

**PRECAUTIONARY STATEMENTS:  
HAZARDS TO HUMANS AND DOMESTIC  
ANIMALS**

**DANGER** Corrosive. Causes irreversible eye damage and skin burns. Do not get in eyes on skin or on clothing. Wear protective eyewear (goggles or face shield), clothing and rubber gloves. Harmful if swallowed, or absorbed through the skin. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash clothing before reuse.

**ENVIRONMENTAL HAZARDS**

This pesticide is toxic to fish and aquatic organisms. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public 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 sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA. Apply this pesticide only as specified on the label.

**PHYSICAL AND CHEMICAL HAZARDS**

ALBEMARLE S909 BIOCIDe is not flammable. Avoid contact with strong oxidizers, acids, alkaloidal and heavy metal salts.

**DIRECTIONS FOR USE**

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

For use as a disinfectant, algicide, fungicide, and/or slimeicide for wastewater, commercial and industrial recirculating cooling water systems and industrial once-through cooling water systems. ALBEMARLE S909 BIOCIDe may be added at system inlet water or other locations in the system.

**WASTE WATER.** When used as directed, ALBEMARLE S909 BIOCIDe disinfects wastewater effluent. The quantity of ALBEMARLE S909 BIOCIDe required varies with the degree of fouling. Add sufficient ALBEMARLE S909 BIOCIDe to achieve residual bromine levels of 3 ppm to 10 ppm when measured approximately 5 minutes after treatment. Applying 4 fluid ounces to 1000 gallons of water yields a maximum of 6.4 ppm of total bromine. Higher dosages may be necessary depending upon the system.

Depending on the construction of the wastewater system, ALBEMARLE S909 BIOCIDe may be effectively added to one or more different locations in the system. Frequently the compound is added to wastewater receiving secondary treatment at a contact tank preceding the effluent discharge or at the influent of the final clarifier.

The disinfection of sewage effluent must be evaluated by determining that the total number of coliform bacteria and/or fecal coliform bacteria, as determined by the MPN Procedure, of the disinfected effluent has been reduced to or below the maximum permitted by the controlling regulatory jurisdiction.

**RECIRCULATING COOLING WATER SYSTEM.** When used as directed, ALBEMARLE S909 BIOCIDe effectively controls bacteria, fungi, algae and slimes in commercial and industrial cooling towers; heat exchange water towers, industrial water scrubbing systems, and influent systems such as flow through filters, lagoons, etc.

**INDUSTRIAL ONCE-THROUGH COOLING WATER SYSTEMS.** When used as directed, ALBEMARLE S909 BIOCIDe effectively controls bacteria, fungi, algae and slimes in once-through and closed-cycle fresh and sea water cooling systems. Apply ALBEMARLE S909 BIOCIDe to the system inlet water or before any other contaminated area in the system.

**ALBEMARLE S909 BIOCIDe**

FOR USE AS A DISINFECTANT, FUNGICIDE, ALGICIDE AND/OR SLIMEICIDE FOR WASTEWATER, COMMERCIAL AND INDUSTRIAL RECIRCULATING COOLING WATER SYSTEMS, INDUSTRIAL ONCE-THROUGH COOLING WATER SYSTEMS, AND PULP AND PAPER MILLS. CONTROLS BIOFILM DEPOSITS FROM PUMPS, PIPEWORK, HEAT EXCHANGERS, AND FILTERS ASSOCIATED WITH INDUSTRIAL WATER TREATMENT SYSTEMS AND OILFIELD SYSTEMS. CONTROLS BACTERIAL, FUNGAL AND ALGAL SLIME IN DECORATIVE FOUNTAINS, AIR WASHERS AND FOOD, BEVERAGE, AND INDUSTRIAL PROCESS PASTEURIZERS

**ACTIVE INGREDIENT**

Bromine Chloride .....	11.0%
<b>OTHER INGREDIENTS</b> .....	<b>89.0%</b>
<b>TOTAL</b> .....	<b>100.0%</b>

Total Available bromine = approximately 15%  
(expressed as chlorine = approximately 7%)

**KEEP OUT OF REACH OF  
CHILDREN  
DANGER**

**FIRST AID**

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.  
**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 a poison control center or doctor. Do not give anything by mouth to an unconscious person.  
**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 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.  
**NOTE TO PHYSICIAN:** Probable mucosal damage may contraindicate the use of gastric lavage.  
See side panel for additional precautionary statements



In case of emergency endangering life or property involving this product, call collect (225) 344-7147

EPA Reg. No. 3377-55  
EPA Est. \_\_\_\_\_

Net Content \_\_\_\_\_

**DIRECTIONS FOR USE (CONT.)**

**DOSAGE RATES:**

**INITIAL DOSES:** When the system is noticeably fouled, apply sufficient ALBEMARLE S909 BIOCIDe to achieve a residual bromine level of 4-10 ppm or as needed to maintain control. Applying 4 fluid ounces to 1000 gallons of water yields a maximum of 6.4 ppm of total bromine.  
**SUBSEQUENT DOSES:** When microbial control is evident, apply sufficient ALBEMARLE S909 BIOCIDe to achieve a residual bromine level of 4-10 ppm or as needed to maintain control. The product may be added to the system either continuously or intermittently or as needed to obtain the above residual. The frequency of feeding and dosage rate will depend upon the severity of the problem.

ALBEMARLE S909 BIOCIDe can also be used to control biofilm deposits from pumps, pipework, heat exchangers, and filters associated with industrial water treatment systems.

