

BIOBAN™ BP-30

Active ingredient(s)
2-Bromo-2-nitropropane-1,3-diol 30.0%
 Inert ingredient(s) **70.0%**
 Total **100.0%**

E.P.A. Registration No. 464-685
 E.P.A. Est. 37429-GA-2

KEEP OUT OF REACH OF CHILDREN

DANGER

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

CORROSIVE • CAUSES IRREVERSIBLE EYE DAMAGE AND SKIN BURNS • HARMFUL IF SWALLOWED, ABSORBED THROUGH THE SKIN, OR INHALED

Do Not Breathe Vapor or Spray Mist • Do Not Get in Eyes, On Skin, Or On Clothing • Wear Goggles Or Face Shield, Protective Clothing, and Rubber (or chemical resistant) Gloves • Wash Thoroughly With Soap and Water After Handling and Before Eating, Drinking, or Using Tobacco • Remove Contaminated Clothing and Wash Clothing Before Reuse • Prolonged or Frequently Repeated Skin Contact May Cause Allergic Reactions in Some Individuals



THE DOW CHEMICAL COMPANY
 Midland, Michigan 48674 • U.S.A.
 (889)636-4403

* Trademark of THE DOW CHEMICAL COMPANY

FIRST AID:	
IF IN EYES:	• Hold eyes open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first five minutes, then continue rinsing eyes. • Call a poison control center or doctor for treatment advice.
IF SWALLOWED:	• Call a 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 by a poison control center or doctor.
IF ON SKIN:	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment.
IF INHALED:	• Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth to mouth, if possible. • Call a poison control center or doctor for further treatment.
HOT LINE NUMBER	
IN CASE OF AN EMERGENCY endangering life or property involving this product, call collect (889)636-4400. Have the product container or label with you when calling a poison control center or doctor or going for treatment.	
NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.	

ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish. 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.

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.
 Storage: Keep away from heat.

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 of the nearest EPA Regional Office for guidance.

Container Disposal: Empty residue into application equipment. Triple rinse (or equivalent) then offer container for recycling or reconditioning or puncture. Dispose of container in a sanitary landfill, or by incineration, if allowed by state and local authorities. If burned, stay out of smoke.

DIRECTIONS FOR USE

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

GENERAL USE DIRECTIONS

To control the growth of algae-forming, spoilage, odor-causing and corrosion inducing bacteria and algae in industrial applications. Not for control of algae in the State of California.

BIOBAN BP-30 can be dosed directly either by open pouring or by metered pump. Do not apply by open pouring of liquid to cooling water systems; a metering pump system is required for this use and application method.

For in-can product preservation BIOBAN BP-30 is best added to any liquid phase as late as possible during the manufacturing process and after any heating stage, or when the product has cooled below 40°C. Ensure good mixing and even distribution throughout the product.

Applicators and other handlers must wear long-sleeve shirt and long pants, socks plus shoes, and chemical resistant gloves. Do not apply this product in a way that will contact workers or other persons. Follow manufacturer's instruction for cleaning/maintaining personal protective equipment (PPE). If there are 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. Users should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. If pesticide gets inside clothing remove clothing immediately, wash thoroughly, and put on clean clothing. Users 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.

ACCEPTED

FEB 18 2004

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide, registered under EPA Reg. No. 464-685

NET WT: 226.8 kg/500 lb

LOT

84061-00162322-3/24/2003-1715 Active

INDUSTRIAL RECIRCULATING WATER COOLING TOWERS AND EVAPORATIVE CONDENSERS

BIOBAN BP-30 may be dosed directly into the sump or basin or it may be added by a suitable chemical pump. Where circulating pumps are used, these must be set to deliver the required dose within 1 hour. The dosing point should be located close to the outlet from the basin to ensure rapid dispersal around the system.

BIOBAN BP-30 may be dosed once or twice weekly at 70-280 mL/cubic meter or 0.55-2.2 pt/1000 gallons (25 to 100 ppm active ingredient) depending on the condition of the tower, the quality of raw water input and the amount of bleed off. Where contamination is heavy, more frequent dosing may be required. In heavily fouled systems, the tower should be drained and cleaned before treating with BIOBAN BP-30.

INDUSTRIAL PROCESS WATER

For use in closed circuit machine cooling (injection molding, etc.) and stored (non-potable) water. To reduce the biofouling of pipework, heat exchangers, condenser tubes and minimize microbiology produced corrosion. Shock dosing into the sump/tank of the process water system is preferred. Closed circuit systems require less frequent dosing.

In open systems shock dosing should be carried out on a once weekly to once monthly basis depending on the degree of contamination.

Initially dose at 140 mL/cubic meter, or 1.1 pt/1000 gallons (50 ppm active ingredient). When successful, dosing can be lowered to a minimum level equivalent to 10 ppm active ingredient. For intermittent treatment or during routine maintenance use BIOBAN BP-30 at 100 ppm active ingredient, and a contact time of at least one hour.

OIL AND GAS FLUIDS

This product may be used in terrestrial and off-shore drilling muds and packer fluids.

Use for in-can preservation of a wide range of gels and fluids including fracturing, enhanced oil recovery, injection, well squeeze, drilling, workover and completion fluids.

Add BIOBAN BP-30 at 140-280 mL/cubic meter (1.1-2.2 pt/1000 gallons, or 0.047-0.093 pt/barrel) which is equivalent to 50-100 ppm active ingredient.

For well squeezed fluids add BIOBAN BP-30 at 70-560 mL/cubic meter, or 0.55-4.5 pt/1000 gallons (25-200 ppm active ingredient).

