

# BODOXIN

## ANTIMICROBIAL AGENT

For use in metalworking fluids, polymer latices, paints and coatings, building materials, adhesives and tackifiers, mineral slurries, as an in-container preservative for aqueous products, for use in fuels and fuel oils, printing fluids, textile processing chemicals, electrodeposition systems, leather processing chemicals, oil field injection waters, water cooling systems and consumer, household and institutional products.

### ACTIVE INGREDIENTS:

5-Chloro-2-Methyl-4-Isothiazolin-3-One ..... 0.80%  
 2-Methyl-4-Isothiazolin-3-One ..... 0.28%

OTHER INGREDIENTS: ..... 98.92%

TOTAL: ..... 100 %

KEEP OUT OF REACH OF CHILDREN

## DANGER

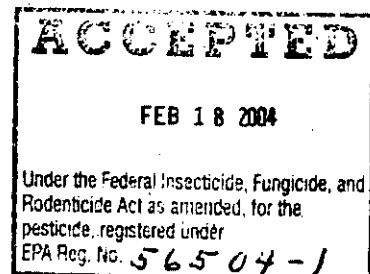
See side panel for additional precautionary statements

FIRST AID	
If in eyes	<ul style="list-style-type: none"> <li>Hold eye open and rinse slowly and gently with water 15-20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
If on skin or clothing	<ul style="list-style-type: none"> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
If swallowed	<ul style="list-style-type: none"> <li>Call a poison control center or doctor immediately for treatment advice.</li> <li>Have person sip a glass of water if able to swallow.</li> <li>Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>Do not give anything by mouth to an unconscious person.</li> </ul>
If inhaled	<ul style="list-style-type: none"> <li>Move person to fresh air.</li> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.</li> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>
NOTE TO PHYSICIAN	
Probable mucosal damage may contraindicate the use of gastric lavage.	
HOT LINE NUMBER	
For medical questions, emergencies or accidents involving this product call: 1-800-222-1222. Have the product container or label with you when calling a poison control center or doctor.	

BODE CHEMIE GMBH & CO.  
 Melanchthonstrasse 27  
 22525 Hamburg, Germany

EPA Reg. No. 56504 - 1  
 EPA Est. No. 56504 - DEU - 001

Net Contents XXXXXX



### DIRECTIONS FOR USE

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

Do not apply this product in a way that will contact workers or other persons.

#### METALWORKING FLUIDS

**Bodoxin is recommended** to control growth of microorganisms in metalworking fluids.

**In concentrates:** BODOXIN is soluble in organic solvents and may be incorporated by the manufacturer in the cutting-fluid concentrate. Long-term stability tests should be carried out by the manufacturer on his specific formulations to ensure that the concentrate does not contain ingredients incompatible with BODOXIN stability. The amount to be incorporated will depend on the dilution factor recommended to be used when the concentrate is diluted for use. For efficient bacteriostatic activity, a concentration of 500-1500 ppm in the diluted fluid is suggested.

**In diluted fluid:** An initial concentration of 500 ppm of BODOXIN is normally sufficient to control gross microbial contamination of freshly diluted metalworking fluids for a period of several weeks at ambient temperatures. The degree of control is influenced by the composition of the metalworking fluid, the pH, the conditions of use, and other factors. Under conditions of severe microbial contamination, a concentration of BODOXIN as high as 2000 ppm may be required temporarily.

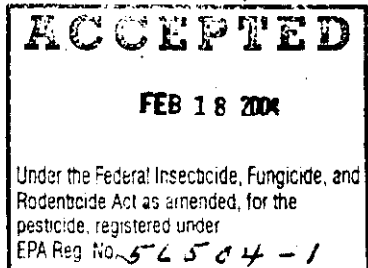
**Maintenance dosage:** Periodic addition of BODOXIN to the metalworking fluid will extend its activity in controlling gross microbial contamination after the initial charge. Additions of 100 ppm to 200 ppm of BODOXIN at weekly intervals usually are recommended.

#### POLYMER LATICES

Bodoxin is recommended for the control of bacteria and fungi in the manufacture and storage of synthetic and natural polymer latices including: acrylics, styrene-butadiene, carboxylated styrene-butadiene, ethylene-vinyl acetate and biopolymers intended for industrial use such as xanthan gum, gum arabic, guar gum, protein derived polymers, starches and casein derived polymers including latices for paper and paperboard. Recommended dosage: to protect against microbial spoilage add 300 - 1500 ppm Bodoxin.

