



U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Pesticide Programs
Antimicrobials Division (7510C)
1200 Pennsylvania Avenue NW
Washington, D.C. 20460

NOTICE OF PESTICIDE:

Registration
[x] Reregistration
(under FIFRA, as amended)

EPA Reg. Number:

1448-53

Date of Issuance

NOV 23

Term of Issuance:

Conditional

Name of Pesticide Product:

Busan 881

Name and Address of Registrant (include ZIP Code):

Buckman Laboratories, Inc.
1256 N. McLean Blvd
Memphis, TN 38108

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

Based on your response to the Potassium N-methyldithiocarbamate RED, the EPA has reregistered this product subject to the comments recorded in the succeeding paragraph. This action is taken under the authority of section 4(g) (2) of the Federal Insecticide, Fungicide and Rodenticide Acts, as amended. Reregistration under this section does not eliminate the need for continual reassessment of pesticides. The EPA may require submission of data at any time to maintain the registration of the subject product.

1. Make the following label changes:

a. The EPA Registration Number must read "1448-53".

Signature of Approving Official:

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

[Handwritten signature of Marshall Swindell]

Date:

NOV 23 2011

b. Additional text must be added to the Note to Physician that addresses eye irritation concerns.

c. Per the acute toxicity review, the Hazards to Humans and Domestic Animals must be revised to read:

"DANGER

Corrosive. Causes irreversible eye damage and skin burns. Do not get in eyes, on skin, or on clothing. Harmful if swallowed. Harmful if absorbed through skin. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Wear goggles or face shield, coveralls over long-sleeved shirt and long pants, socks, chemical-resistant footwear, chemical-resistant gloves made of any waterproof material, and a chemical-resistant apron when cleaning equipment.

d. The following User Safety Requirements text must be added to the label:

"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.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them."

e. Per the acute toxicity review, the following User Safety Recommendations must be added to the label:

"User Safety Recommendations

Wash hands before, eating, drinking, chewing gum, using tobacco, or using the toilet.

Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

Remove PPE immediately after handling this product. As soon as possible, wash thoroughly and change into clean clothing."

f. The first sentence of the Environmental Hazard statement must be revised per the RED to read "this pesticide is toxic to mammals, birds, aquatic invertebrates and fish."

g. Per Page 201 of the RED, the text "a metering pump system must be used when applying this product" must be added to the label.

2. For additional labeling clarity and consistency, please refer to the enclosed EPA reviews.

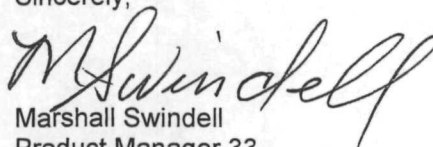
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EPA Registration No. 1448-53

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

Submit two (2) copies of the revised labeling bearing the labeling revisions listed above. A stamped copy of the label is enclosed for your records.

If you have questions concerning this matter, please contact me at (703) 308-6341 or by email at swindell.marshall@epa.gov or Martha L. Terry at (703) 308-6217 or by email at terry.martha@epa.gov.

Sincerely,



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

Enclosures

BUSAN 881

BUSAN is a registered trademark.

ACCEPTED
with COMMENTS
EPA Letter Dated:

Buckman

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ACTIVE INGREDIENT(S)

Disodium cyanodithioimidocarbonate.....

Potassium N-methyldithiocarbamate.....

INERT INGREDIENTS.....

TOTAL.....

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

14.7%
20.3%
65.0%
100.0%

1448-53

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 and skin burns. Harmful or fatal if swallowed. Harmful if absorbed through the skin or inhaled. Do not get in eyes, on skin, or on clothing. Wear goggles or face shield, protective clothing, and rubber gloves. Wash thoroughly after handling and before eating, drinking, or using tobacco. Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove contaminated clothing and wash before reuse. Avoid contamination of food.

ENVIRONMENTAL HAZARDS: This pesticide is toxic to fish and aquatic organisms. Do not contaminate water by cleaning of equipment or disposal of waste. 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.

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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 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 toxic. 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. 1448-53

Product Weight 10.2 lbs./gal. 1.22 kg/L

ACCEPTED
with COMMENTS
EPA Letter Dated:
Net contents are marked on the container.

HMIS / NPCA Ratings

Health 3 Flammability 1 Reactivity 1

NOV 23 2011
Under the Federal Insecticide,
Fungicide, and Rodenticide Act as
amended, for the pesticide,
registered under EPA Reg. No.

Last Revision

11/12/2009

BUSAN 881

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ACCEPTED
with COMMENTS
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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.

