

Patents issued or pending in the U.S.A. and other countries

Active ingredient:

2-(Thiocyanomethylthio)benzothiazole ..... Inert ingredients .....

## APPLICATIONS

Busan 30-I is an emulsifiable liquid concentrate used to control sap stain and mold on freshly cut softwood and hardwood lumber, logs, poles, posts, and timbers. Busan 30-I is also used to inhibit the growth of fungi that cause the degradation of wood chips, wet lap or sheet pulp, mulch paper, chrome-tanned leather, caulking-sealants, and vinyl acetate wallcovering adhesives. Another application is its use in the manufacture of mold-resistant paper and paperboard, including such grades as soapwrap, furnace filter frames, wallpaper base stock, and building papers and paperboards.

Lumber: Freshly cut lumber 2 inches or less in thickness should be dipped or sprayed until complete surface wetting is accomplished using a dispersion prepared by mixing 2.0 to 3.0 pounds (2 to 3 pints) of Busan 30-I in 100 U.S. gallons of

Logs: Spray the ends and barkless areas of the freshly cut logs with a dispersion of 4.0 to 6.0 pounds (4 to 6 pints) of Busan 30-I in 100 U.S. gallons of water.

Poles, Posts, and Timbers: Dip or spray until all surfaces are wetted in a dispersion of 4.0 to 6.0 pounds (4 to 6 pints)

of Busan 30-I in 100 U.S. gallons of water.

Logs should be bright and free of infection when converted into lumber. For best production during warm weather, lumber should be treated within 24 hours after being sawed. Busan 30-I should be thoroughly dispersed in water using a mixing tank or container of known capacity prior to being added to the dipping vat. The dipping vat should be protected from rain to prevent dilution of dispersion.

Treated lumber should not be exposed to heavy rains immediately after treatment. Lumber piles should be as narrow

practicable, properly elevated, well-spaced, and adequately roofed. For complete instructions on the other applications of Busan 30-I, refer to the appropriate Product Data bulletins

listed below: Busan 30-I-For Preservation of Wood Chips, Wet Pulp, and Mulch Paper and Manufacture of Mold-Resistant Paper

and Paperboard Busan 30-I-For Microorganism Control in Tanneries

Busan 30-I-Preservative for Caulking-Sealants and Vinyl Acetate Wallcovering Adhesives

Busan 30-I is composed of substances that have been allowed by the U.S. Food and Drug Administration for use on the wet-end of paper and paperboard machines during the manufacture of paper and paperboard for food packaging, but it has not been allowed for use in dry-end applications. Therefore, Busan 30-I should not be employed to provide mold resistance to paper or paperboard intended for food-contact use.

## WARNING

## KEEP OUT OF REACH OF CHILDREN

Causes eye damage and skin irritation. May be harmful if absorbed through the skin. Do not get in eyes, on skin, or on clothing. Wear goggles or face shield and rubber gloves when handling. Harmful if swallowed. Avoid contamination of

FIRST AID: After any skin exposure, 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. Remove and wash contaminated clothing before reuse.

If the product gets into the eyes, flood eyes immediately and thoroughly with cool water for 15 to 30 minutes. See a physician if any irritation persists.

If the product is swallowed, call a physician immediately. Give patient doses of powdered charcoal immediately or all can swallow of raw egg whites, milk, gruel, or flour and water. Then induce vomiting with salt, soap, or mustard in

This product is toxic to fish. Keep out of lakes, streams, or ponds. Do not contaminate water by cleaning of equipment or disposal of wastes. Apply this product only as specified on this label.

Do not reuse empty container. Return to drum reconditioner or destroy by perforating and crushing and burying in a safe place.

MANUFACTURED BY UCKMAN LABORATORIES, I MEMPHIS, TENN. 38108, U.S.A.

EPA Reg. No. 1443-55

EPA Est, 1448-TN-1

September 1, 1975

BUSAN® 30-I. Where my spenth is graphed and the countries of the last of the countries of t Bulletin No. D10

## PRESERVATIVE FOR CAULKING-SEALANTS AND VINYL ACETATE WALLCOVERING ADHESIVES

Busan 30-I is a microbicide concentrate that is used as a preservative for caulking-sealants and vinyl acetate wallcovering adhesives. Its addition to these products will inhibit the growth of fungi (mold, "mildew") that often cause the discoloration, unsightly appearance, and degradation of these compounds, particularly when they are exposed to humid environments. Busan 30-I is especially recommended for the protection of caulking-sealants intended for use around bathtubs, showers, and bathroom tiles and vinyl acetate adhesives used on fabrics and paper for covering walls.

