

1448-45

2/18/2010

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



Office of Pesticide Programs

Buckman Laboratories, Inc.
256 N. McLean Blvd.
Memphis, TN 38108

FEB 18 2010

Attention: Carl F. Watson, Ph.D.

Subject: BUSAN 93
EPA Registration No. 1448-45
Amendment Dated November 19, 2009

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

Proposed Amendment

- Revise Storage and Disposal Section per PR Notice 2007-4

General Comment

A stamped copy of the "accepted" label is enclosed for your records.

If you have any questions concerning this letter, please contact Martha Terry at (703) 308-6217.

Sincerely

A handwritten signature in cursive script that reads "M Swindell".

Marshall Swindell
Product Manager (33)
Regulatory Management Branch 1
Antimicrobials Division (7510P)

Enclosure



BUSAN 93

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BUSAN is a registered trademark.

ACTIVE INGREDIENT(S)
 2-Bromo-4'-hydroxyacetophenone.....
 2-(Thiocyanomethylthio)benzothiazole.....
 INERT INGREDIENTS.....
 TOTAL.....

ACCEPTED
 with COMMENTS
 EPA Letter Dated:

FEB 18 2010

20.0%
 8.0%
 72.0%
 100.0%

Under the Federal Insecticide,
 Fungicide, and Rodenticide Act as
 amended for the pesticide,
 registered under EPA Reg. No. 1448-45

KEEP OUT OF REACH OF CHILDREN

DANGER

| 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 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 | <ul style="list-style-type: none"> - 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 | |
| <p>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.</p> | |

Precautionary Statements

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER: Corrosive. Causes eye damage. Do not get into eyes. Fatal if inhaled, harmful if swallowed or if absorbed through the skin. Causes eye and skin irritation. Do not get in eyes, on skin, or on clothing. This product may cause skin sensitization reactions in some people. Avoid contamination of food. Wear goggles or face shield and rubber gloves when handling. When handlers use closed metering systems the handler requirements may be reduced or modified to long-sleeve shirt, long pants, shoes and socks. Users should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. Users should remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Users should remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

ENVIRONMENTAL HAZARDS: This pesticide is toxic to fish. Do not use in facilities discharging directly or indirectly to the estuarine or marine environment. Do not discharge effluent containing this product into freshwater lakes, streams and ponds 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. Secondary biological treatment of BHAP effluent discharging to freshwater environments is required for all uses except for use in secondary oil recovery systems discharging to freshwater environments. 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.



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Storage and Disposal

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

PESTICIDE STORAGE: Do not expose to extreme temperatures. Do not stack more than four 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.

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 of 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-BUCKMAN

EPA Est. No. 1448-TN-01

EPA Reg. No. 1448-45

Product Weight 9.5 lbs./gal. 1.14 kg/L

Net contents are marked on the container.

HMIS / NPCA Ratings

Health 3 Flammability 2 Reactivity 1

Last Revision

11/11/2009

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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.

BUSAN 93 is used in pulp and paper mills to control bacterial and fungal slime. It is also used to inhibit the growth of bacteria and fungi that cause the microbiological degradation of papermaking chemicals. For slime control in pulp and paper mill systems, BUSAN 93 is used at concentrations of 80 to 400 ppm, based on the total weight of fiber and water at maximum dilution for treatment periods of 2 to 6 hr. When conditions favor unusually rapid slime growth, the BUSAN 93 addition can be made once each 8 hr or once each 12 hr. Under average condition of slime growth, addition is made once each 24 hr. The addition should be made at a location where good mixing and agitation will ensure uniform distribution of BUSAN 93 in the mass of fiber and water.

SLIME CONTROL: For slime control in pulp and paper mill systems, BUSAN 93 is used at concentrations of 80-400 ppm, based on the total flow of fiber and water at maximum dilution, for treatment periods of 2-6 hours. The treatment with BUSAN 93 is repeated once each 8, each 12, or each 24 hours. The concentration of BUSAN 93 and the frequency of treatment are adjusted according to the rate of slime accretion. Best results are generally obtained by feeding BUSAN 93 into the suction side of the fan pump or into white water or stock moving to the fan pump. When necessary, this treatment can be supplemented by treatment of fresh water, slush pulp, broke, or other furnish components with BUSAN 93 or another one of the broad-spectrum BUSAN microbicides. Use of BUSAN 93 for the supplementary treatments is described in subsequent sections of this label. In addition to use of effective microbicides, good housekeeping is also essential to a good slime control program. Before treatment with BUSAN 93 is started, the system should be cleaned thoroughly to remove old deposits of slime, pitch, scale, etc., and cleaning of the system should be repeated periodically in order to get the best results from use of the microbicide. Cleaning procedures used should include both mechanical cleaning with high pressure hoses and other mechanical devices and, if possible, circulation of a hot chemical cleaning solution to all parts of the system.

FRESH WATER TREATMENT: BUSAN 93 can be used to supplemental or replace chlorine in the treatment of process fresh water. In treating fresh water, BUSAN 93 is usually employed at concentrations of 1-4 ppm for treatment periods of 3 hours out of each 8 hours. However, the frequency can be increased or decreased to provide optimum control of microorganisms. BUSAN 93 should not be added to water used for drinking or bathing.

PRESERVATION OF SLUSH PULP: Pulp stored at either high or low consistency may require treatment with a microbicide to prevent it from spoiling as the result of the growth of microorganisms. Slush pulp that may be held in storage for more than 8 hours but not more than 1 week should be treated with 0.1-0.3 kg of BUSAN 93 per tonne (0.2-0.6 lb per ton) of moisture-free pulp. The BUSAN 93 should be added in a manner that will ensure uniform distribution throughout the mass of pulp moving to storage.

RECYCLED FIBER TREATMENT: When microbiologically contaminated pulp or recycled fiber (waste paper) is added to the system, it should receive a supplementary treatment with BUSAN 93. The addition to each beater or pulper of 0.1 kg of BUSAN 93 per tonne (0.2 lb per ton) of moisture-free pulp. The BUSAN 93 should be added in a manner that will ensure uniform distribution throughout the mass of pulp moving to storage.

BROKE TREATMENT: Broke may also require supplementary treatment with BUSAN 93 to provide the best slime control. For uncoated broke, the addition of 0.1-0.2 kg of BUSAN 93 per tonne (0.2-0.4 lb per ton) will usually be adequate, but coated broke may require as much as 0.3 kg of BUSAN 93 per tonne (0.6 lb per ton).

PRESERVATION OF PAPERMAKING CHEMICALS: BUSAN 93 can be used to inhibit the growth of bacteria and fungi that cause the microbiological degradation of papermaking chemicals. The required amount of BUSAN 93 should be added in such a manner as to ensure uniform distribution throughout the substrate to be protected. If necessary, BUSAN 93 can be diluted with an equal volume or less of ethyl alcohol or isopropyl alcohol immediately prior to use to facilitate its dispersion in the substrate. The following table shows the amount of BUSAN 93 recommended for the preservation of various materials, based on the total wet weight of slurry, emulsion, or solution to be protected.

| Substrate | Parts per million of BUSAN 93 |
|---------------------------------------|-------------------------------|
| Alum solutions | 80 to 100 |
| Animal glue solutions | 80 to 150 |
| Clay slurries, phosphate dispersed | 80 to 100 |
| Coating formulations, protein binders | 150 to 400 |
| Coating formulations, starch binders | 100 to 200 |
| Starch slurries and solutions | 80 to 150 |

**ACCEPTED
with COMMENTS
* EPA Letter Dated:**

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Technical assistance on individual mill or plant problems is available upon request.