



BUSAN®

94

REGISTERED
9 OCT 1981
1448-72

FOR INDUSTRIAL MICROORGANISM CONTROL

ACTIVE INGREDIENT

2,2-Dibromo-3-nitropropionamide

20%

INERT INGREDIENTS*

80%

*Inert ingredients include solubilizing and dispersing agents

EPA Reg. No. 1448-72

EPA Est. No. 1448-1N-1

Net Contents as Marked
on Container

DIRECTIONS FOR USE

IT IS A VIOLATION OF FEDERAL LAW TO USE THIS PRODUCT IN A MANNER INCONSISTENT WITH ITS LABELING.

NOTE: Busan 94 is added separately to systems. Do not mix it with other additives. The highest of the following instructions will apply.

PULP AND PAPER MILLS Busan 94 is used to control bacteria, fungi, and algae in systems. Busan 94 is added at 2.1 mg/l (0.15 g per barrel) to 500 barrels of pulp or paper. A sludge may be made by mixing Busan 94 intermittently as needed to control the growth of microorganisms. The frequency of treatment is adjusted according to the rate of fouling. Best results are obtained by feeding Busan 94 to the pulp line of the fan pump or into the white water or stock moving to the fan pump. Before treatment with Busan 94, the system should be cleaned thoroughly.

COOLING WATER SYSTEMS Busan 94 is used to control the growth of algae, fungi, and bacteria in summer air and industrial cooling water systems. If the system is fouled, it is recommended that before treatment with Busan 94 is begun, the system should be cleaned thoroughly, cleaned, flushed, and filled with fresh water. Busan 94 should then be added to the water. Using three slugs of Busan 94 intermittently, as required to maintain control. If sludge dosing is used, the blowdown should be discontinued for 24 hours after treatment.

Control of Fungi and Algae: If intermittent or slug dose treatment is used, add an initial dose of 46.95 ml Busan 94 (0.35 g per barrel) to 1000 gal water. Based on the total volume of water in the system. Repeat until control is evident. Then treat the system every 2 days, or as needed to maintain control, with 29.95 ml Busan 94 (0.23 g per barrel) to 1000 gal water in the system. If the continuous feed method of treatment is used, make initial dose as described above. Then treat daily, or as needed, with 29.95 ml Busan 94 (0.23 g per barrel) to 1000 gal water in the system by means of a chemical metering pump.

Control of Bacteria: If intermittent or slug dose treatment is used, add an initial dose of 4.695 ml Busan 94 (0.037 g per barrel) to 1000 gal water. Based on the total volume of water in the system. Repeat until control is evident. Then treat every 4 days, or as needed to maintain control, with 2.495 ml Busan 94 (0.020 g per barrel) to 1000 gal water in the system. If the continuous feed method of treatment is used, make initial dose as described above and repeat until control is evident. Then treat continuously with 4.695 ml Busan 94 (0.037 g per barrel) to 1000 gal water in the system by means of a chemical metering pump.

ONCE THROUGH INDUSTRIAL COOLING WATER SYSTEMS Busan 94 is used to control bacteria, fungi, and algae in once through industrial cooling water systems. Cooling ponds, canals, and lagoons. Busan 94 should be added to the system that water is formed. After contamination has been eliminated, the system should be treated by means of a metering pump. Treatment may be on a continuous or intermittent basis, depending on the severity of the contamination and the retention time in the system.

Control of Fungi and Algae: If intermittent or slug dose treatment is used, add an initial dose of 60.118 ppm Busan 94 based on the flow rate of water in the system. The minimum treatment interval should be 15 minutes. Repeat until control is evident. Then treat the system with 118 ppm Busan 94 as needed to maintain control. If the continuous feed method of treatment is used, make initial dose as described above. Then treat the system with 118 ppm Busan 94 by means of a metering pump.

Control of Bacteria: If intermittent or slug dose treatment is used, add an initial dose of 6.12 ppm Busan 94 based on the flow rate of water in the system. The minimum treatment interval should be 15 minutes. Repeat until control is evident. Then treat the system with 12 ppm Busan 94 as needed to maintain control. If the continuous feed method of treatment is used, make initial dose as described above. Then add 1.6 ppm Busan 94 by means of a metering pump, as needed to maintain control.

AIR WASHER SYSTEMS Busan 94 is used to control slime forming bacteria and fungus in industrial air washer systems. By intermittent or slug dose treatment of the water in the system. The system should be cleaned, refined with fresh water, and treated regularly with Busan 94.

