

1448-439

6/20/2011

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

JUN 20 2011

OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

Buckman Laboratories, Inc.  
1256 North McLean Blvd.  
Memphis, TN 38108-1241 USA

Attention: Jeffery M. Thorne  
Director, Compliance

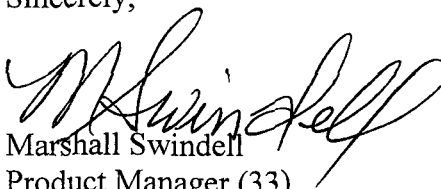
Subject: Busan 1234  
EPA Reg. No.: 1448-439  
Amendment Application Dated May 12, 2011

The amendment referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is acceptable.

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

If you have any questions concerning this letter, please contact Abigail Downs at (703) 305-5259.

Sincerely,

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

# BUSAN 1234

BUSAN is a registered trademark.

2014

ACCEPTED  
with COMMENTS  
in EPA Label Draft

## Buckman

JUN 20 2011

**ACTIVE INGREDIENT(S)**

2-(Thiocyanomethylthio)benzothiazole.....

Methylene bis(thiocyanate).....

**INERT INGREDIENTS**.....

**TOTAL**.....

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

10%  
10%  
80%  
100%

1448-439

**KEEP OUT OF REACH OF CHILDREN**

## DANGER

### 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.

### NOTE TO PHYSICIAN

Probable mucosal damage may contraindicate the use of gastric lavage.

## Precautionary Statements

### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**DANGER:** Corrosive. Causes irreversible eye damage or skin burns. May be fatal if swallowed or inhaled. Do not get in eyes, on skin, or on clothing. Do not breathe vapor. Prolonged or frequently repeated skin contact may cause allergic reaction in some individuals. For handling activities during exposures, wear either a respirator with an organic vapor removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C), or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G), or a NIOSH approved respirator with an organic vapor (OV) cartridge or canister with any R, P, or HE prefilter. Wear coveralls with long-sleeved shirt and long pants, socks and chemical resistant footwear, goggles or face shield, and chemical-resistant gloves (such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, polyvinyl chloride, viton; selection category C). Handlers participating in hand-dip applications, including introduction of material to and removal from the dip and handling materials still wet from the dip, must wear: chemical-resistant full-front aprons with attached full-sleeve gloves. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry. Discard clothing or other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. For cleaning equipment: Add a chemical-resistant apron. User must wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. If pesticide gets inside clothing, remove clothing immediately; wash thoroughly and put on clean clothing. Users must 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. Remove contaminated clothing and wash clothing before reuse. Treated lumber must be stored under cover, indoors, or at least 100 feet from any pond, lake, stream, wetland, or river to prevent possible runoff of the product into the waterway. Treated lumber stored within 100 feet of a pond, lake, stream, or river must be either covered with plastic or surround by a berm to prevent surface water runoff into the nearby waterway. If a berm or curb is used around the site, it should consist of impermeable material (clay, asphalt, concrete) and be of sufficient height to prevent runoff during heavy rainfall.

**ENVIRONMENTAL HAZARDS:** This pesticide is toxic to fish and aquatic organisms. For terrestrial uses, do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. 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 AND CHEMICAL HAZARDS:** Combustible. Do not use or store near heat or open flames.

# BUSAN 1234

BUSAN is a registered trademark.

with DIRECTIONS  
to EPA Label (Text)

3044

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

## Buckman

### Directions for Use

1448-439

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

**NOTE TO USER:** Do not apply this product in a way that will contact workers or other persons.

**SAPSTAIN AND MOLD CONTROL:** BUSAN 1234 is used to control sapstain and mold on freshly cut hardwood and softwood lumber, logs, poles, posts and timbers. It is applied by dipping the wood until complete surface wetting is accomplished. Use 0.5 to 2.0 gallons of BUSAN 1234/100 gallons water (5 to 18 lbs of BUSAN 1234/100 gallons water) and agitate vigorously until BUSAN 1234 is thoroughly dispersed. Rates to be used will vary according to temperature, humidity, wood moisture, storage conditions, etc. Under conditions suitable for aggressive mold growth, the high rate mentioned above should be used. Treatment should be made as quickly as possible after lumber is cut and always within 24 hours after cutting.