#### PAINTS AND COATINGS

Bodoxin is recommended as an in-container preservative for the control of bacteria and fungi in water based coatings such as paper and wood coatings and paints used for architectural product finishes and special purpose coatings. Recommended dosage: to protect against microbial spoilage add 500 - 1500 ppm Bodoxin.



**BUILDING / CONSTRUCTION MATERIALS**

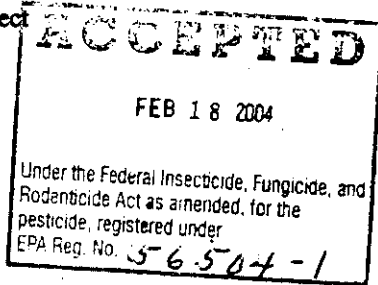
Bodoxin is recommended as an in-container preservative for the control of bacteria and fungi in building materials such as mastics, caulks, joint cements, spackles, grouts and concrete admixtures. Recommended dosage: to protect against microbial spoilage add 700 - 2000 ppm Bodoxin.

**ADHESIVES AND TACKIFIERS**

Bodoxin is recommended as a preservative for the control of bacteria and fungi in water soluble and water dispersed adhesives such as animal glues, vegetable glues, natural rubber latices, polyvinyl acetate, styrene-butadiene and acrylic latices. Bodoxin is recommended as a preservative for tackifiers derived from rosin and hydrocarbon resins. Recommended dosage: to protect against microbial spoilage add 300 - 1500 ppm Bodoxin.

**DISPERSED PIGMENTS**

Bodoxin is recommended for the control of bacterial and fungi in the manufacture and storage of dispersed pigments (mineral slurries) such as refractory coatings, ceramic glazes, kaolin clay, montmorillonite clay, titanium dioxide, calcium carbonate, calcium sulfate, barium sulfate, magnesium silicate and kieselguhr used in paint and paper products. Recommended dosage: to protect against microbial spoilage add 300 - 2000 ppm Bodoxin.



**IN-CONTAINER PRESERVATIVE**

Bodoxin is recommended as an in-container preservative for the control of bacteria and fungi in water based products such as aqueous emulsions and dispersions including stabilized oil in water emulsions, surface preparation compounds, foam control products and aqueous pesticides. Use concentrations of 500 - 2000 ppm Bodoxin, depending on the finished formulation, are needed for effective preservation.

**FUELS AND FUEL OILS**

Bodoxin is recommended for the control of bacteria and fungi in the following liquid hydrocarbon fuels and oils: crude oils, heating oils, residual fuel oils and diesel fuels. Bodoxin should be directly dispensed into a fuel tank, storage tank or flowing stream of fuel in a manner to ensure uniform distribution of the preservative in the fuel system. Slug dose or continuous feed methods are recommended.

When the system is noticeably fouled, add 1-2 gallon of Bodoxin per 10,000 gallon of fluid in the system. Repeat until control is achieved. A shock dose of up to 4 gallon of Bodoxin per 10,000 gallon of fluid is recommended in case of extreme contamination. Grossly contaminated systems should be physically cleaned to remove debris.

When the system is not noticeably fouled, add 0.4 - 1.0 gallon of Bodoxin per 10,000 gallon of fluid to maintain the system. Repeat every 3 - 6 weeks or when microbial contamination is detected.

**PRINTING FLUIDS**

Bodoxin is recommended to control growth of bacteria and fungi in water-based printing inks such as flexographic, gravure, screen, and ink jet printing

inks. Recommended dosage: add 700 - 2000 ppm Bodoxin to the product to be protected.

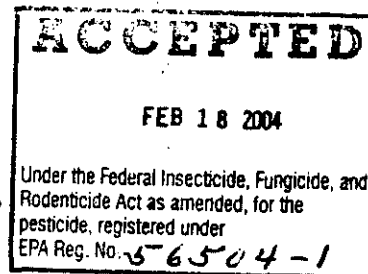
Bodoxin is recommended for the control of bacteria and fungi in the manufacture and storage of printing ink components such as resins, plasticizers, water soluble dyes, pigments, gelling agents, waxes, surfactants, and thickeners. To inhibit microbial spoilage add 700 - 2000 ppm Bodoxin.