If intermittent or slug dose treatment is employed, add an initial dose of 3.96 ml Busan 94 (0.031 g per barrel) to 1000 gal water. Based on the total volume of water in the system. Repeat until control is evident. Then treat every 2 days, or as needed to maintain control, with 1.547 ml Busan 94 (0.012 g per barrel) to 1000 gal water in the system. If the continuous feed method of treatment is used, make initial dose as described above and repeat until control is evident. Then treat daily, or as needed, with 1.547 ml Busan 94 (0.012 g per barrel) to 1000 gal water in the system by means of a chemical metering pump.

METALWORKING FLUIDS Busan 94 is used to inhibit the growth of bacteria and yeasts that may deteriorate aqueous metalworking fluids. It is effective in fluid concentrations that have been diluted in water at ratios of 1:100 to 1:4. Busan 94 should be added to the metalworking fluid system in a concentration by use of a metering pump.

Initial Slug Dose: When the system is noticeably fouled, add 250 ml Busan 94 (2.05 g per barrel) to 1000 gal fluid. Based on the total volume of fluid in the system. Repeat until control is evident.

Subsequent Doses: Add 100 ml Busan 94 (0.80 g per barrel) to 1000 gal fluid daily, or as needed to maintain control. Additions are recommended only if the system is fouled. Slug the system as required.

ENHANCED OIL RECOVERY SYSTEMS Busan 94 is used to control slime forming bacteria, sulfate reducing bacteria, and fungus in oil field water recovery systems. Busan 94 is added to the system at rates of 1.80 ppm Busan 94 (0.164 g per barrel) to 2400 barrels of water. Depending on the severity of contamination. Additions should be made continuously or intermittently by means of a metering pump. Busan 94 may be added at the free water knockouts before or after water pumps and injection well headers.

Continuous Feed Method: When the system is noticeably fouled, add 10.80 ppm Busan 94 (0.964 g per barrel) to 2400 barrels of water. If necessary, at a limited degree of control is obtained. Then treat with 1.15 ppm Busan 94 (0.112 g per barrel) to 2400 barrels of water. If necessary, at a limited degree of control is obtained.

Intermittent or Slug Method: When the system is noticeably fouled, or to maintain control, add 10.80 ppm Busan 94 (0.964 g per barrel) to 2400 barrels of water for 48 hours per day and 1.4 times per week, or as needed to maintain control.

Treatment of Biopolymer Solutions: To control bacteria, fungi, and yeast in aqueous solutions of biopolymer used in flooding operations, add 10.80 ppm Busan 94 (0.964 g per barrel) to 2400 barrels of solution. Add Busan 94 by means of a metering pump immediately after the solution is prepared to prevent its activity.

KEEP OUT OF REACH OF CHILDREN DANGER

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER: Causes severe burns of eyes. May burn the skin. May be harmful or fatal if swallowed. Do not get in eyes, on skin, or on clothing. Wear chemical workers' goggles when handling. Do not inhale fumes or vapor. Wash thoroughly after handling.

FIRST AID: In case of eye contact, flush eyes immediately with plenty of water for at least 15 minutes and get medical attention. In case of skin contact, wash with soap and plenty of water. Wash contaminated clothing before reuse. If product is swallowed, call a physician immediately. If patient is conscious, induce vomiting by stroking or tickling the patient's throat or far back on patient's tongue. Emetics such as 2 teaspoonsful (10 mL) of ipecac syrup or 1 teaspoonful (5 mL) of dry mustard in warm water to form a paste or even soap in warm water can be used. Repeat until vomit fluid is clear. Then have patient drink plenty of milk, gelatin solution, beaten egg whites, flour and water, or other nonoily demulcent. Never induce vomiting or give anything by mouth to an unconscious person.

Note to physician: Probable mucosal damage may contraindicate gastric lavage.

ENVIRONMENTAL HAZARDS: Do not discharge into lakes, streams, ponds, or public waters unless in accordance with a NPDES permit. For guidance contact your Regional Office of the EPA. This product is toxic to fish. Do not contaminate water by cleaning of equipment or disposal of wastes. Apply this product only as specified on this label.

STORAGE & DISPOSAL

PROHIBITIONS: Do not contaminate water, food, or feed by storage or disposal. Open dumping is prohibited. Do not reuse empty container.

PESTICIDE DISPOSAL: Pesticide, spray mixture, or rinseate that cannot be used or chemically reprocessed should be disposed of in a landfill approved for pesticides or buried in a safe place away from water supplies.

CONTAINER DISPOSAL: Triple rinse (or equivalent) and dispose in an incinerator or landfill approved for pesticide containers, or bury in a safe place.

GENERAL: Consult Federal, State, or local disposal authorities for approved alternative procedures such as limited open burning.

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