 <p style="text-align: center;">U.S. ENVIRONMENTAL PROTECTION AGENCY Office of Pesticide Programs Registration Division (H7505C) 401 "M" St., S.W. Washington, D.C. 20460</p> <p style="text-align: center;">NOTICE OF PESTICIDE: <u> X </u> Registration <u> </u> Reregistration</p> <p>(under FIFRA, as amended)</p>	EPA Reg. Number: 1448-383	Date of Issuance: June 9, 1997
	Term of Issuance: Conditional	
	Name of Pesticide Product: Busan 1146	
Name and Address of Registrant (include ZIP Code): Buckman Laboratories, Inc. 1256 North McLean Blvd. Memphis, TN. 38108-0305		
<p>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.</p> <p>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.</p> <p>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.</p> <p style="text-align: center;">This product is conditionally registered in accordance with FIFRA sec. 3(c)(7)(A) provided that you:</p> <ol style="list-style-type: none"> 1. Submit and/or cite all data required for registration/reregistration of your product under FIFRA sec. 3(c)(5) when the Agency requires all registrants of similar products to submit such data; and submit acceptable responses required for reregistration of your product under FIFRA section 4. 2. Make the labeling change listed below before you release the product for shipment: <ol style="list-style-type: none"> a. Revise the EPA Registration Number to read, "EPA Reg. No. 1448-383". b. Submit two copies of the revised final printed label for the record. 		
Signature of Approving Official: <i>MSwindell</i> Marshall Swindell Acting Product Manager 33 Regulatory Management Branch 1 Antimicrobial Division (7504C)		Date: JUN _9 1997

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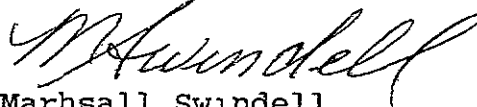
3. The Confidential Statement of Formula dated January 30, 1997 is in compliance with PR Notice 91-2, it agrees with the label and is acceptable.

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.

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

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

Sincerely,



Marhsall Swindell
Acting Product Manager 33
Regulatory Management Branch 1
Antimicrobial Division (7504C)

Enclosure

9/3
ACCEPTED
with COMMENTS
to EPA Letter Dates

BUSAN 1146

JUN 9 1997

KEEP OUT OF REACH OF CHILDREN
DANGER

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

1448-383

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. This product may cause allergic skin reactions. Workmen handling the product should wear rubber gloves and goggles and should avoid contact of the product with clothing or skin.

STATEMENT OF PRACTICAL TREATMENT: Ingestion: Do not induce vomiting. Rinse with copious amounts of water or milk. Avoid giving alcohol or alcohol related products. In cases where the individual is semi-comatose, comatose or convulsing, DO NOT GIVE FLUIDS BY MOUTH. In case of internal ingestion of the product seek medical assistance immediately; take individual to nearest medical facility. In case of skin contact, wash promptly and thoroughly with an abrasive soap and cool water and finally with glycerin. In case of persistent irritation of the skin, obtain medical attention. If product gets in eyes it causes eye damage. Flood eyes immediately and thoroughly with cool water for 15 to 30 minutes. See a physician if any irritation persist. If inhaled move person to a well ventilated place and apply artificial respiration if required. Call a physician.

ENVIRONMENTAL HAZARDS: 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.

STORAGE AND DISPOSAL

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: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

DIRECTIONS FOR USE

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

Busan 1146 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 1146 is used at concentrations of 80 to 400 ppm, based on total weight of fiber and water at maximum dilution. The addition should be made at a location where good mixing and agitation will ensure uniform distribution of Busan 1146 in the mass of fiber and water. Best results are generally obtained by feeding Busan 1146 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

ACTIVE INGREDIENTS:
2-(Thiocyanomethylthio)benzothiazole 4.0 %
BHPAP
2-Bromo-4'-hydroxyacetophenone 7.6 %
Related brominated species 2.4 %
INERT INGREDIENTS: 86.0 %

water, slush pulp, broke, or other furnish components with Busan 1146 or another one of the broad-spectrum Busan microbiocides.