Bodoxin is recommended for the control of bacteria and fungi in fountain solutions used for lithographic printing operations. Bodoxin should only be used in those fountain solution concentrates which are automatically diluted prior to use.

Bodoxin is also recommended as a preservative for photoplate processing chemicals such as stabilizer solutions. Bodoxin should be added to the fountain solution concentrate or processing chemical concentrate at a level to ensure that the final use-dilution fluid will contain between 500 -2000 ppm product.

**TEXTILE PROCESSING CHEMICALS**

Bodoxin is recommended for the control of bacteria and fungi in the manufacture and storage of textile processing chemicals such as fiber lubricants, spin finishes, sizes, dyestuffs, textile printing inks, dispersants, thickeners, dye fixatives, hand builders and weighters. These textile processing chemicals are commonly used in the production of natural and synthetic fibers and fabrics and textile coatings. Recommended dosage: to control microbial spoilage add 700 - 2000 ppm Bodoxin.



**ELECTRODEPOSITION SYSTEMS**

Bodoxin is recommended as a tankside additive for the control of bacteria, fungi and algae in recirculating electrodeposition systems and associated rinse systems. Alternatively, Bodoxin may be added through the components of the electrodeposition paint prior to their addition to the electrodeposition system.

**Tankside addition to electrodeposition systems:** Bodoxin should be dispensed into the recirculating rinse system, ultrafilter permeate or final distilled rinse system at a point to insure uniform mixing. When the system is noticeably fouled, add up to 2000 ppm Bodoxin. Repeat until control is achieved. When microbial control is evident, add 400 - 1000 ppm Bodoxin weekly or as needed to maintain the system. A change of frequency of treatment may be required depending on the rate of dilution of the preservative with makeup fluid, the nature and severity of contamination, level of control required, filtration effectiveness, system design, etc.

**Treatment of electrodeposition paint components:** Initial dose of paint components: Bodoxin should be added to the resin, pigment or other component of the electrodeposition paint at a level to ensure that the final use-dilution fluid will contain no more than 2000 ppm product.

**Supplemental tankside dosing of electrodeposition paint components:** if additional microbial control is necessary, Bodoxin may be added to the electrodeposition system tankside to supplement the preservative incorporated through paint components. If the system becomes noticeably fouled, add 1000 - 2000 ppm Bodoxin. Repeat until control is achieved.

When microbial control is evident, the system can be maintained by addition of 500 - 1500 ppm Bodoxin weekly or as needed.

**LEATHER PROCESSING CHEMICALS**

Bodoxin is recommended for the control of bacteria and fungi during soaking of hides, skins and furs in the manufacturing of leather and related products. Using Bodoxin, soaking can be carried out at temperatures between 20 °C and 30 °C, accelerating this process without the danger of bacterial damage. Rehydration is most efficient if carried out at a pH between 6.0 and 9.0. We recommend the use of nonionic surfactants together with Bodoxin for efficient soaking.

**Application instruction for soaking:**

Short-term conservation of raw hides is carried out by dipping hides into a 0.3 - 0.7 % w/w solution of Bodoxin at a temperature of 20 - 25 °C, to achieve a completely salt free raw hide. To achieve optimum wetting, we recommend the additional use of 0.3 - 0.7 % of a nonionic wetting agent with Bodoxin.

In normal treatment of *Salted Raw Material*, use a presoak for 30-60 minutes at 20-25 °C to remove salt, followed by a main soak for up to one day at the same temperature in a solution containing 0.1 - 0.2 % Bodoxin by weight of the salted hides. Rapid presoak and main soak (4-6 hours) treatments may be used by increasing the temperature to around 30 °C.

For *Dried Raw Materials* use a dirt soak with 0.1 - 0.2 % Bodoxin by dry weight of material at 20 - 25 °C overnight followed by a main soak containing 0.2 - 0.4 % Bodoxin at the same temperature for 2-3 days. Add alkali and break over on the fleshing machine if necessary.

For *Dried Hard Material* that is difficult to rewet, use a dirt soak containing 0.1 - 0.2 % Bodoxin by weight of material at a temperature of 20 - 25 °C overnight followed by a main soak with 0.2 - 0.4 % Bodoxin by weight of treated material at a temperature of 25 - 30 °C for 2-4 days. Add alkali and break over on the fleshing machine if necessary.

