

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



Office of Pesticide Programs

FEB 23 2010

Carl F. Watson, Ph.D.
Senior Regulatory Toxicologist
Buckman Laboratories, Inc.
1256 North McLean Blvd.
Memphis, TN 38108-1241

FILE COPY

Subject: BUSAN 6040
EPA Registration No. 1448-345
Application Date: January 12, 2010
EPA Receipt Date: January 19, 2010

Dear Dr. Watson:

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

Conditions:

Revise the label as follows:

1. Revise the ingredient statement, by extending the dotted tab leader, aligning the active ingredient, inert ingredient, and total headings with their respective percentage.
2. Revise the Container Disposal section as follows, to be consistent with the referenced product:

{Text for non-refillable containers}

Container Disposal

Nonrefillable container. 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 ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for 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 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.

{Text for refillable containers}

Container Disposal

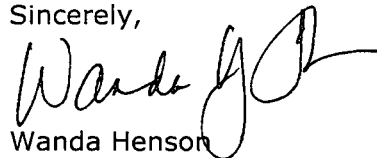
Refillable container. Refill this container with sodium bromide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

General Comments:

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

Should you have any questions concerning this letter, please contact me at Henson.Wanda@epa.gov or call (703) 308-6345.

Sincerely,



Wanda Henson
Acting Product Manager (32)
Regulatory Management Branch II
Antimicrobials Division (7510P)

BUSAN 6040

BUSAN is a registered trademark.

ACCEPTED
with COMMENTS
in EPA Letter Dated:

FEB 23 2010

Buckman

Under the Federal Insecticide,
Fungicide, and Rodenticide Act as
amended, for the pesticide,
registered under EPA Reg. No. 1448-345

ACTIVE INGREDIENT(S)
Sodium Bromide.....

INERT INGREDIENTS.....

TOTAL.....

40.0%
60.0%
100.0%

KEEP OUT OF REACH OF CHILDREN

WARNING

FIRST AID	
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 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 or doctor for treatment advice.
If Swallowed	- 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 901-767-2722 for emergency medical treatment information.	

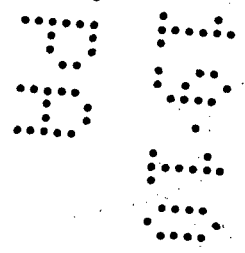
Precautionary Statements

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.

ENVIRONMENTAL HAZARDS: This pesticide 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.

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.



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Storage and Disposal

Do not contaminate water, food, or feed by storage or disposal.

PESTICIDE STORAGE: Keep product in tightly closed original container when not in use. Store in a dry, well ventilated area. Product should be stored at 0 degrees F or above. Do not stack more than five drums high. Drums should be opened in well-ventilated areas. Leaking or damaged drums should be placed in overpack drums for disposal. Spills should be absorbed in sawdust or sand and disposed of in a sanitary landfill. Keep container closed when not in use.

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 your EPA Regional Office for guidance.

CONTAINER DISPOSAL:

(Text for all nonrefillable containers)

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

{Liquid residue removal statement for nonrefillable containers with capacity of 5 gals 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 1/4 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.

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

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 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.

(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)

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.

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 >120F. 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.

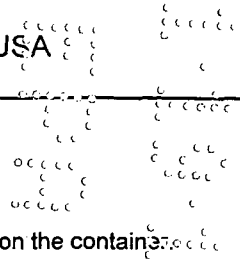
Batch code: _____

Manufactured by

Buckman Laboratories, Inc.

1256 North McLean Blvd., Memphis, Tennessee 38108, USA

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



EPA Est. No. 1448-TN-1

EPA Reg. No. 1448-345

Product Weight 11.9 lbs/gal 1.43 kg/L

Net contents are marked on the container

HMIS / NPCA Ratings

Health 1 Flammability 0 Reactivity 0

Last Revision

12/23/2009

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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.

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 slimicide 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.

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 ration 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.