

1448-345

3-21-2003

1/2

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Ms. Kristin M. Miller  
Buckman Laboratories, Inc.  
1256 North McLean Blvd.  
Memphis, TN 38108

MAR 21 2003

Subject: Busan 6040  
EPA Registration Number 1448-345  
Application Date: 2/20/03  
Receipt Date: 2/26/03

Dear Ms. Miller:

The following submission, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is acceptable with the conditions listed below:

- Per the Agency Letter Dated January 16, 2003

**Conditions**

- 1 Delete the (s) on the word "Ingredients" in the Ingredient Statement.
2. Under the "Environmental Hazards" Statement add as the first sentence "This pesticide is toxic to fish and aquatic organisms".

**General Comments**

A stamped copy of the accepted labeling is enclosed. Submit three (3) copies of your final printed labeling before distributing or selling the product bearing the revised labeling.

Should you have any questions or comments concerning this letter, please contact Delores Williams at (703) 308-6372.

Sincerely,



Robert S. Brennis  
Product Manager 32  
Regulatory Management Branch II  
Antimicrobials Division (7510C)

**CONCURRENCES**

SYMBOL							
SURNAME							
DATE							



### Directions for Use

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. **Recirculating Cooling Water Systems, Cooling Water Systems, Air Washers, Brewery Pasteurizers, and Retort Systems.** BUSAN 6040 is used as a disinfectant, fungicide, algacide, bactericide and simicide in influent water systems, wastewater systems, recirculating cooling water systems, heat-exchangers, industrial water scrubbing systems, industrial process water, once-through cooling water systems, air washers, brewery pasteurizers, retort systems, and process water systems. It is applied in conjunction with an oxidant such as sodium hypochlorite (12.5%) or chlorine gas (99.9%) to produce hypobromous acid, which is more effective for microorganism control at an elevated pH (greater than 8). BUSAN 6040 may be added to the system inlet water or metered into existing NaOCl piping to form a solution of sodium hypobromite. Consult your feeder manufacturer or Buckman representative for appropriate materials of construction, proper procedure and correct use of the feeder equipment for the application of BUSAN 6040.

<b>ACTIVE INGREDIENT(S)</b>	
Sodium Bromide.....	40.0%
<b>INERT INGREDIENTS</b> .....	60.0%
<b>TOTAL</b> .....	100.0%

## KEEP OUT OF REACH OF CHILDREN WARNING

### FIRST AID

If in Eyes	- Hold eyes 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 further treatment advice.
If on Skin, Clothes	- Take off contaminated clothing. - Rinse skin immediately with plenty of water for 15-20 minutes. - Call a poison control center for treatment advice.
If Ingested	- Call 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.
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.

### 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 901-278-0330 or 1-800-BUCKMAN for emergency medical treatment information.

## Precautionary Statements

### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**WARNING:** Irritation may develop from eye and skin exposure. Avoid contact with eyes. Wear gloves and safety goggles. Wash contaminated clothing before reuse.

**FIRST AID:** In case of eye contact, flush eyes with cold water for at least 15 minutes. If irritation persists, seek medical attention immediately. Prolonged skin contact can produce skin irritation. In case of skin contact, wash with cold water for 15 minutes.

**ENVIRONMENTAL HAZARDS:** 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.

**PHYSICAL & CHEMICAL HAZARDS:** This product 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.

**DOSAGE RATES: Initial Doses:** When the system is noticeably fouled, apply sufficient BUSAN 6040 and chlorine or sodium hypochlorite to achieve a residual bromine level of 0.5 to 5 ppm or as needed to maintain control. A 0.5 to 2 mole ratio of sodium bromide to oxidant is recommended. Typically the recommended mole ratio may be achieved by using 1.5 to 6.0 lbs of chlorine gas (99.9%) or 1.3 to 5.2 gallons NaOCl (12.5%) for each gallon of BUSAN 6040. **Subsequent Dose:** When microbial control is evident, apply sufficient BUSAN 6040 and chlorine or sodium hypochlorite to achieve a residual bromine level of 0.5 to 2 ppm or as needed to maintain control. A 0.5 to 2 mole ratio of sodium bromide to oxidant is recommended. Typically, the recommended mole ratio may be achieved by using 1.5 to 6.0 lbs of chlorine gas (99.9%) or 1.3 to 5.2 gallons NaOCl (12.5%) for each gallon of BUSAN 6040. The product may be added to the system either continuously or intermittently, as needed. The frequency of feeding and duration of the treatment will depend upon the severity of the problem.

