

1448-42

04-06-2010

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

APR - 6 2010

OFFICE OF
PREVENTION,
PESTICIDES
AND TOXIC SUBSTANCE

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

Subject: BUSAN 77
EPA Registration No 1448-42
Application Date: November 19, 2009
Receipt Date: January 12, 2010

Dear Dr. Watson:

The following amendment, submitted in connection with registration under section 3(c)(7)(A) of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is acceptable with the conditions listed below:

- Update the FIRST AID chart
- Update the Precautionary Statements language
- Update Directions for Use
- Update Storage and Disposal statements to be in compliance with PR Notice 2007-4

Conditions

Revise the label as follows:

1. On page 1, the FIRST AID chart needs to be reorganized so that the toxicity category III statements precede the toxicity category IV statements. Reorganize the chart so that the FIRST AID statements are in the following order: "If swallowed", "If in eyes", "If on skin or clothing", and "If inhaled".
2. On page 1, the Precautionary Statements language must be revised to read as follows:

CAUTION. Causes moderate eye irritation. Harmful if swallowed or absorbed through the skin. Avoid breathing vapors. Avoid contact with skin, eyes or clothing. Wear chemical-resistant eyewear. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash clothing before reuse."
3. On page 2 in the Directions for Use under the subheading "Cutting Fluids or Oils", revise the fourth sentence to read, "For preservation of cutting fluids use 0.01 to 0.10% of BUSAN 77, based on the total weight of the diluted cutting fluid."

4. On pages 4, 5 and 6, revise the subheading "Container Disposal" to read "Container Handling".
5. On pages 4 and 5, delete the third sentence, "Offer for recycling if available", under Container Handling for non-refillable containers with a capacity of 5 gallons or less and greater than 5 gallons because it appears as the last statement in the second paragraph for this section.
6. On page 4, 5, and 6, revise the last statement under Container Handling for all container sizes to read: "Then offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities." Since your product is packaged in both plastic and metal containers, you must remove the reference to burning as you can not burn metal containers.
7. On page 5 and 6, revise the refillable containers with a capacity of 55 gallons or less and greater than 55 gallons statements section by deleting the last paragraph because it references discharging of rinsate which is this language presented under the Environmental Hazards section.

General Comments

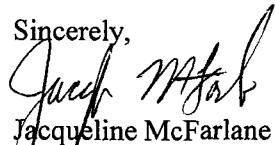
A stamped copy of the labeling accepted with conditions is enclosed. Submit three (3) copies of your final printed labeling before distributing or selling the product bearing the revised labeling.

Submit and/or cite all data required for registration/reregistration of your product under FIFRA section 3(c)(5) when the Agency requires all registrants of similar products to submit such data.

If the above conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(e). Your release for shipment of the product bearing the amended labeling constitutes acceptance of these conditions.

Should you have any questions or comments concerning this letter, please contact me by telephone at (703) 308-6416 or email at: campbell-mcfarlane.jacqueline@epa.gov or Heather Garvie by telephone at (703) 308-0034 or email at: garvie.heather@epa.gov

Sincerely,



Jacqueline McFarlane
(Acting) Product Manager (34)
Regulatory Management Branch II
Antimicrobials Division (7510P)

BUSAN 77

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ACTIVE INGREDIENT(S)

Poly[oxyethylene(dimethyliminio)ethylene(dimethyliminio)ethylene dichloride].....

60.0%

INERT INGREDIENTS.....

40.0%

TOTAL.....

100.0%

KEEP OUT OF REACH OF CHILDREN

CAUTION

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

CAUTION: CAUTION: Harmful if swallowed. Avoid breathing vapor. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

ENVIRONMENTAL HAZARDS: This pesticide is toxic to fish, aquatic invertebrates and clams. 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.

ACCEPTED
with COMMENTS
in EPA Letter Dated:

APR - 6 2010

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

1448-42

BUSAN 77

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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 77 is used to control the growth of algae in swimming pools, heated swimming pools, exterior spas, whirlpools, hot tubs and decorative fountains that do not contain fish. It is also used to control algae, bacteria, fungi and mollusks in industrial cooling water and industrial process water systems; control bacteria in industrial water cooling systems; and to inhibit the growth of bacteria that cause degradation of cutting fluids.

