Reg # 1448-45

PM-31

BUSAN 93

BUSAN is a registered trademark.

ACTIVE INGREDIENTS:

2-Bromo-4'-hydroxyacetophenone	20.0
2-(Thiocyanomethylthio)benzothiazole	8.0
INERT INGREDIENTS:	72.0

KEEP OUT OF REACH OF CHILDREN

DANGER

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER: Fatal if inhaled, harmful if swallowed or absorbed through the skin, causes eye damage 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 first. Irrigate the esophagus and dilute stomach contents by slowly giving one (1) to two (2) glasses 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 the eyes, it causes eye damage. Flood eyes immediately and thoroughly with cool water for 15 to 30 minutes. See a physician if any irritation persists. If inhaled remove person to a well ventilated place and apply artificial respiration if required. Call a physician.

ENVIRONMENTAL HAZARDS: This product is toxic to fish. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public waters unless this product is specifically identified and addressed in an NPDES permit. Do not discharge effluent containing this product into sewer systems without previously notifying the sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

STORAGE: Do not stack more than five 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 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: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

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 conditions 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 of fiber and water at maximum dilution, for treatment periods of 2-6 hours. The treatment with Busan 93 is repea 8, each 12, or each 24 hours. The concentration of Busan 93 and the frequency of treatment are adjusted accord of slime accretion. Best results are generally obtained by feeding Busan 93 into the suction side of the fan pum water or stock moving to the fan pump. When necessary, this treatment can be supplemented by treatment slush pulp, broke or other furnish components with Busan 93 or another one of the broad-spectrum Busan micr of Busan 93 for the supplementary treatments is described in subsequent sections of this bulletin.

In addition to use of effective microbicides, good housekeeping is also essential to a good slime control pro treatment with Busan 93 is started, the system should be cleaned thoroughly to remove old deposits of slime, pl and cleaning of the system should be repeated periodically in order to get the best results from use of th Cleaning procedures used should include both mechanical cleaning with high-pressure hoses and other mech 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 supplement or replace chlorine in the treatment of process fresh water. In treating fres 93 is usually employed at concentrations of 1-4 ppm for treatment periods of 3 hours out of each 8 hours. frequency can be increased or decreased to provide optimum control of microorganisms. Busan 93 should n 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 spoilin of the growth of microorganisms. Slush pulp that may be held in storage for more than 8 hours but not more 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 Busa 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 sho supplementary treatment with Busan 93. The addition to each beater or pulper of 0.1 kg of Busan 93 per tonne of moisture-free fiber will aid in keeping the system free of slime.

BROKE TREATMENT

Broke may also require supplementary treatment with Busan 93 to provide the best slime control. For uncoa 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 re 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 o chemicals. The required amount of Busan 93 should be added in such a manner as to ensure uniform distribut the substrate to be protected. If necessary, Busan 93 can be diluted with an equal volume or less of ethyl alcoh alcohol immediately prior to use to facilitate its dispersion in the substrate. The following table shows the amou recommended for the preservation of various materials, based on the total wet weight slurry, emulsion, or protected.

SUBSTRATE	PARTS PER MILLION
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 of [illegible] problems is available upon request.

HMIS/NPCA RATING
Health 3 Flammability 2 Reactivity 1

Product Weight: 9.5 lbs./gal.
NET CONTENTS MARKED ON C
EPA Reg. No. 1448

Manufactured By EPA Est. No. 1448-TN-1
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