

**BUSAN® 1167**  
LIQUID MICROBICIDE  
INDUSTRIAL  
**READ THE LABEL BEFORE USING**  
**REGISTRATION NO. : 22577**  
**PEST CONTROL PRODUCTS ACT**

**ACTIVE INGREDIENT:**

Sodium Bromide .....40% (by weight)

**NET CONTENTS:** Liters; kilograms

**Buckman Laboratories of Canada, Ltd.**

PO Box 41059  
Montreal CP Marcel-Laurin, QC  
H4R 0N1

877-282-5626

**24-HOUR EMERGENCY TELEPHONE NUMBER:**  
**Chemtrec 703-741-5970**

**ENVIRONMENTAL HAZARDS:** This product is toxic to fish and other aquatic organisms. It is not to be used in circumstances that would cause or allow it to enter lakes, streams, ponds, estuaries, oceans or other waters in contravention of federal or provincial regulatory requirements. The requirements of applicable laws should be determined before using the product.

**NOTICE TO USER:** This pest control product is to be used only in accordance with the directions on the label. It is an offence under the *Pest Control Products Act* to use this product in a way that is inconsistent with the directions on the label.

## **For Use as a Disinfectant, Sanitizer, Bactericide, Slimicide and Algaecide**

### **DIRECTIONS FOR USE**

**For Pulp and Paper Mills** (influent fresh and sea water, cooling water, waste water treatment, non-potable water and other process water) and **Recirculating Cooling Water Systems** (commercial and industrial cooling towers, influent water, heat exchange water and industrial water scrubbing systems), **when used as directed, Busan 1167 Liquid Microbicide effectively controls algal, bacterial and fungal slimes.**

For use with closed loading and transfer systems only.

Wear protective eyewear, chemical-resistant coveralls over long-sleeved shirt, long pants, and chemical-resistant gloves and footwear when handling the concentrate and contacting treated process fluids.

Dosage Rates: Add Busan 1167 Liquid Microbicide to the system at a 0.125 to 2.0 Sodium bromide/oxidant mole ratio. For example: 1) 192 to 3175 grams of Chlorine gas (99.9%) per litre of Sodium bromide solution; 2) 1.3 to 21 liters of Sodium hypochlorite (12.5% available chlorine) solution per liter of Sodium bromide solution.

Initial Dose: When the system is noticeably fouled, add 0.0003 to 0.024 liters of Busan 1167 Liquid Microbicide solution per 1000 liters of water contained in the system and oxidize with either Chlorine gas (0.959 to 4.794 grams of Chlorine gas per 1000 liters of contained water), or Sodium hypochlorite solution (0.007 to 0.032 liters of 12.5% Sodium hypochlorite solution per 1000 liters of contained water).

Subsequent Dose: When microbial control is evident, add 0.0002 to 0.024 liters of Busan 1167 Liquid Microbicide solution per 1000 liters of water contained in the system, and oxidize with either Chlorine gas (0.479 to 4.793 grams Chlorine gas per 1000 liters of contained water), or Sodium hypochlorite solution (0.003 to 0.032 liters of 12.5% Sodium hypochlorite solution per 1000 liters of contained water).

Feed Busan 1167 Liquid Microbicide either before or after the oxidant injection point into the water to be treated. Be sure rapid mixing of the treated water, Busan 1167 Liquid Microbicide and oxidant is achieved. Pump manufacturers can recommend the appropriate materials of construction and capacity for a pump to feed Busan 1167 Liquid Microbicide or Sodium Hypochlorite solution. If used as the oxidant, Chlorine gas must be handled and used only in accordance with practices recommended in the Chlorine Manual published by the Chlorine Institute Inc., New York. Use Chlorine gas only in well ventilated areas.

Treatment levels of Busan 1167 Liquid Microbicide and oxidant can be best measured with test kits for either bromine or chlorine. Test 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 of 2.25. Busan 1167 Liquid Microbicide has a density of 1.426 kg/L at 21.1°C.

Toxic to aquatic organisms. "DO NOT discharge effluent containing this product or the biocide produced into sewer systems, lakes, streams, ponds, estuaries, oceans or other waters unless the effluent has been detoxified by suitable means.

## **PRECAUTIONS**

### **KEEP OUT OF REACH OF CHILDREN**

Harmful if swallowed. Irritation may develop from eye and skin exposure. Avoid contact with eyes, skin, clothing and the contamination of food. Wear safety glasses (goggles), rubber gloves and body-protective clothing. Busan 1167 Liquid Microbicide is not flammable. However, in fires fueled by other materials, hydrogen bromide or bromine may be released. In case of fire, wear self-contained breathing apparatus.

### **FIRST AID**

Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

**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 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 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 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.

**TOXICOLOGICAL INFORMATION:** Note to physician: Probable mucosal damage following ingestion may contraindicate gastric lavage. Treat symptomatically.

**STORAGE:** Keep the product tightly closed in the original container when not in use. Store in a dry, well ventilated area. Product should be stored at -18°C or above.

### **DISPOSAL**

Do not reuse this container for any purpose. This is a recyclable container and is to be disposed of at a container collection site. Contact your local distributor/dealer or municipality for the location of the nearest collection site. Before taking the container to the collection site:

1. Triple- or pressure-rinse the empty container. Add the rinsings to the treatment site.
2. Make the empty, rinsed container unsuitable for further use.

If there is no container collection site in your area, dispose of the container in accordance with provincial requirements.

For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for clean-up of spills.