**PULP AND PAPER MILLS.** When used as directed, ALBEMARLE S909 BIOCIDe effectively controls algal, bacterial, and fungal slime in pulp and paper mill fresh and sea water influent water systems, cooling water systems, wastewater treatment systems, nonpotable water systems and other process water.

**Advisory Statement:** This product cannot be used in paper mills and pulp manufacturing sites where food packaging materials are produced.  
**DOSAGE RATES:** Add sufficient ALBEMARLE S909 BIOCIDe to achieve a residual bromine level of 4-10 ppm or as needed to maintain control of the system.

Feed ALBEMARLE S909 BIOCIDe directly into the water to be treated. Be sure rapid mixing of the treated water, and ALBEMARLE S909 BIOCIDe is achieved. Pump manufacturers can recommend the appropriate materials of construction and capacity for a pump to feed ALBEMARLE S909 BIOCIDe.

**COOLING PONDS AND DECORATIVE FOUNTAINS**

ALBEMARLE S909 BIOCIDe may be applied at the pond or fountain inlet or at a location that permits complete diffusion into the water at maximum retention time before reaching the outlet. Sufficient ALBEMARLE S909 BIOCIDe should be fed to maintain a total bromine level of 4 - 10 ppm in all parts of the pond (4 fluid ounces per 1000 gallons of water yields a maximum of 6.4 ppm total bromine).

**INDUSTRIAL PASTEURIZERS** (Such as food, beverage, and industrial process pasteurizers)

For control of bacteria and fungi in recirculating cooling water and heat transfer systems such as industrial pasteurizers add 2.5 - 5.0 ounces of ALBEMARLE S909 BIOCIDe per 1000 gallons of system water to achieve control. To maintain control add sufficient ALBEMARLE S909 BIOCIDe to maintain 4 - 10 ppm total bromine throughout the system. (4 fluid ounces per 1000 gallons of water yields a maximum of 6.4 ppm total bromine.)

**AIR WASHERS** (This product may be used only in industrial air washers and air washer systems which have mist-eliminating components.) For control of microorganisms in industrial air washer systems add sufficient ALBEMARLE S909 BIOCIDe to the air washer sump or chill water to provide a total bromine level of 4 - 10 ppm. Badly fouled systems must be cleaned before treatment is begun.

ALBEMARLE S909 BIOCIDe at a dosage of 4 fluid ounces per 1000 gallon of water yields a maximum of 6.4 ppm total bromine, but several times that dosage may be required to provide a total bromine level of 4 - 10 ppm throughout the system. The total bromine level should be checked with a test kit and additional product applied until a reading of 4 - 10 ppm is obtained at the bleed-off point. Some systems may be maintained in satisfactory biological condition by applying this dosage once per day while others will respond better to dosages less than once per day.

**OILFIELD APPLICATIONS**

This Product controls biofilm deposits on pumps, pipework, heat exchangers, and filters associated with oilfield systems. It also controls biofilm deposits downhole in formations.

**OIL RECOVERY DRILLING MUDS AND PACKER FLUIDS**

When used as directed, this product will control the growth of bacteria such as anaerobic sulfate-forming bacteria (*Desulfovibrio desulfuricans*) and aerobic slime-forming bacteria (*Pseudomonas fluorescens* and *Bacillus cereus*) which impair the efficiency of the muds and fluids.

Add sufficient amount of this product directly to the drilling muds and packer fluids to achieve a residual bromine level of up to 10 ppm or as needed to maintain control of the system. Fracturing fluids may be added and premixed prior to the fracturing operation or may be added directly to the blender during the operation. Be sure rapid mixing of the treated water with this product is achieved.

**SECONDARY OIL RECOVERY SYSTEMS**

This product may be used in secondary oil recovery water systems, such as oil field water flood or salt water disposal systems for the control of sulfate-reducing bacteria and aerobic slime-forming bacteria, which impair the efficiency of the system.

Add sufficient amount of this product to achieve a residual bromine level of up to 10 ppm or as needed to maintain control of the system. This product can be added whenever needed to maintain 10 ppm residual bromine. Feed this product directly into the water to be treated. Be sure mixing of the treated water with product is achieved.

Treatment levels of ALBEMARLE S909 BIOCIDe can best be measured with test kits for either bromine or chlorine. Tests should be made immediately after drawing water samples from the system. Use test kits according to directions.

1. When a bromine test kit is used, results can be read directly as ppm bromine.
2. When a chlorine test kit is used, results can be expressed in terms of bromine by multiplying chlorine values by the conversion factor 2.25.

**STORAGE AND DISPOSAL**

**STORAGE:** Do not contaminate water, food, or feed by storage, disposal or cleaning of equipment.

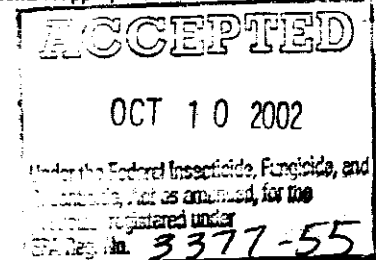
**PESTICIDE DISPOSAL:** Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

**CONTAINER DISPOSAL**

**METAL CONTAINERS:** Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

**PLASTIC CONTAINERS:** Do not reuse empty container. Triple rinse (or equivalent). Then puncture and dispose of in a sanitary landfill, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

**TOTES:** Verify that the tote is empty. Do not rinse or clean. Seal tote and contact appropriate vendor for tote pickup.



Under the Federal Insecticide, Fungicide, and Herbicide Act as amended, for the product registered under State Reg. No. 3377-55

3377-55

10/10/2002

page 1 of 1