

1448-72

03/19/2012

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

MAR 19 2012

Crystal W. Brown, Regulatory Affairs  
Buckman Laboratories, Inc.  
1256 North McLean Blvd.  
Memphis, TN. 38108-1241

RE: Label Amendment Dated December 11, 2011  
Product Name: BUSAN 94  
EPA Registration Number: 1448-72

Dear Ms. Brown:

The Agency has reviewed your application submitted in accordance with continuing registration under the Federal Insecticide Fungicide and Rodenticide Act (FIFRA), as amended, and determined the action acceptable.

In summary, your request for an amendment to add Enhanced Oil Recovery use, revise your Cooling Water and Air Washer Systems directions, and remove the Reverse Osmosis use to your product label is approved. A copy of your accepted label is enclosed.

In summary, your request to amend the label has been reviewed and will replace your previously accepted label. A stamped copy of the accepted labeling is enclosed. Submit one copy of your final printed labeling before distributing or selling the product bearing the revised labeling. If you have any questions, please contact Tom Luminello by telephone, (703) 308-8075, or by e-mail at [luminello.tom@epa.gov](mailto:luminello.tom@epa.gov).

Sincerely,

A handwritten signature in black ink, appearing to read "Jacqueline Campbell".

Jacqueline Campbell  
Product Manager 34

Regulatory Management Branch II  
Antimicrobials Division (7510-P)



# BUSAN 94

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**ACTIVE INGREDIENT(S)**

2,2-Dibromo-3-nitrilopropionamide.....

20.0%

INERT INGREDIENTS.....

80.0%

TOTAL.....

100.0%

**KEEP OUT OF REACH OF CHILDREN**

## DANGER

### FIRST AID

If in Eyes	<ul style="list-style-type: none"> <li>- Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>- Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>- Call a poison control center or doctor for further treatment advice.</li> </ul>
If on Skin, Clothes	<ul style="list-style-type: none"> <li>- Take off contaminated clothing.</li> <li>- Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>- Call a poison control center or doctor for treatment advice.</li> </ul>
If Swallowed	<ul style="list-style-type: none"> <li>- Call poison control center or doctor immediately for treatment advice.</li> <li>- Have person sip a glass of water, if able to swallow.</li> <li>- Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>- Do not give anything by mouth to an unconscious person.</li> </ul>
If Inhaled	<ul style="list-style-type: none"> <li>- Move person to fresh air.</li> <li>- If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth if possible.</li> <li>- Call a poison control center or doctor for further treatment advice.</li> </ul>

**ACCEPTED**  
 MAR 19 2012  
 Under the Federal Insecticide, Fungicide, and Rodenticide Act  
 EPA Reg. No. 1448-72

### HOT LINE NUMBER

Have the product container or label with you when calling a Poison Control Center or doctor or going for treatment. You may also contact 901-767-2722 for emergency medical treatment information.

### NOTE TO PHYSICIAN

Probable mucosal damage may contraindicate the use of gastric lavage.

## Precautionary Statements

### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**DANGER:** Corrosive. Causes irreversible eye damage. May be fatal if swallowed. Harmful if inhaled or absorbed through skin. Causes skin burns. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Do not get in eyes, on skin, or on clothing. Wear chemical workers' goggles, rubber gloves (such as barrier laminate, butyl rubber, neoprene rubber, nitrile rubber, polyvinyl chloride {PVC and vitor}), coveralls worn over long sleeved shirt and long pants, and chemical resistant footwear plus socks when handling. For mixing/loading and for cleaning equipment, wear a chemical resistant apron. Use with adequate ventilation. 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 separately before reuse.

**ENVIRONMENTAL HAZARDS:** This pesticide is toxic to fish and aquatic organisms. Apply this product only as specified on this label. Do not contaminate water by cleaning of equipment, or disposal of wastes. 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 misting.

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# BUSAN 94

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## Directions for Use

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

**NOTE:** BUSAN 94 must be added separately to systems. Do not mix it with other additives; the high pH of many additive formulations will cause decomposition of BUSAN 94.

