

1448-345

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

April 19, 2012

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

Glenda Akins
Buckman Laboratories Inc.
1256 North McClean Blvd
Memphis, TN 38108

Subject: Busan 6040
EPA Reg.#: 1448-345
Application Date: January 16, 2012
Receipt Date: January 23, 2012

Dear Ms. Akins:

The following amendment submitted in connection with the registration under FIFRA, as amended is acceptable with conditions.

Proposed Label Amendment:

A response to address EPA letters dated September 28, 2011 and June 20, 2011, regarding "Busan 6040" (EPA Reg#1448-345).

Revise label as follows:

P.2- Insert "**Do not contaminate water, food, or feed by storage and disposal**" immediately below the heading "**STORAGE AND DISPOSAL**". See Label Review Manual Chapter 13. Change "should" to "must" to read "Product must be stored at 0°F or above." – See PR Notice 2000-5.

P.2- Add a subheading and text to read "**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 EPA Regional Office for guidance."

P.2- Change subheading "**Container Disposal**" to read "**Container Handling and Disposal**"

P.2- Change optional text "**(TEXT FOR ALL NONREFILLER CONTAINER)**" to read "**(TEXT FOR ALL REFILLABLE AND NONREFILLABLE CONTAINER)**"

P.3 – Under “FRUIT AND VEGETABLE WASH”, change “should” to “must” to read “This product and oxidant must be added at a...”.

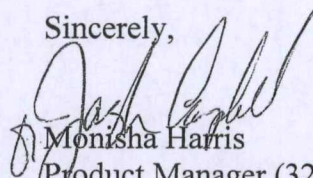
P.4 – In first sentence, delete “recommended” to read “The activation mix of this...”.

General Comments:

A stamped copy of the accepted label with conditions and comments is enclosed. Submit one copy of your final revised printed labeling before distributing or selling the product bearing the revised labeling.

If you have any questions on this letter, please contact David Liem by email at liem.david@epa.gov or call at 703-305-1284.

Sincerely,



Monisha Harris
Product Manager (32)
Regulatory Management Branch II
Antimicrobials Division (7510P)

Att: Stamped Labeling (Accepted with comments)

BUSAN[®] 6040

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ACTIVE INGREDIENT(S):

Sodium bromide

40.0%

INERT INGREDIENTS:

60.0%

TOTAL

100.00%

ACCEPTED
with COMMENTS
in EPA Letter Dated:
APR 19 2012

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

1448-345

**KEEP OUT OF REACH OF CHILDREN
CAUTION**

FIRST AID

If in Eyes	<ul style="list-style-type: none">• 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 further treatment advice.
If on Skin, Clothes	<ul style="list-style-type: none">• 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 Swallowed	<ul style="list-style-type: none">• 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.

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.

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

CAUTION. Causes substantial but temporary eye injury. Do not get in eyes or on clothing. Wear protective eyewear such as goggles, face shield, or safety glasses. 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 before reuse.

PHYSICAL AND CHEMICAL HAZARDS: Sodium bromide 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.

ENVIRONMENTAL HAZARDS: This product is toxic to fish and aquatic organisms. 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.

NOTE: Buyer assumes all responsibility for safety and use not in accordance with directions.

STORAGE AND DISPOSAL

DONOT CONTAMINATE YOURSELF BY STORAGE AND DISPOSAL
STORAGE. Keep product dry in tightly closed original container when not in use. Store in a cool, dry, well ventilated area. Product ~~should~~ be stored at 0°F or above.

see label **PESTICIDE DISPOSAL...** *MUST*
(TEXT FOR NONREFILLABLE CONTAINERS)

CONTAINER DISPOSAL *HANDLING AND*

NONREFILLABLE CONTAINERS: Do not reuse or refill this container. Offer for recycling, if available. Triple rinse container (or equivalent) promptly after emptying.

For containers of 5 gallons or less: 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 half 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.

For containers with capacities greater than 5 gallons: Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container half 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.

REFILLABLE AND
(TEXT FOR ALL NONREFILLABLE CONTAINERS)

Then offer for recycling if available or reconditioning, if appropriate, or puncture and dispose of in a sanitary landfill, or, if allowed by state and local authorities by burning. If burned, stay out of smoke.

(TEXT FOR REFILLABLE CONTAINERS)

CONTAINER DISPOSAL *HANDLING AND*

REFILLABLE CONTAINERS. Refill this container with sodium bromide 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.

For containers larger than 55 gallons: 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.

For containers 55 gallons and smaller: 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.

Do not discharge rinsate containing this product 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 rinsate containing this product to sewer systems without prior approval from the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

Batch code: _____

DIRECTIONS FOR USE

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

Read entire label and use strictly in accordance with precautionary statements and directions.

RECIRCULATING COOLING WATER SYSTEMS, INCLUDING AIR WASHERS AND BREWERY PASTEURIZERS: When used in conjunction with an oxidant, this product effectively controls algal, bacterial, and fungal slime and controls the settlement and growth of mollusks such as the zebra mussel (*Dreissena*) or the Asiatic clam (*Corbicula*) in commercial and industrial cooling towers; influent water systems such as flow through filters, cooling ponds, canals, and lagoons; heat exchange water systems; air washers; pasteurizers; retort systems; and industrial water scrubbing systems.