**PAPER MILLS:** To control bacterial and fungal growth on paper and paperboard machines, BUSAN 1234 is added to the white water or stock at 0.1 to 0.5 lb./ton of dry paper or paperboard produced. To inhibit the growth of bacteria and fungi in papermaking additives (including alum solutions, animal glue solutions, pigment slurrings, coating formulations, and starch slurries and solutions) BUSAN 1234 is added to these materials in concentrations of 50-400 ppm (weight/weight). Pulp that may be held in storage for 8 hours to 1 week should be treated with 0.25 to 0.75 kg of BUSAN 1234 per tonne (0.5 to 1.5 lbs per ton) of moisture-free pulp. BUSAN 1234 may be added to contaminated fresh water at the rate of 0.25-1 ppm for treatment periods of 6-12 hours out of each 24 hours.

**PULP MILLS:** To protect wood chips from fungal degradation during storage, BUSAN 1234 is used at 0.5 to 2 lbs/ton of oven-dry wood. It can be applied through a water shower located in the pneumatic conveyor carrying chips from the chipper to the storage pile. All persons not directly participating in such spray applications in enclosed or indoor areas must be excluded from the treatment site and from an area extending at least 25 feet from the perimeter of the treatment site until application is complete and sprays have settled out of the air. For preservation of wet lap or sheet pulp, BUSAN 1234 is used at 0.5 to 4 lbs/ton of oven-dry fiber. It is applied by addition to the white water or stock, or to the surface of dewatered pulp by means of applicator rolls. Pulp that may be held in storage for 8 hours to 1 week should be treated with 0.25 to 0.75 kg of BUSAN 1234 per tonne (0.5 to 1.5 lbs per ton) of moisture-free pulp. *Not registered for this use in California.*

**PARTICLE BOARD:** BUSAN 1234 is employed as a preservative against mold and fungi for particle board, insulation board, and other wood-base fiber and particle panel materials. In this use, BUSAN 1234 is mixed with the furnish, resin, or binding agent at 0.1 to 0.3% based on the dry weight of the wood. *Not registered for this use in California.*

**BACTERIOSTATIC PAPER:** BUSAN 1234 may be used in the production of bacteriostatic paper and paperboard when included in the coating formulation at a dosage of 0.5-9.0% weight/weight of product and added at the size press or similar application. The bacteriostatic paper and paperboard applications are not to be used in the manufacture of food contact paper, paper coatings, or paperboard. *Not registered for this use in California.*

**COOLING TOWERS:** BUSAN 1234 is used to protect cooling tower wood against soft or surface rot and internal or dry rot. It is applied by painting a dispersion containing 0.5 to 0.7% BUSAN 1234 in water onto the clean wood surfaces. The amount applied should provide 0.6 to 0.8 lb. BUSAN 1234 per 1000 sq. ft of wood surface. Soft or surface rot can also be inhibited by periodic shock doses of BUSAN 1234 to the recirculating cooling water at the tower basin or cold well. The dosage should provide 1.25 lb. of BUSAN 1234 per 1000 gal of water and the bleedoff should be stopped for 4 to 6 hr after treatment. The shock treatment should be repeated every four months. In systems greater than or equal to 4000 gallons, do not apply BUSAN 1234 by open pouring of liquid to cooling water systems; a metering pump delivery system is required for this use and application method. *Not registered for this use in California.*

**COOLING WATER:** BUSAN 1234 is used to control algae, bacteria and fungi in industrial recirculating cooling water systems. Before treatment is begun, the system should be cleaned thoroughly to remove old algal growth, microbiological slime, and other deposits. The system should then be drained, flushed, refilled with water, and treated with an initial dose of 0.6 to 3.7 fl oz BUSAN 1234 per 1000 gal water in the system. Subsequent additions of 0.2 to 1.2 fl oz per 1000 gal should be made every 1 to 5 days, depending on amount of bleedoff and severity of microbiological fouling. In systems greater than or equal to 4000 gallons, do not apply BUSAN 1234 by open pouring of liquid to cooling water systems; a metering pump delivery system is required for this use and application method.

**DRILLING FLUIDS:** To inhibit bacterial and fungal degradation of the fluids or muds used in the drilling of wells, BUSAN 1234 is incorporated in the drilling fluid at concentrations of 0.05 to 0.25% based on the total wet weight of the fluid.