OIL PROCESS WATERS

For use in oil and gas well injection and formation waters. Inject BIOBAN BP-30 as a slug dose directly into well and formation waters at 70-280 mL/cubic meter; 0.55-2.2 pt/1000 gallons or 0.0235-0.093 pt/barrel, 25-100 ppm active ingredient). A slug dose should be applied from once per week to once per month depending on the severity of contamination.

OIL AND GAS PIPELINE AND TANK MAINTENANCE

For use in water bottoms in crude and refined hydrocarbon storage tanks, piping and transportation systems.

Inject BIOBAN BP-30 directly into the water bottom or pipeline, or add to the hydrocarbon phase. Treat once daily for pipeline maintenance to once every one or two months for both storage and transportation systems. Apply BIOBAN BP-30 at 70-560 mL/cubic meter or 0.55-4.5 pt/1000 gallons of aqueous phase (25-200 ppm active ingredient). Higher levels may be added when dosing the hydrocarbon phase which will result in longer term protection by gradual diffusion into the water.

ADHESIVES

For control of microbial contamination, add 0.34 to 3.4 lb of BIOBAN BP-30 per 1000 lb total formulation weight. The addition is best accomplished by adding the product to any water to be incorporated into the formulation.

**DISINFECTANT, LIQUID,
 CORROSIVE, N.O.S.
 (2-BROMO-2-NITRO-1,3
 PROPANEDIOL SOLUTION)
 UN1908**

Apply Corrosive # label.

METALWORKING FLUIDS

For use in soluble oils, semi-synthetic and synthetic fluids. Add directly to the sump (with agitation) and allow the system to circulate for about one hour before shutdown.

In diluted fluids add 700-2800 mL/cubic meter or 0.7-2.8 gallon/1000 gallon (250-1000 ppm active) to control microbial growth. For maintenance add 250-1120 mL/cubic meter or 0.25-1.1 gallon/1000 gallon (100-400 ppm active ingredient) on a weekly basis preferably in the afternoon before shutdown. This frequency may be increased where significant contamination is identified.

BIOBAN BP-30 may be incorporated in metalworking fluid concentrate by the manufacturer who should ensure that any incompatibility will not affect efficacy.

PAPER MILL PROCESS WATER

Apply at a convenient point early in the process system (machine chest, constant head box or backwater loop system).

Shock dose one, twice or three times daily at 1 to 25 ppm a.i. in the process water. This equates to 30 and 700 ml (0.08 and 1.5 pt) per ton of finished paper or paperboard depending on the complexity of the system, quality of raw paper and type and degree of contamination.

PAPER MILLS-BULK PULP

Add BIOBAN BP-30 directly into the hydropulper, machine chest or stock chest.

Add BIOBAN BP-30 once weekly to once daily at between 150 and 500 ml per ton of stock or 1.1-4.4 pt/1000 gallons (50-200 ppm active ingredient) depending on the degree of contamination.

ABSORBENT CLAYS

For in-can preservation impregnate absorbent clays, such as fullers earth, sepiolite and attapulgite with BIOBAN BP-30 by spraying or pouring 7.0 to 56.0 mL/100 lb clay or 0.11-0.86 fl oz/100 lb of clay (25-200 ppm active ingredient).

STARCH, PIGMENT AND EXTENDER SLURRIES

For in-can preservation apply BIOBAN BP-30 to water based solutions of starch or pigments and extender slurries such as kaolin, calcium carbonate and titanium dioxide. Recommended use rates are 280 to 1400 mL/cubic meter at 2.2-11.2 pt/1000 gallon based on the final formulation volume (100 to 500 ppm active ingredient).

PAINTS, LATEX AND ANTIFOAM EMULSION SYSTEMS

For in-can preservation of acrylic, styrene-acrylic, polyvinyl acetate and other latex emulsion concentrates, latex emulsion based paints, silicones and other emulsion emulsion systems.

Add BIOBAN BP-30 at 280 to 1400 mL/cubic meter or 2.2-11.2 pt/1000 gallon based on the final formulation volume (100-500 ppm active ingredient).

WATER BASED PRINTING INKS

To inhibit the growth or spoilage bacteria during the storage and use of water based printing inks, including their use as fountain solutions. In-can preservation: BIOBAN BP-30 should be dosed at 280 to 1400 mL/cubic meter or 2.2-11.2 pt/1000 gallon based on the final formulation volume (100-500 ppm active ingredient).

During the use of fountain solution shock dose BIOBAN BP-30 at 140-280 mL/cubic meter (1.1 to 2.2 pt/1000 gallon) depending on the contamination (between 50 and 100 ppm active ingredient). Apply once or twice weekly as a normal routine to the fountain solution sump.

Not for Use in California

WATER BASED AGRICULTURAL PESTICIDE CONCENTRATES

For preservation, BIOBAN BP-30 should be dosed at 280 to 1400 mL/cubic meter or 2.2 to 11.2 pt/1000 gallons based on the final formulation volume (100 to 500 ppm active ingredient). NOT FOR USE IN CALIFORNIA.

CONSUMER, HOUSEHOLD AND INSTITUTIONAL PRODUCTS;

SURFACTANTS AND RAW MATERIALS

For preservation of products such as dishwashing liquids, surface cleaners, polishes; bulk ionic, nonionic, amphoteric, and cationic surfactants; an raw materials supplied for the manufacture of industrial and consumer products.

BIOBAN BP-30 should be dosed at 280 to 1400 mL/cubic meter or 2.2 to 11.2 pt/1000 gallons based on the final formulation volume (100 to 500 ppm active ingredient).

464-685

02/18/2004

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