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

PULP AND PAPERMILLS: BUSAN 881 is used to control bacterial slime. BUSAN 881 can be fed directly from the shipping containers by use of chemical-metering pumps. It can also be dispersed in suitable measuring containers or by means of drip-feed devices. For control of bacterial slime in pulp and paper systems, BUSAN 881 is added at 0.4 to 2.0 kg per ton (0.8 to 4.0 lb. per ton) of pulp or paper (dry basis) for treatment periods of 6 hours out of each 12 or each 24 hours. The concentration and frequency of treatment should be adjusted higher or lower according to the rate of slime accretion. Best results are generally obtained by feeding BUSAN 881 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 881. When microbiologically contaminated furnish is added to the system, the supplementary addition of 0.5 kg of BUSAN 881 per metric ton (1.0 lb. per ton) of this furnish (dry basis) to each beater or pulper will aid in keeping the system free of slime. Broke may also require supplementary treatment. For uncoated broke, the addition of 0.25 to 0.5 kg of BUSAN 881 per ton (0.5 to 1.0 lb. per ton) will usually be adequate, but coated broke may require as much as 1.0 kg of BUSAN 881 per ton (2.0 lb. per ton). Slush pulp may require treatment with a microbicide to preserve the pulp and prevent contamination of papermaking systems. 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 881 per ton (0.5 to 1.5 lb. per ton) of moisture-free pulp. When the fresh water used on a machine is a significant source of microbiological contamination, treatment of this water with BUSAN 881 will aid in slime control on the machine. For this purpose, BUSAN 881 is added to the fresh water at concentrations of 2 to 5 ppm for treatment period of 6 to 12 hours out of each 24 hours. BUSAN 881 should not be added to water used for drinking or bathing. BUSAN 881 may be used in pulp and paper mills to inhibit the growth of microorganisms that cause the degradation of papermaking additives (clay slurries, starch slurries and solutions, coating formulations pigment slurries, and animal glue solutions). It should be added in such a manner to ensure uniform distribution throughout the system to be protected in concentrations of 50 to 400 ppm.

PETROLEUM SECONDARY RECOVERY OPERATIONS: BUSAN 881 is used in waterfloods to control sulfate-reducing bacteria, iron bacteria, and bacteria that cause slime.

Sulfate Reducers: BUSAN 881 is effective for the control of sulfate-reducing bacteria (*Desulfovibrio* sp.) in many types of waters utilized in secondary recovery of petroleum, including produced salt water, sea water, salt water from wells, commingled waters, waters retained in open ponds, and water going to disposal wells. It is employed for this purpose at 1.0 to 1.5 fl oz per 1000 gallons of water treated (10 - 15 ppm by weight). Treatment of produced waters with BUSAN 881 should be continuous and the product should be added at the heater-treater dump, into gathering lines, or into receiving tanks. Treatment should always be upstream from the filter. Wells should be treated continuously by adding BUSAN 881 at the well annulus or into the tank before the filter. The best treatment point for commingled water is as far upstream as possible. For example with a waterflood using produced water mixed with fresh water for make-up, BUSAN 881 is usually introduced at the heater-treater dump on the salt-water line and down the annulus of the fresh water well. For seawater the usually recommended point of addition is the first holding tank. Water obtained from a well adjacent to a source of seawater should be treated with BUSAN 881 down the annulus of the well to protect the well equipment and transfer lines. Use of BUSAN 881 in gathering or skimming ponds serves to keep the population of sulfate reducing bacteria at a minimum while the water is held in ponds so that a better quality of water with hydrogen sulfide will be available for the processing plant. BUSAN 881 should be added to the gathering line going to the first pond at the rate of 1 fl oz per 1000 gallons of water going to the pond (10 ppm of BUSAN 881 based on the total weight of the water going to the pond). An additional 1.0 fl oz per 1000 gallons (10 ppm) should be fed ahead of the filters. To minimize sulfide generation by sulfate reducers and subsequent plugging of disposal wells, BUSAN 881 should be added to the produced waters going to the wells. Addition should be made at the gathering or skimming pond before the pumps inject water into the well. The recommended amount is 1.0 fl oz of BUSAN 881 per 1000 gallons of water (10 ppm). **Iron Bacteria and Other Bacteria:** BUSAN 881 is effective for the control of iron bacteria and other troublesome bacteria that are sometimes present in fresh water. The place of application recommended is as far upstream in the system as possible, and the amount recommended is 1.0 fl oz of BUSAN 881 per 1000 gallons of water (10 ppm BUSAN 881). For example, when long lines are used from the source well to the holding tank, BUSAN 881 should be added at the source well annulus. When a short line is involved, treatment can be made at the intake of the first holding tank or surge tank, but it always should be made upstream from the filter.

COOLING WATER SYSTEMS: BUSAN 881 is used to inhibit the microorganisms in industrial, commercial and institutional cooling water system. In noticeably fouled systems, BUSAN 881 should be added at a rate of 1.5 to 3.0 fl. oz. of BUSAN 881 per 1000 gallons of system water (15 - 30 ppm) by until control is evident. Subsequent additions of BUSAN 881 should be made to the system as needed at a rate of 0.5 to 3.0 fl oz of BUSAN 881 per 1000 gallons of system water (5 - 30 ppm) to maintain control. The frequency of treatment depends upon the severity of the microbiological problem. For best results the system should be cleaned prior to treatment.