**PULP AND PAPER MILLS:** For slime control in pulp and paper mill systems, BUSAN 94 is employed at 75 to 250 g per tonne (0.15 - 0.50 lb. per ton of pulp or paper dry basis). Make continuous or intermittent additions as needed to control the growth of microorganisms. As a general rule, make intermittent treatments at the specified rates for periods of 2 to 6 hours out of each 8, each 12 or each 24 hours cycle. The concentration and frequency of treatment are adjusted according to the rate of slime accretion. Best results are obtained by feeding BUSAN 94 into the suction side of the fan pump or into the white water or stock moving to the fan pump. Clean the system thoroughly before treatment with BUSAN 94 is begun.

**INDUSTRIAL RECIRCULATING WATER COOLING TOWERS:** Add BUSAN 94 to the basin (or any other point of uniform mixing). Additions should be made with a metering pump; it may be continuous or intermittent, depending on the severity of the contamination when treatment is begun, and the retention time of the system. Optimum performance with this product is attained by continuous or intermittent treatment. If "shock" treatment is used, the blowdown must be discontinued for 24 - 48 hours.

**FOR CONTROL OF BACTERIA:** Add 0.00095 - 0.0095 gal BUSAN 94/1,000 gal of water in the system, depending on the severity of contamination.

### INTERMITTENT OR SLUG METHOD

**INITIAL DOSE:** When the system is noticeably fouled, add 0.0048 - 0.0095 gal BUSAN 94/1,000 gal of water in the system. Repeat until control is achieved.

**SUBSEQUENT DOSE:** When microbial control is evident add 0.0024 - 0.0095 gal BUSAN 94/1,000 gal of water in 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 0.0048 - 0.0095 gal BUSAN 94/1,000 gal of water to the system. **SUBSEQUENT DOSE:** Maintain this level by pumping a continuous feed of 0.00095 - 0.0048 gal BUSAN 94/1,000 gal of water in the system per day. **BADLY FOULED SYSTEMS** must be cleaned before treatment is begun.

**FOR CONTROL OF FUNGI AND ALGAE:** Add 0.029-0.095 gal BUSAN 94/1,000 gal of water in the system depending on the severity of contamination.

### INTERMITTENT OR SLUG METHOD

**INITIAL DOSE:** When the system is noticeably fouled, add 0.048 - 0.095 gal BUSAN 94/1,000 gal of water in the system. Repeat until control is achieved.

**SUBSEQUENT DOSE:** When microbial control is evident, add 0.029-0.095 gal BUSAN 94/1,000 gal of water in the system daily, 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 0.048 - 0.095 gal BUSAN 94/1,000 gal of water to the system. **SUBSEQUENT DOSE:** Maintain this treatment level by pumping a continuous feed of 0.029-0.095 gal BUSAN 94/1,000 gal of water in the system per day. **BADLY FOULED SYSTEMS** must be cleaned before treatment is begun.

**AIR WASHER SYSTEMS:** Add 0.0015 - 0.095 gal BUSAN 94/1,000 gal of water in the system, depending upon the severity of contamination to control slime-forming bacteria and fungi in industrial air-washer systems.

### INTERMITTENT OR SLUG METHOD

**INITIAL DOSE:** When the system is noticeably fouled, add 0.003 - 0.095 gal BUSAN 94/1,000 gal of water in the system. Repeat until control is achieved.

**SUBSEQUENT DOSE:** When microbial control is evident, add 0.0015 - 0.047 gal BUSAN 94/1,000 gal of water in the system every 2 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 0.003 - 0.095 gal BUSAN 94/1,000 gal of water in the system. **SUBSEQUENT DOSE:** Maintain this level by pumping a continuous feed of 0.0015 - 0.047 gal BUSAN 94/1,000 gal of water 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.

**INDUSTRIAL PRESERVATIVE APPLICATIONS:** BUSAN 94 is 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 BUSAN 94 to the material or product at a concentration of 25 to 2,000 ppm by weight. This concentration is equivalent to 2.8 to 224.0 fluid ounces BUSAN 94 per 1,000 gallons or 21.4 to 1,712.0 milliliters BUSAN 94 per 1,000 liters. The required concentration will depend on the material being treated and level of contamination present.