INDUSTRIAL FRESH WATER SYSTEMS: BUSAN 77 is used to control the growth of algae, bacteria and fungi in holding and processing tanks of industrial fresh water systems supplying water to pulp and paper mills, and other manufacturing plants. In such systems, it is employed as a replacement for or supplement to the conventional treatment with chlorine or chlorine compounds. In pulp and paper mills, treatment of the fresh water with BUSAN 77 can make an important contribution to slime control. The use of BUSAN 77 as described will reduce the development of slime in fresh water pipes, fresh water spraying nozzles, and on the pulp and paper mill machine parts contacted by fresh water. However, BUSAN 77 is not recommended for use as the primary microbiocide for pulp and paper mill slime control since absorbents such as wood pulp rapidly absorb the product and greatly reduce its concentration in the circulating water. NOTE: Do not use in paper and paperboard that will contact food.

For the control of algae, bacteria, and fungi in industrial fresh water systems, BUSAN 77 is added at the rate of 1 to 11 fluid ounces of BUSAN 77 per 10,000 gallons of water to provide a concentration of 1 to 10 ppm BUSAN 77. Treatment is usually made continuously and is based on the amount of water entering the intermediate processing operations. In some cases, regular treatment periods of several hours each day will provide adequate control of the microorganisms.

WATER COOLING SYSTEMS: Prior to the use of BUSAN 77 in water cooling towers, clean the systems to remove algal growth, microbiological slime, and other deposits. Then make an initial slug addition of 0.9 to 2.2 fluid ounces of BUSAN 77 per 1000 gallons of water to provide 8 to 20 ppm BUSAN 77, based on the total weight of water in the system. Repeat initial dosage until control is evident. Make subsequent slug additions of 0.2 to 2.2 fluid ounces of BUSAN 77 per 1000 gallons of water (2 to 20 ppm BUSAN 77) every 2 to 5 days or as needed. The frequency of addition depends upon the relative amount of bleedoff and the severity of the microbiological problem. Make slug additions in the sump of water cooling towers.

MOLLUSK CONTROL: To control mollusks such as *Corbicula* species in recirculating cooling water and industrial systems, add BUSAN 77 at dosage rates of 2 to 20 ppm. Make continuous or intermittent additions at the intake water. Continuous addition is required for noticeably fouled systems. Intermittent feeding is used to maintain control. BUSAN 77 is used to control algae and mollusks such as *Corbicula* and *Dreissena* species in potable water treatment systems. Mitigation: Add BUSAN 77 to the raw water at dosage rates of 2 to 5 ppm (2 to 5 mL of BUSAN 77 / 1000 L of water). For badly fouled systems, treat continuously for up to 21 days, followed by regular control treatments. Control: To avoid fouling of potable water systems by mollusks, treat the raw water at 2 ppm for 60 minutes, repeating this treatment daily or a continuous feed of 0.5 mg/L.

INDUSTRIAL AIR WASHING SYSTEMS: BUSAN 77 is used to control bacteria in industrial air washing systems that maintain effective mist eliminating components. Prior to its use, clean the systems to remove bacterial slime and other deposits. An initial slug dose of 3.33 to 5.55 fluid ounces of BUSAN 77 per 1000 gallons of water is recommended. Repeat initial dosage until control is evident. Make subsequent slug additions of 2.25 to 5.55 fluid ounces of BUSAN 77 per 1000 gallons of water each 1 to 5 days, or as needed. The frequency of addition depends upon the relative amount of bleedoff and severity of the bacterial problem. Make slug additions into the sump or into the water collection trays of the airwash system.

SWIMMING POOLS, EXTERIOR SPAS, WHIRLPOOLS AND HOT TUBS: For maximum effectiveness of BUSAN 77 in swimming pools, heated swimming pools, exterior spas, whirlpools and hot tubs, clean those systems with heavy growth of algae prior to using BUSAN 77.

For pools having just visible algae growth, add an initial dose of 11 to 17 fluid ounces of BUSAN 77 per 10,000 gallons of water and remove settled algae debris by cleaning. For treatment of a freshly cleaned and filled pool, add initially 6 to 11 fluid ounces of BUSAN 77 per 10,000 gallons of water. To maintain pools free of visible algae growth, make subsequent additions of 2 to 4 fluid ounces of BUSAN 77 per 10,000 gallons of water every 5 to 7 days after the initial treatment. Uniform distribution of BUSAN 77 throughout the water in the pool is necessary for maximum effectiveness.

Spas, whirlpools and hot tubs having just visible algae growth require an initial dose of 1 to 2 fluid ounces of BUSAN 77 per 1000 gallons of water. For treatment of a freshly cleaned spa, whirlpool or hot tub, add 0.6 to 1.1 fluid ounces of BUSAN 77 per 1,000 gallons of water. Make subsequent additions of 0.2 to 0.4 fluid ounces of WSCP 77 every 5 to 7 days after initial treatment for maintenance.