DOSAGE RATES. Add this product to the system at a 0.125 to 2.0 sodium bromide/oxidant mole ratio. For example:

- 1) 1.6 to 26.5 pounds of chlorine gas (99.9%) per gallon of sodium bromide solution; or,
- 2) 1.3 to 21.2 gallons sodium hypochlorite (12.5% available chlorine) solution per gallon of sodium bromide solution.

Initial Dose: When the system is noticeably fouled, add 0.0003 to 0.024 gallons of this product per 1000 gallons of water contained in the system and oxidize with either gas chlorine (0.008 to 0.040 pounds gas chlorine per 1000 gallons of contained water), or sodium hypochlorite solution (0.007 to 0.032 gallons of 12.5% sodium hypochlorite solution per 1000 gallons of contained water).

Subsequent Dose: When microbial control is evident, add 0.0002 to 0.024 gallons of this product per 1000 gallons of water contained in the system and oxidize with either gas chlorine (0.004 to 0.040 pounds gas chlorine per 1000 gallons of contained water), or sodium hypochlorite solution (0.003 to 0.032 gallons of 12.5% sodium hypochlorite solution per 1000 gallons of contained water).

ONCE-THROUGH COOLING WATER AND WASTE WATER TREATMENT SYSTEMS:

When used in conjunction with an oxidant, this product effectively controls algal, bacterial and fungal slime and controls the settlement and growth of mollusks such as the zebra mussel (*Dreissena*) or the Asiatic clam (*Corbicula*) in once-through fresh and sea water cooling systems, cooling ponds, canals, and lagoons; and disinfects secondary and tertiary wastewater treatment systems.

DOSAGE RATES. Add this product to the system at a 0.125 to 2.0 sodium bromide/oxidant mole ratio. For example:

- 1) 1.6 to 26.5 pounds of chlorine gas (99.9%) per gallon of sodium bromide solution; or,
- 2) 1.3 to 21.2 gallons sodium hypochlorite (12.5% available chlorine) solution per gallon of sodium bromide solution.

Initial Dose: When the system is noticeably fouled, add 0.0008 to 0.049 gallons of this product per 1000 gallons of water contained in the system and oxidize with either gas chlorine (0.02 to 0.08 pounds gas chlorine per 1000 gallons of contained volume), or sodium hypochlorite solution (0.02 to 0.06 gallons of 12.5% sodium hypochlorite solution per 1000 gallons of contained volume).

Subsequent Dose: When microbial control is evident, add 0.0003 to 0.049 gallons of this product per 1000 gallons of water contained in the system and oxidize with either gas chlorine (0.008 to 0.08 pounds gas chlorine per 1000 gallons of contained volume), or sodium hypochlorite solution (0.006 to 0.06 gallons of 12.5% sodium hypochlorite solution per 1000 gallons of contained volume).

FRUIT AND VEGETABLE WASH:

When used in conjunction with an oxidant (Chlorine gas or NaOCl) ^{must} this product can be used for the wash and transport of fruits and vegetables. This product and oxidant ~~should~~ be added at a rate not to exceed a dosage of 55 ppm of product (38.5 gallons of this product per one million gallons of water treated). Apply sufficient amount of this product and chlorine or sodium hypochlorite to achieve a residual bromine level

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of 0.5 to 5 ppm when measured approximately 5 minutes after treatment. The ~~recommended~~ activation mix of this product 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 this product (40% sodium bromide solution). This product 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.

PULP AND PAPER MILLS:

When used in conjunction with an oxidant, this product 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, service water systems, white water systems, non-potable water systems, and other process water.

DOSAGE RATES. Add this product to the system at a 0.125 to 2.0 sodium bromide/oxidant mole ratio. For example:

- 1) 1.6 to 26.5 pounds of chlorine gas (99.9%) per gallon of sodium bromide solution; or,
- 2) 1.3 to 21.2 gallons sodium hypochlorite (12.5% available chlorine) solution per gallon of sodium bromide solution.

Add sufficient amount of mixed product/oxidant solution to achieve a residual bromine level of 0.5 to 5.0 parts per million. For 0.5 parts per million add 0.00057 gallons of product and 0.0018 gallons of (12.5%) bleach or 0.0019 pounds gas chlorine per 1,000 gallons of water treated.

Treatment levels of this product and oxidant 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 parts per million 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.

HMIS/NPCA RATING

Health 3 Flammability 0 Reactivity 0

Product Weight 11.9 lbs/gal 1.43 kg/L

NET CONTENTS MARKED ON CONTAINER

EPA Reg. No. 1448-345

EPA Est. No. 1448-TN-1

Manufactured by:

Buckman Laboratories, Inc.

1256 N. McLean Blvd., Memphis, Tennessee 38108, U.S.A.

(901) 278-0330 or 1-800-282-5626

Revised: 01/09/12