**WASTEWATER TREATMENT SYSTEMS:** When used as directed, BUSAN 6040 effectively controls algae, bacteria and fungal slimes and disinfects secondary and tertiary wastewater systems and effluents. The quantity of BUSAN 6040 required varies with the degree of fouling. Add sufficient BUSAN 6040 and chlorine or sodium hypochlorite to achieve residual bromine levels of 0.3 ppm to 1 ppm when measured approximately 5 minutes after treatment (0.5 to 2.0 sodium bromide/oxidant mole ratio). This addition can be made at various points in the system including a contact tank preceding the effluent discharge on a secondary system or at the influent of the final clarifier.

**RECIRCULATING COOLING WATER SYSTEMS:** When used as directed, BUSAN 6040 effectively controls fungi, algae, bacteria and slime in commercial and industrial cooling towers, air washers, heat exchangers, industrial water scrubbing systems, industrial process water and influent water systems. The quantity of BUSAN 6040 required varies with the degree of fouling. Apply sufficient BUSAN 6040 and chlorine or sodium hypochlorite to achieve residual bromine levels 0.5 to 5 ppm when measured approximately 5 minutes after treatment. A 0.5 to 2 mole ratio of sodium bromide to oxidant is recommended.

**INDUSTRIAL ONCE-THROUGH COOLING WATER SYSTEMS:** When used as directed, BUSAN 6040 effectively controls molluscs, bacteria, fungi, algae and slime in once-through and closed-cycle fresh and sea water cooling systems. Apply BUSAN 6040 and chlorine or sodium hypochlorite to the system inlet water or before any other contaminated area. Add sufficient BUSAN 6040 and chlorine or sodium hypochlorite to achieve a residual bromine level of 0.5 to 5.0 ppm or as needed to maintain control. A 0.5 to 2 mole ratio of sodium bromide to oxidant is recommended.

**PULP AND PAPER MILLS:** When used in combination with an oxidant, BUSAN 6040 effectively controls algae, bacteria 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. Add sufficient BUSAN 6040 and chlorine or sodium hypochlorite to achieve a residual bromine level of 0.5 to 5.0 ppm or as needed to maintain control. A 0.5 to 2 mole ratio of sodium bromide to oxidant is recommended. BUSAN 6040 can be added wherever chlorination is applied.

**FRUIT AND VEGETABLE WASH:** When used in conjunction with an oxidant (Chlorine gas or NaOCl), BUSAN 6040 can be used for the wash and transport of fruits and vegetables. BUSAN 6040 and oxidant should be added at a rate not to exceed a dosage of 55 ppm BUSAN 6040 (38.5 gallons BUSAN 6040 per one million gallons of water treated). Apply sufficient BUSAN 6040 and chlorine or sodium hypochlorite to achieve a residual bromine level of 0.5 to 5 ppm when measured approximately 5 minutes after treatment. The recommended activation mix of BUSAN 6040 and oxidant is a one to one molar ratio. Chlorine dose (99%), 3.3 pounds, 10% NaOCl dose (3.3 gallons) or 15% NaOCl dose (2.0 gallons) will activate one gallon of BUSAN 6040 (40% Sodium bromide solution). BUSAN 6040 may be continuously metered to Chlorinator eductor water or mixed with a NaOCl solution for activation. The use of this product under this application must be followed by a potable water rinse to remove, to the extent possible, residues of the chemical.

**Decorative waters that DO NOT contain fish:** BUSAN 6040 may be used to control microbiological growth in decorative fountains and ponds that do not contain fish. The quantity of BUSAN 6040 required will vary with the degree of fouling. BUSAN 6040 should be applied with chlorine, sodium hypochlorite, or other suitable chlorine donor to provide a residual bromine level of 0.5 - 5ppm. The residual bromine level should be maintained for 1 - 24 hours, depending on the degree of control required.

**ACCEPTED  
with COMMENTS  
EPA Letter Dated:**

MAR 21 2003

Under the Federal Insecticide,  
Fungicide and Rodenticide Act as  
amended for the pesticide,  
registered under EPA Reg. No.

1448-345

**STORAGE:** Keep product dry, well ventilated area.  
**DISPOSAL:** Wastes must be disposed at an approved waste offer for recycling or re-incinerate. Burn only if smoke.

Manufactured by  
1256 North McL...

EPA Est. No.  
EPA Reg. No.  
Product Weight

HMS  
Health 1 Flam