Before treatment with Busan 1146 is started, the systems 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 microbiocides. 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 1146 can be used to supplemental or replace chlorine in the treatment of process fresh water. In treating fresh water, Busan 1146 is usually employed at concentrations of 1-8 ppm. Busan 1146 should not be added to water used for drinking or bathing.

PRESERVATION OF SLUSH PULP, WET LAMP PULP, RECYCLED FIBER, or BROKE: Pulp stored at either high or low consistency requires treatment with a microbiocide to prevent it from spoiling as the result of the growth of microorganisms. This may be slush pulp produced in the mill, wet lap pulp shipped to or from another mill, either virgin pulp, or recycled pulp. This also may be broke produced in the mill. Such pulp that may be held in storage should be treated with 0.2-1.0 kg of Busan 1146 per tonne (0.4-2.0 lb per ton) of moisture-free pulp. The Busan 1146 should be added in a manner that will ensure uniform distribution throughout the mass of pulp moving to storage.

PRESERVATION OF PAPERMAKING CHEMICALS: Busan 1146 can be used to inhibit the growth of bacteria and fungi that cause the microbiological degradation of papermaking chemicals. The required amount of Busan 1146 should be added in such a manner as to ensure uniform distribution throughout the substrate to be protected. The following table shows examples of papermaking chemicals that might be treated with Busan 1146, and the amount of Busan 1146 recommended for preservation of some of these materials. The treatment levels are based on the total wet weight of slurry, emulsion, or solution to be protected.

Substrate	Parts per million
Alum solutions	100-200 ppm
Animal glues	100-300 ppm
Clay slurries, phosphate dispersed	100-200 ppm
Coating formulations, protein binders	200-300 ppm
Coating formulations, starch binders	200-400 ppm
Starch slurries and solutions	100-300 ppm

COOLING WATER SYSTEMS: For the control of bacteria in industrial and commercial recirculating cooling water systems, Busan 1146 should be fed at a rate of 1.3 to 13 fl. oz. (10 to 100 ppm) per 1,000 gallons of systems water. This dosage should be repeated every 1 to 5 days as needed. If the system is badly fouled, it should be cleaned to remove old deposits before treatment with Busan 1146 is begun.

PETROLEUM SECONDARY RECOVERY: Busan 1146 is used to control both aerobic and anaerobic bacteria in oil field water, water disposal systems, and other oil field water systems. Busan 1146 may be fed continuously, intermittently or by slug addition. Addition should be made to injection wells, free water knockouts, filtration systems, production wells and at other locations subject to bacterial fouling and corrosion.

CONTINUOUS FEED: Busan 1146 may be fed continuously at a level of 0.65 to 6.3 fl. oz. per 1,000 gallons or 26.5 to 265 fl. oz. per 1,000 bbls of produced water (5 to 50 ppm).

INTERMITTENT FEED: Busan 1146 may be fed intermittently at a level of 0.65 to 10.0 fl. oz. per 1,000 gallons or 26.5 to 424 fl. oz. per 1,000 bbls of produced water (5 to 80 ppm) 4 to 8 hours per day.

SLUG FEED: Where intermittent or continuous feed is not desirable, Busan 1146 may be fed at a dosage of 1.3 to 12.6 fl. oz. per 1,000 gallons or 53 to 530 fl. oz. per 1,000 bbls of produced water (10 to 100 ppm). Dosage should be repeated every 1 to 7 days as needed.

DRILLING FLUIDS: To inhibit bacterial degradation of drilling fluids and muds, Busan 1146 should be applied at a rate of 0.1 to 0.8% based upon the total weight of the fluid.

HMS/NPCA RATING Health 3 Flammability 2 Reactivity 1	Product Weight: 8.6 lbs./gal. 1.03 kg/l NET CONTENTS MARKED ON CONTAINER
	EPA Reg. No. 1448-draft

Manufactured By EPA Est. No. 1448-TN-1, 1448-MO-1
BUCKMAN LABORATORIES, INC.
1256 N. McLEAN BLVD., MEMPHIS, TN 38108 USA
(901) 278-0330 or 1-800-BUCKMAN

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