



# BUSAN<sup>®</sup> 30

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

ACCEPTED

NOV 29 1976

Under the Federal Insecticide,  
Fungicide, and Rodenticide Act,  
registered under  
EPA Reg. No. 1448-55

**Active ingredient:**

2-(Thiocyanomethylthio)benzothiazole ..... 30 percent  
Inert ingredients ..... 70 percent

## APPLICATIONS

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

**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 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 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 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 as practicable, properly elevated, well-spaced, and adequately roofed.

For complete instructions on the other applications of Busan 30, refer to the appropriate Product Data bulletins listed below:

*Busan 30 - For Preservation of Wood Chips, Wet Pulp, and Mulch Paper and Manufacture of Mold-Resistant Paper and Paperboard*

*Busan 30 - For Microorganism Control in Tanneries*

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

Busan 30 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 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 food.

**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 he can swallow of raw egg whites, milk, gruel, or flour and water. Then induce vomiting with salt, soap, or warm water.

*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**  
**BUCKMAN LABORATORIES, INC.**  
**MEMPHIS, TENN. 38108, U.S.A.**



# PRODUCT DATA

October 1, 1976

Bulletin No. D8US

## BUSAN® 30

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

### FOR MICROORGANISM CONTROL IN TANNERIES

Busan 30 is an effective and economical 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 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. The composition and some of the physical properties of Busan 30 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	66° C. (151° F.)
pH of 100 parts per million in distilled water	6-7

Busan 30 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, however, will effectively control mold growth on chrome-tanned stock. The

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registered under  
EPA Reg. No. 1448-55

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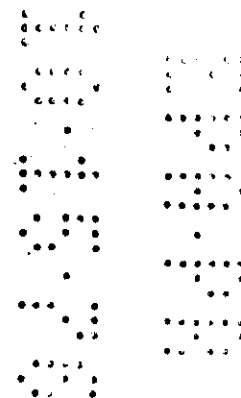
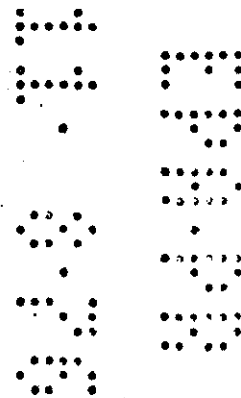
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microbicide should be applied as a 5-percent dispersion in water, which should be prepared by adding the required amount of the microbicide to vigorously agitated water. Application of this dispersion to the stock can be made as a uniform spray or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

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*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.*





# PRODUCT DATA

October 1, 1976

## BUSAN® 30

(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

4/7  
Bulletin No. A40  
NOV 29 1976  
Under the Federal Insecticide, Fungicide, and Rodenticide Act, registered under EPA Reg. No. 1448-55

Busan 30 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 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 is useful when this paper is used in locations where fungal deterioration is too rapid. The mold resistance provided by Busan 30 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 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

Busan 30 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. The composition and some of the physical properties of Busan 30 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 .....	66° C. (151° F.)
pH of 100 parts per million in distilled water .....	6-7

Busan 30 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.

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## METHODS OF APPLICATION

Busan 30 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 should be dispersed in water or surface-sizing solution prior to its application. When Busan 30 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 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 is used at 0.5 to 1 kg. per metric ton (1 to 2 lb. per short ton) of oven-dry wood. Busan 30 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 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 required generally ranges from 0.5 to 2 kg. of Busan 30 per metric ton (1 to 4 lb. of Busan 30 per short ton) of oven-dry fiber.

### Mulch Paper Preservation

For the preservation of mulch paper Busan 30 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 should be applied before the paper is coated with wax, polyethylene, or other protective materials. The amount of Busan 30 dispersion applied should be sufficient to provide a total of 1.5 to 2.5 kg. of Busan 30 per metric ton (3 to 5 lb. of Busan 30 per short ton) of air-dry paper.

### Mold-Resistant Paper and Paperboard

For the manufacture of mold-resistant paper and paperboard, Busan 30 is employed at rates equivalent to 0.25 to 1 kg. of Busan 30 per metric ton (0.5 to 2 lb. of Busan 30 per short ton) of paper and paperboard produced per side treated. For coated paper or paperboard, the required amount of Busan 30 should be incorporated into the coating mix prior to application of the coating; the amount of Busan 30 added will depend on the weight of coating applied to each ton of paper or paperboard. For uncoated paper or paperboard, Busan 30 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 added to the surface-sizing solution will depend on the rate the solution is transferred to the paper or paperboard.

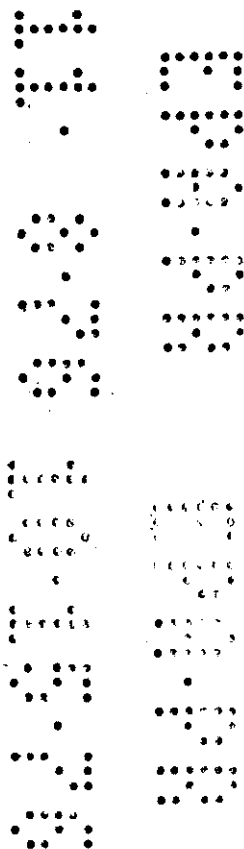
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Since the optimum dosage rate will vary with the type of product to be protected, it is necessary to determine the optimum amount of Busan 30 needed to preserve a particular caulking-sealant or adhesive. Technical assistance in making such tests will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

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# PRODUCT DATA

October 1, 1976

## BUSAN® 30

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

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

Busan 30 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 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.

**ACCEPTED**  
Bulletin No. D10  
**NOV 29 1976**  
Under the Federal Insecticide, Fungicide, and Rodenticide Act, recommended for the pesticide registered under EPA Reg. No. 1448-55

### PRODUCT CHARACTERISTICS

Busan 30 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. The composition and some of the physical properties of Busan 30 are as follows:

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pH of 100 parts per million in distilled water .....	6-7

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### APPLICATION

Busan 30 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 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 by means that ensure that it is evenly distributed throughout the product.

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