## PRODUCT CHARACTERISTICS

Busan 30-I is a liquid that emulsifies readily in water. It is packed in 210-kg. (465-lb.) net weight, lined, nonreturnable steel drums with bungs. Type 316 stainless steel, molded nylon, Penton, Teflon, polyethylene, and polypropylene are all satisfactory for handling Busan 30-I. The composition and some of the physical properties of Busan 30-I are as follows:

Active ingredient:	
2-(Thiocyanomethylthio)benzothiazole	30 percent
Inert ingredients	70 percent
Density at 25° C. (77° F.)	1.05 g. per ml.
Approximate weight per U.S. gallon	8.7 lb.
Approximate volume per kilogram	950 ml.
Approximate volume per pound	430 ml.
Flashpoint by Tagliabue open-cup method	6° C. (151° F.)
pH of 100 parts per million in distilled water	6–7

Busan 30-I is moderately toxic by ingestion in single doses and by single skin applications. The undiluted product is irritating to the skin and to the eyes. Workmen handling the product should use rubber gloves and goggles and should observe other precautions shown on the label.

## APPLICATION

Busan 30-I can be dispensed directly from the shipping container by use of chemical-metering pumps or suitable measuring containers. For the preservation of caulking-sealants and vinyl acetate wallcovering adhesives, Busan 30-I is employed in concentrations of 0.1 to 0.5 percent based on the total wet weight of the product to be protected. The preservative should be incorporated in the compound that it is evenly distributed throughout the product.

## Buckman Laboratories, Inc

BUCKMAN LABORATORIES INTERNATIONAL, INC

MEMPHIS, TENNESSEE 38108, U.S.A.

BUCKMAN LABORATORIOS, LTDA.

OCT 14 1975

Unasa the Federal Intecticida Punncide, and Rodenticide Act. 

BUCKMAN LABORATORIES, S. A. GHENT, BELGIUM

BUCKMAN LABORATORIES (PTY) LTD DURBAN, SOUTH AFRICA



Activa inspedient

BUCKMAN LABORATORIES, S. A. DE C. V MEXICO, D. F., MEXICO

Since the optimum dosage rate will vary with the type of product to be protected, it is necessary to determine the optimum amount of Busan 30-I needed to preserve a particular caulking-sealant or adhesive. Technical assistance in making such tests will be provided upon request.

Recommendations given in this bulletin are based on tests believed to be reliable. However, the use of the product is beyond the control of Buckman Laboratories, Inc., and no guarantee, expressed or implied, is made as to the effects of such or the results to be obtained if not used in accordance with directions or established safe practice. The buyer must assume all responsibility, including injury or damage, resulting from misuse of the product as such, or in combination with other materials. This bulletin is not to be taken as a license to operate under or recommendation to infringe any patent.

## PŘEŠERVATÍVE FO: VINYL ACETATE A

car Jist is a nuice obtained conserved of the conserved of the saves of the conserved of th

#### PICODUCT C

the states and because of the second dresses of the second second of the second second

Bullianing , most tille at met o

on the survive and infarth and more the above the survive and the survive parties of the survive and the survi

of the an order person of person of the correct program of the correct program of the correct person of the co

Buckmar



## PRODUCT DATA

147839, 9111-

September 1, 1975

Bulletin No. A40

## BUSAN® 30-I

(Patents issued or pending in the U.S.A. and other countries)

## FOR PRESERVATION OF WOOD CHIPS, PULP, AND MULCH PAPER AND MANUFACTURE OF MOLD-RESISTANT PAPER AND PAPERBOARD

Busan 30-I is an emulsifiable microbicide concentrate used to inhibit the growth of fungi that cause the degradation of wood chips, wet lap or sheet pulp, and mulch paper. It is also

used to provide mold resistance to coated and uncoated paper and paperboard.

Application of the product as a chip preservative helps to decrease the losses in wood substance, discoloration of wood, and losses in pulp quality that often result during long-term storage of wood chips. Use of Busan 30-I as a preservative for wet lap or sheet pulp can help prevent the microbiological deterioration that often occurs when moist pulp must be stored for substantial periods of time or transported over long distances. Preservation of agricultural mulch paper with Busan 30-I is useful when this paper is used in locations where fungal deterioration is too rapid. The mold resistance provided by Busan 30-I helps prevent discoloration, odors, and degradation of paper and paperboard employed in moist environments, including grades such as soap wrap, furnace filter frames, wallpaper base stock, and building papers and paperboards.

Busan 30-I is composed of substances that have been allowed by the U.S. Food and Drug Administration under Regulation 121.2505 for use on the wet-end of paper and paperboard machines during the manufacture of paper and paperboard for food packaging, but it has not

been allowed for use in dry-end applications.