**PETROLEUM SECONDARY RECOVERY:** BUSAN 1234 is used to control sulfate-reducing bacteria, slime-forming bacteria and fungi in oil-field water, polymer, or micellar floods, water-disposal systems, and other oil-field water systems at dosage rates of 3.9 to 13.0 fl oz of BUSAN 1234 per 1000 gal of water treated. Additions should be made continuously or intermittently by means of a metering pump at the free water knockouts, before or after injection pumps and injection well headers. Continuous Feed Method: When system is noticeably fouled, add 3.9 to 13.0 fl oz BUSAN 1234 per 1000 gal of water continuously until desired degree of control is achieved. Then treat with 3.9 to 13.0 fl oz BUSAN 1234 per 1000 gal of water continuously, or as needed to maintain control. Intermittent or Slug Method: When system is noticeably fouled, or to maintain control, add 3.9 to 13.0 fl oz BUSAN 1234 per 1000 gal of water for 4 to 8 hr per day and 1 to 4 times per week, or as needed to maintain control.

**CRUDE AND REFINED OILS:** BUSAN 1234 is an oil-soluble preservative for the control of bacteria and fungi that cause the degradation of crude oil and refined fuel oils during storage. Crude and refined oils include, but are not limited to, olefinic, aromatic, paraffinic, and naphthenic oils. It should be added to the oil as it is being transferred from the shipping container to the storage tank at the rate of 0.6 to 6.0 fl. oz. per 1000 gal of oil. Addition should be made batchwise where mixing occurs or continuously to the suction side of the transfer pump.

**HIDES AND SKINS:** BUSAN 1234 is used to prevent bacterial decomposition of brine cured hides and skins. BUSAN 1234 should be used at a level of 0.003-0.02% (30-200 ppm) based upon the weight of green fleshed hides or skins and saturated brine solution. In raceway operations, BUSAN 1234 can be added directly to the raceway during the addition of hides and operation of paddles. In processor/mixer applications, BUSAN 1234 should be added as dispersion in water. A satisfactory dispersion of 1 part BUSAN 1234 plus 4 parts water can be prepared by adding the BUSAN 1234 to the water (as opposed to adding water to BUSAN 1234) with agitation. *Not registered for this use in California.*

**LEATHER:** BUSAN 1234 can be used to prevent bacterial decomposition of brine cured, wet salted, air-dried or green fleshed hides/skins in the soaking process. For this purpose, treatment levels of 0.02-0.05% (200-500 ppm) based on the total weight of hides/skins and process water (float). BUSAN 1234 is recommended for the prevention of mold in the storage, transport and processing of wet leather stock such as pickled, vegetable-, chrome-, alternative metal or metal free tanned hides/skins. For this purpose, BUSAN 1234 is used at treatment rates of 0.05-0.25% (500-2500 ppm) of white lime stock weight. A dispersion as described above should be prepared and added to the pickling solution or tanning liquor or during the tanning operation or to the rinse water in a post tanning refloat. The product can also be applied during the fatliquoring process to prevent fungal growth at 0.025-0.075% (250-750 ppm) based on the split and shaved weight of leather being processed. *Not registered for this use in California.*

**PIGMENT SLURRIES, NON-FOOD ADHESIVES, CAULKS AND SEALANTS:** For the preservation of pigment slurries, non-food adhesives, caulks and sealants, BUSAN 1234 should be added at a point in the processing system where there is sufficient time and agitation for good mixing and dispersion. The actual amount of material to be added for the preservation of any given formulation will depend on the components and storage time and conditions. Dosage rates should be determined by actual testing. For pigment slurries, non-food adhesives, caulks and sealants which are subject to bacterial and fungal attack in their containers, BUSAN 1234 should be added at use levels of 0.5 to 0.75% by weight to inhibit this attack. To inhibit fungal growth on the non-food adhesive, caulk, or sealant, BUSAN 1234 should be incorporated at a use level of 0.75 to 2.5% by weight.

# BUSAN 1234

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4084

ACCEPTED  
with COMMENTS  
in EPA Letter Dated:

## Buckman

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

1448-439

### 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 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 non-refillable containers)

Non-refillable 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 non-refillable 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 non-refillable 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 non-refillable 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. 1448-439

Product Weight 9.2 lbs./gal. 1.1 kg/l

Net contents are marked on the container.

**HMIS / NPCA Ratings**

Health 3 Flammability 1 Reactivity 1

**Last Revision**

**4/27/2011**