Bodoxin is also recommended for the control of bacteria and fungi in the manufacture and storage of other leather processing chemicals such as waterproofing agents, fat liquors and other auxiliaries. Use concentrations of 700 - 2000 ppm Bodoxin, depending on the finished formulation, are needed for effective preservation.

**OIL FIELD INJECTION WATERS**

Bodoxin is recommended for the control of slime-forming and sulfate-reducing bacteria in oil and gas field water systems, including enhanced recovery injection fluids, drilling, fracturing and completion fluids. Slug treat with 50 - 300 ppm Bodoxin depending on the severity of contamination. As initial dose add 150 - 300 ppm Bodoxin at a point in the system where it will be uniformly mixed. Repeat treatment after three days or as needed until control is achieved. As a subsequent dose add 50 - 150 ppm Bodoxin every seven days or as needed to maintain control.

**ACCEPTED**  
FEB 18 2004  
Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide, registered under EPA Reg. No. 56504-1

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### WATER COOLING SYSTEMS

Bodoxin is recommended for the control of bacteria, fungi and algae in industrial process water systems and industrial recirculating (closed loop) water cooling systems. Add Bodoxin at some point in the system to insure uniform mixing.

When the system is noticeably fouled, add 400 - 1000 ppm Bodoxin. Repeat until control is achieved. Badly fouled systems should be cleaned before treatment is begun. When microbial control is evident, add 50 - 300 ppm Bodoxin weekly or as needed to maintain control.

### CONSUMER, HOUSEHOLD, AND INSTITUTIONAL PRODUCTS

To inhibit bacterial spoilage during the production and shelf-life storage and use of consumer, household and institutional products including dishwashing liquids, surface cleaners, laundry cleaners, and polishes dose at 700 to 2000 ppm of BODOXIN. Not for use where food contact will occur.

Manufactured in Germany

### STORAGE AND DISPOSAL

#### PROHIBITIONS

This product is corrosive to mild steel. Do not store or transport in unlined metal containers. Do not contaminate food or feed by storage, disposal, or cleaning of equipment.

#### PESTICIDE DISPOSAL

Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide 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 the nearest EPA Regional Office for guidance.

#### GENERAL

CONSULT FEDERAL, STATE, OR LOCAL DISPOSAL AUTHORITIES FOR APPROVED ALTERNATIVE PROCEDURES

<b>ACCEPTEL</b>
FEB 18 2004
Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide, registered under EPA Reg. No. 5-6504-1

### PRECAUTIONARY STATEMENTS

#### HAZARDS TO HUMANS & DOMESTIC ANIMALS

**DANGER:** Fatal if absorbed through skin or inhaled. Corrosive. Causes irreversible eye damage or skin burns. May be fatal if absorbed through skin. Harmful if swallowed. Do not get in eyes, on skin, or on clothing. Do not breathe spray mist. Prolonged or frequently repeated skin contact may cause allergic reaction in some individuals. Remove contaminated clothing before reuse.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE)

- A non-powered air-purifying respirator equipped with an organic-vapor (OV) removing cartridge or cannister plus an R- or P- series filter.
- Coverall over long-sleeved shirt and long pants.
- Socks and chemical resistant footwear.
- Chemical-resistant gloves (such as barrier laminated, butyl rubber, nitrile rubber, neoprene rubber, polyvinyl chloride, or viton).
- Chemical-resistant apron.
- Goggles or face shield.

**USER SAFETY REQUIREMENTS**

Do not apply this product in a way that will contact workers or other persons. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry. Discard clothing or other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

**USER SAFETY RECOMMENDATION**

User should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. User should remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. User should remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

**PHYSICAL AND CHEMICAL HAZARDS**

This product is corrosive to mild steel.

**ENVIRONMENTAL HAZARDS**

This product is toxic to terrestrial and aquatic plants, fish, and aquatic invertebrates. 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. Do not contaminate water by cleaning of equipment or disposal of waste. Apply this pesticide only as specified on this label.

BODE CHEMIE GMBH & CO. assumes no responsibility when this product is not used in accordance with the instructions and information contained on this label.