#### PRODUCT CHARACTERISTICS OF THE PRODUCT CHARACTERISTICS

Busan 30-I is a liquid product packed in 210-kg. (465-lb.) net weight, lined, nonreturnable steel drums with bungs. Type 316 stainless steel, molded nylon, Penton, Teflon, polyethylene, and polypropylene are all satisfactory for handling Busan 30-I. The composition and some of the physical properties of Busan 30-I are as follows:

Active ingredient:

2-(Thiocyanomethylthio)benzothiazole	) percent
Inert ingredients	) percent
Density at 25° C. (77° F.)	
Approximate weight per U.S. gallon	
Approximate volume per kilogram	
Approximate volume per pound	430 ml.
Flashpoint by Tagliabue open-cup method 66° C. (	(151° F.)
pH of 100 parts per million in distilled water	6–7

Busan 30-I is moderately toxic by ingestion in single doses and by single skin applications. The undiluted product is also irritating to the skin and to the eyes. Workmen handling the product should use rubber gloves and goggles and should observe other precautions shown on the label.

## Buckman Laboratories, Inc.

BUCKMAN LABORATORIES INTERNATIONAL.INC

MEMPHIS, TENNESSEE 38108, U.S.A.

BUCKMAN LABORATORIES PTY, LTD. SYDNEY, AUSTRALIA BUCKMAN LABORATORIES, S. A. GHENT, BELGIUM

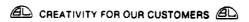
BUCKMAN LABORATORIOS, LTDA. CAMPINAS, BRAZIL

OCT 14 1975

Under the Federal Insecticide,
Functicide, and Redenticide Act.
on amended tor the pesticide
(NAMILARORATORIES OF CANADA LID

PUCKMAN LABORATORIES, LTD. TOPYC, JAPAN

BUCKMAN LABORATORIES, S. A. DE C. V MEXICO. D. F. MEXICO BUCKMAN LABORATORIES (PTY) LTD DURBAN, SOUTH AFRICA



### METHODS OF APPLICATION

Busan 30-I can be dispensed directly from shipping containers by use of chemical-metering pumps or suitable measuring containers. To ensure proper coverage of the substrate to be protected, Busan 30-I should be dispersed in water or surface-sizing solution prior to its application. When Busan 30-I is applied by means of water showers or sprays, continuous addition of the product to the waterline supplying these showers or sprays is recommended. When batch preparation of dilute emulsions of Busan 30-I is necessary, the mixture should be kept continuously agitated and should be used promptly.

## Chip Preservation

To protect wood chips from microbiological deterioration during long storage periods, Busan 30-I is used at 0.5 to 1 kg. per metric ton (1 to 2 lb. per short ton) of oven-dry wood. Busan 30-I should be applied to the wood so that the product is uniformly distributed over all exposed surfaces of the chips. One suggested method of application is through a water shower or spray located in the pneumatic-conveyor system carrying the chips from the chipper to the storage pile.

## **Pulp Preservation**

For the preservation of wet lap or sheet pulp, Busan 30-I is dispersed in water and applied uniformly to the exposed surfaces of the dewatered pulp by means of sprays or applicator rolls. The total amount of Busan 30-I required generally ranges from 0.5 to 2 kg. of Busan 30-I per metric ton (1 to 4 lb. of Busan 30-I per short ton) of oven-dry fiber.

## Mulch Paper Preservation

For the preservation of mulch paper Busan 30-I is dispersed in water and applied uniformly to the surfaces of the mulch paper by tub-sizing methods or by means of sprays or applicator rolls. Busan 30-I should be applied before the paper is coated with wax, polyethylene, or other protective materials. The amount of Busan 30-I dispersion applied should be sufficient to provide a total of 1.5 to 2.5 kg. of Busan 30-I per metric ton (3 to 5 lb. of Busan 30-I per short ton) of air-dry paper.

## Mold-Resistant Paper and Paperboard

For the manufacture of mold-resistant paper and paperboard, Busan 30-I is employed at rates equivalent to 0.25 to 1 kg. of Busan 30-I per metric ton (0.5 to 2 lb. of Busan 30-I per short ton) of paper and paperboard produced per side treated. For coated paper or paperboard, the required amount of Busan 30-I should be incorporated into the coating mix prior to application of the coating; the amount of Busan 30-I added will depend on the weight of coating applied to each ton of paper or paperboard. For uncoated paper or paperboard, Busan 30-I should be dispersed in water or a surface-sizing solution, such as starch, carboxymethylcellulose, poly(vinyl alcohol), or wax emulsion, and applied to the surface to be protected by means of a water box at the machine calender stacks. The amount of Busan 30-I added to the surface-sizing solution will depend on the rate the solution is transferred to the paper or paperboard.

