Osmosis unit. This product must be added with a metering pump on an intermittent basis depending on the severity of contamination and the guidelines specified by the membrane manufacturer for this product. Add sufficient of this product to achieve a concentration of 0.2 – 24.0 ppm in the feedwater. During use of this product both permeate and reject waters must be directed to the drain. Once treatment is completed, rinsing with feedwater must continue until conductivity values in the permeate are at or below values before treatment with this product. Badly fouled systems must be cleaned before treatment is begun.

### **FOR CONTROL OF BACTERIA**

Initial Dose: When the system is noticeably fouled, add sufficient of this product to achieve a concentration of 1.2 – 2.4 ppm active ingredient in the feedwater. Minimum treatment intervals must be 15 minutes. Repeat until control is achieved or as specified by guidelines recommended by the membrane manufacturer.

Subsequent Dose: When microbial control is achieved, maintain a concentration of 0.6 – 2.4 ppm of this product in the feedwater, or as specified by guidelines recommended by the membrane manufacturer.

### **FOR CONTROL OF FUNGI AND ALGAE**

Initial Dose: When the system is noticeably fouled, add 12.0 – 24.0 ppm of this product to the feedwater. Minimum treatment intervals must be 15 minutes. Repeat until control is achieved or as specified by guidelines recommended by the membrane manufacturer.

Subsequent Dose: When microbial control is achieved, maintain a concentration of 7.2 – 24.0 ppm of this product in the feedwater, or as specified by guidelines recommended by the membrane manufacturer.

### **TREATING BREWERY PASTEURIZER WATER**

For controlling (or inhibiting) the growth of bacteria, fungi or yeasts in brewery pasteurizing water systems, add this product at a point in the system to insure uniform mixing via metering pump or chemical feed dispenser with control release mechanism that accompanies this product's container.

Initial or Slug Dose: When the system is noticeably fouled, add sufficient of this product to achieve a concentration of 60.6 ppm active ingredient in the system. Repeat until control is achieved.

Subsequent Dose: When microbial control is evident, maintain a concentration of 24.4 – 48.4 ppm of this product in the system, or as needed to maintain control. Additions of this product can be made continuously or intermittently. Slug the system as required. Badly fouled systems must be cleaned before treatment is begun.

### **DIRECTIONS FOR TREATING AIR-WASHER SYSTEMS**

Add sufficient of this product via metering pump or chemical feed dispenser with control release mechanism that accompanies this product's container to reach a concentration in the system of 0.35 – 22.1 ppm active ingredient, depending on the severity of contamination to control slime-forming bacteria and fungi in industrial air washing systems.

### **INTERMITTENT OR SLUG METHOD**

Initial Dose: When the system is noticeably fouled, add sufficient of this product to reach a concentration in the system of 0.7 – 22.1 ppm active ingredient. Repeat until control is achieved.

Subsequent Dose: When microbial control is evident, add sufficient of this product every 2 days to reach a concentration in the system of 0.35 – 10.9 ppm active ingredient, or as needed to maintain control. Badly fouled systems must be cleaned before treatment is begun.

### **CONTINUOUS FEED METHOD**

Initial Dose: When the system is noticeably fouled, add sufficient of this product to achieve a concentration in the system of 0.7 – 22.1 ppm active ingredient.

Subsequent Dose: Maintain this level by pumping a continuous feed of 0.35 – 10.9 ppm active ingredient in the system per day. Badly fouled systems must be cleaned before treatment is begun.

NOTE: For use only in industrial air-washer systems that maintain effective mist eliminating components.

### **DIRECTIONS FOR INDUSTRIAL PRESERVATION APPLICATIONS**

This product may be used to reduce microbiological contamination in raw materials and/or products such as: aqueous paints and coatings, polymers, slurries, adhesives, latex and resin emulsions, sizing, caulk, process water, along with specialty industrial products including: inks, polishes, waxes, detergents, and cleansers.

### **TO REDUCE MICROBIOLOGICAL CONTAMINATION**

Add this product to the raw material or product at a concentration of 5 to 408 ppm by weight. This concentration is equivalent to 0.036 to 2.894 lbs. of this product per 1,000 gallons. The required concentration will depend on the material being treated and the level of contamination present.

### **DIRECTIONS FOR TREATING PUBLICLY- OWNED TREATMENT WORKS TO CONTROL COLIFORM AND OTHER BACTERIA**

Add sufficient of this product to reach a concentration in the system of 0.2 to 2.0 ppm active ingredient by weight of water being treated, depending on the severity and contamination in the system. Addition must be CONTINUOUS and must be made with a metering pump at a point in the system where mixing will be rapid and thorough. Add this product to the system in a location where contact time will be 30 minutes or greater before reaching the outfall.

### **TO USE AS A CO-TREATMENT WITH CHLORINE**

Add sufficient of this product to reach a concentration in the system of 0.1 to 0.3 ppm of this product active ingredient by weight of water treated. Chlorination must result in a minimum detectable residual (i.e., greater than zero but less than the NPDES permit level). Addition must be CONTINUOUS and made at a point just after initial chlorine mixing. Rapid mixing is necessary for maximum effectiveness. This product must be added at a location where a contact time of 10 minutes or longer will be provided before reaching the outfall.