



BUSAN 93

BUSAN is a registered trademark.

ACTIVE INGREDIENT(S)	
2-Bromo-4'-hydroxyacetophenone.....	20.0%
2-(Thiocyanomethylthio)benzothiazole.....	8.0%
INERT INGREDIENTS.....	72.0%
TOTAL.....	100.0%



**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

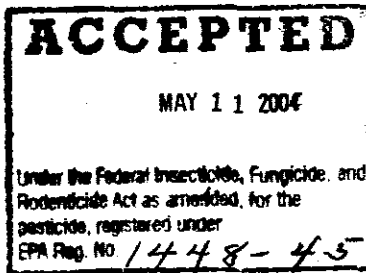
Have the product container or label with you when calling a Poison Control Center or doctor or going for treatment. You may also contact 901-278-0330 or 1-800-BUCKMAN for emergency medical treatment information.

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.

ENVIRONMENTAL HAZARDS: This product 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 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.



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.

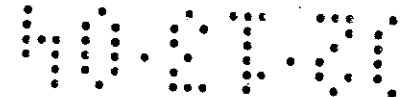
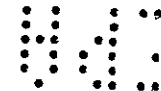
RECYCLED FIBER TREATMENT: When microbiologically contaminated pulp or recycled fiber (waste paper) is added to the system, it should receive a supplementary treatment with BUSAN 93. The addition to each beater or pulper of 0.1 kg of BUSAN 93 per tonne (0.2 lb per ton) of moisture-free pulp. The BUSAN 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

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



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: 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.

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 2/10/2004

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5/11/2004
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