Recommendations given in this bulletin are based on tests believed to be reliable. However, the use of the product is beyond the control of Buckman Laboratories, Inc., and no guarantee, expressed or implied, is made as to the effects of such or the results to be obtained if not used in accordance with directions or established safe practice. The buyer must assume all responsibility, including injury or damage, resulting from misuse of the product as such, or in combination with other materials. This bulletin is not to be taken as a license to operate under or recommendation to infringe any patent.

Printed in U.S.A.



# PRODUCT DATA

September 1, 1975

reality and the best transfer to the Bulletin No. D8US

## BUSAN® 30-I

(Patents issued or pending in the U.S.A. and other countries) of among a manufacture of a manufacture of the countries of the

## FOR MICROORGANISM CONTROL IN TANNERIES

Busan 30-I is an effective and economical nonmercurial microbicide for use in preventing fungal attack of skins and hides during tannery processing. It is specifically recommended for use in chrome tanning to prevent the leather damage and consequent losses caused by microorganisms.

#### PRODUCT CHARACTERISTICS

Busan 30-I is a liquid that emulsifies readily in water. It is packed in 210-kg. (465-lb.) net weight, lined, nonreturnable steel drums with bungs. Type 316 stainless steel, molded nylon, Penton, Teflon, polyethylene, and polypropylene are all satisfactory for handling Busan 30-I. The composition and some of the physical properties of Busan 30-I are as follows:

Active ingredient:
2-(Thiocyanomethylthio)benzothiazole
Inert ingredients
Density at 25° C. (77° F.) 1.05 g. per ml.
Approximate weight per U.S. gallon
Approximate volume per kilogram
Approximate volume per pound
Flashpoint by Tagliabue open-cup method
pH of 100 parts per million in distilled water

Busan 30-I is moderately toxic by ingestion in single doses and by single skin applications. The undiluted product is irritating to the skin and to the eyes. Workmen handling the product should use rubber gloves and goggles and should observe other precautions shown on the label.

#### APPLICATION

Because of the moist condition and pH of the stock, chrome-tanned stock held "in the blue" readily molds and becomes discolored with the result that additional cleaning is required. Severe mold growth at this stage will usually cause permanently discolored areas that influence subsequent finishing operations and reduce the value of the leather. Treatment with Busan 30-I, however, will effectively control mold growth on chrome-tanned stock. The

ACCEPTED

OCT 1 4 1975

Functicide, and Rodenticide Act, as a rended, for the pesuatee

registened under

EPA Heg. No.

Buckman Laboratories, Inc.

BUCKMAN LABORATORIES INTERNATIONAL, INC

MEMPHIS, TENNESSEE 38108, U.S.A.

BUCKMAN LABORATORIES PTY. LTD.

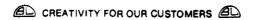
BUCKMAN LABORATORIES, S. A. GHENT, BELGIUM

BUCKMAN LABORATORIOS, LTDA. CAMPINAS, BRAZIL BUCKMAN LABORATORIES OF CANADA, LTD MONTREAL, CANADA

BUCKHAN LABORATORIES, LTD

BUCKMAN LABORATORIES, S. A. DE C. V. MEXICO, D. F., MEXICO

BUCKMAN LABORATORIES (PTY) LTD DURBAN, SOUTH AFRICA



microbicide should be applied as a 5-percent dispersion in water, which should be prepared by adding the required amount of the microbicide to vigorously agitated water. Application of this dispersion to the stock can be made as a uniform spray or preferably by means of an applicator roll. Recommended treatment rates are 0.4 to 0.6 kg. of Busan 30-I per metric ton (0.4 to 0.6 lb. per 1,000 lb.) of tanned stock.

Recommendations given in this bulletin are based on tests believed to be reliable. However, the use of the product is beyond the control of Buckman Laboratories, Inc., and no guarantee, expressed or implied, is made as to the effects of such or the results to be obtained if not used in accordance with directions or established safe practice. The buyer must assume all responsibility, including injury or damage, resulting from misuse of the product as such, or in combination with other materials. This bulletin is not to be taken as a license to operate under or recommendation to infringe any patent.

, s fig. , Mile

n, Beliner zwiech bergeit in ein Groute deurschliebe gebruik in Group bergeiser in des

, manipose of bounding London propose to bound

Approximation of the second of

. .

าราชานัก (ค.ศ. 25 ค.ศ.) เกาะสาราชานัก (ค.ศ. 25 ค.ศ.)

and the second second