**DIRECTIONS FOR TREATING PUBLICLY-OWNED TREATMENT WORKS TO CONTROL COLIFORM AND OTHER BACTERIA** add BUSAN 94 at a concentration of 1.0 to 10.0 ppm by weight of water being treated, depending on the severity and contamination in the system. Make the continuous addition of BUSAN 94 with a metering pump at a point in the system where mixing will be rapid and thorough. Add BUSAN 94 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 0.4 - 1.5 ppm BUSAN 94 by weight of water treated. Target chlorination treatment to achieve a minimum detectable residual (i.e., greater than zero but less than the NPDES permit level). Make the continuous addition at a point just after the initial chlorine mixing. Rapid mixing is necessary for maximum effectiveness. BUSAN 94 should be added at a location where a contact time of 10 minutes or longer will be provided before reaching the outfall.

**DIRECTIONS FOR TREATING ENHANCED OIL RECOVERY SYSTEMS:** **NOTE:** Add BUSAN 94 separately to the system. Do not mix it with other additives, so as to avoid decomposition of BUSAN 94 due to the high pH of many additive formulations. Addition of BUSAN 94 may be made at the free water knockouts, before or after the injection pumps and injection well headers. For controlling slime-forming bacteria, sulfide-producing bacteria, yeasts, and fungi in oil field water, polymer or micellar floods, water-disposal systems, or other oil field water systems, add 1-80 ppm BUSAN 94 (0.1- 6.4 gallons of BUSAN 94 per 2400 barrels of water) depending on the severity of contamination. Additions should be made with a metering pump either continuously or intermittently.

**CONTINUOUS FEED METHOD:** When the system is noticeably fouled, add 10-80 ppm BUSAN 94 (0.8-6.4 gal. of BUSAN 94 per 2400 barrels of water) continuously until the desired degree of control is achieved. Subsequently, treat with 1-15 ppm BUSAN 94 (0.1-1.2 gal. of BUSAN 94 per 2400 barrels of water) continuously or as needed to maintain control.

**INTERMITTENT OR SLUG METHOD:** When the system is noticeably fouled or to maintain control of the system, add 10-80 ppm BUSAN 94 (0.8-6.4 gal. of BUSAN 94 per 2400 barrels of water) intermittently for 4-8 hours per day and from 1-4 times per week, or as needed depending on the severity of contamination.

**NOTE:** For control of bacteria, yeast, and fungi in aqueous solutions of biopolymer used in flooding operations, add 15-80 ppm BUSAN 94 (1.2-6.4 gal. of BUSAN 94 per 2400 barrels of water). Additions of BUSAN 94 should be made with a metering pump immediately after preparation of the aqueous biopolymer solution to reduce loss of viscosity.

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A microbiocidal, bactericide, fungicide, algacide, and slimicide, used in treating recirculating cooling water in industrial cooling systems, pulp and paper mills, enhanced oil recovery systems, air-washer systems, industrial preservation applications and publicly-owned treatment works. FOR INDUSTRIAL USE.

### 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, not above 35°C, 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:**

{Liquid residue removal statement for nonrefillable containers with capacity of 5 gals or less}

Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for the 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 reconditioning, if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

{Liquid residue removal statement for nonrefillable containers with capacity of >5 gals}

Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

Then offer for recycling if available or reconditioning, if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

{Text for refillable containers for containers larger than 55 gallons}

Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller.

To clean the container prior to refilling or disposal, use a pressure wash as follows: Empty the remaining contents into application equipment or a mix tank. Use a pressure wash system that rinses all interior sides with water and that is rated at >40 psi and >120°F. Pressure wash the container for a length of time that ensures that a minimum 25% of the container volume of water is used. During the pressure wash, ensure that the container valve is left open for continuous draining. Collect the rinsate and empty into application equipment or a mix tank or store rinsate for later use or disposal. Allow container to drain for 10 minutes after pressure wash is completed.

{Text for refillable containers for containers 55 gallons and smaller}

Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller.

To clean the container prior to refilling or disposal, use a triple rinse wash as follows: Empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10 percent full with water. Agitate vigorously. Pour or pump rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this rinsing procedure two more times.

**Manufactured by** Buckman Laboratories, Inc.  
1256 North McLean Blvd., Memphis, Tennessee 38108, USA  
(901) 278-0330 or 1-800-282-5626

**EPA Est. No.** 37429-GA-2

**EPA Reg. No.** 1448-72

**Product Weight** 10.4 lbs/gal 1.25 kg/L

Net contents are marked on the container.

**HMIS / NPCA Ratings**

Health 3 Flammability 1 Reactivity 1

**Last Revision**

11/18/2011