BUSAN 77 will prevent growth of most algae during the off-season winter months when pools are not in use. For pools, which have been properly treated during the swimming season and are free of visible algae, add 6 to 10 fluid ounces of algicide per 10,000 gallons of water. If, at the end of the swimming season, pools have some visible algae growth, add 12 to 17 fluid ounces per 10,000 gallons. It is necessary that a uniform distribution of algicide throughout the water and the pool be made for maximum effectiveness. If pool is not covered, it may be necessary to repeat the treatment one or more times during the season.

BUSAN 77 is compatible with those chemicals normally used to treat pools and is effective at both acid and alkaline pH. BUSAN 77 can be used in pools treated with chlorine chemicals and may reduce the amount of those chemicals normally required. However, do not mix BUSAN 77 with concentrated dry or liquid chlorine products.

DECORATIVE FOUNTAINS: BUSAN 77 is used to control the growth of algae in decorative fountains that do not contain fish. Manually clean heavy growths of algae prior to treatment. Fountains with just visible algae growth require an initial dose of 1.0 to 2.0 fluid ounces of BUSAN 77 per 1000 gallons of water. To treat a freshly cleaned and filled fountain, add 0.5 to 1.5 fluid ounces of BUSAN 77 per 1000 gallons of water. For maintenance dosages, add 0.2 to 0.5 fluid ounces of BUSAN 77 per 1000 gallons of water every 5 to 7 days as needed. Make sure BUSAN 77 is added at a point where it can be uniformly distributed. BUSAN 77 may be used in fountains treated with chlorine chemicals, but do not mix BUSAN 77 with concentrated dry or liquid chlorine products.

CUTTING FLUIDS OR OILS: BUSAN 77 is employed for the inhibition of bacterial degradation of aqueous solutions or emulsions of the cutting fluids or oils employed as lubricants or coolants in the machining and processing of metals. It is recommended for the preservation of water-based synthetic metalworking fluids based on amines, borates, phosphates, nitrates, etc, and also for the protection of those fluids based on soluble or emulsifying oils modified with nonionic surfactants. It is not recommended, however, for use in insoluble or straight oils or in fluids containing anionic surfactants. For preservation of cutting fluids, 0.01 to 0.10% of BUSAN 77, based on the total weight of the diluted cutting fluid, is recommended. In some cases, BUSAN 77 may be added to the concentrated fluids. In these cases, add sufficient amount of BUSAN 77 to achieve concentrations of 0.01 to 0.1% when the fluid is diluted with water for use in metalworking operations. For continued protection against bacterial degradation, repeat treatment of the diluted cutting fluid every four weeks. More frequent treatment may be necessary if excessive contamination of a particular cutting fluid system occurs. The latter condition may be indicated by the development of abnormal odors or an unusual appearance of the cutting fluid solution or emulsion and can be determined by bacteriological testing procedures.

BUSAN 77

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Storage and Disposal

See attached document for Storage and Disposal.

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. 1448-42

Product Weight **9.6 lbs./gal. 1.15 kg/L**

Net contents are marked on the container.

HMIS / NPCA Ratings

Health 1 Flammability 1 Reactivity 0

Last
Revision
3/31/2010

(Non-refillable Containers, capacity of 5 gallons or less)

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal. Do not ship with Food, Feed, Drugs, or Clothing.

PESTICIDE STORAGE: Keep container closed when not in use. Spills should be absorbed in sawdust or sand and disposed of in a sanitary landfill.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product may be disposed of on-site or at an approved waste disposal facility.

CONTAINER DISPOSAL: Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Triple rinse container (or equivalent) promptly after emptying. 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 the later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

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.

(Nonrefillable Containers, capacity of greater than 5 gallons)

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal. Do not ship with Food, Feed, Drugs, or Clothing.

PESTICIDE STORAGE: Do not stack more than four drums high. 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 the nearest EPA Regional Office for guidance.

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

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.

(Refillable Containers, capacity of 55 gallons or less)

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal. Do not ship with Food, Feed, Drugs, or Clothing.

PESTICIDE STORAGE: Keep container closed when not in use. Spills should be absorbed in sawdust or sand and disposed of in a sanitary landfill.

PESTICIDE STORAGE: Do not stack more than four drums high. 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.

CONTAINER HANDLING: 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.

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.

(Refillable Plastic Containers, capacity of greater than 55 gallons)

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal. Do not ship with Food, Feed, Drugs, or Clothing.

PESTICIDE STORAGE: Do not stack more than four drums high. 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 the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL: 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.

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.

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.