

39967-114



12/3/2014

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, DC 20460

1/3

OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

December 3, 2014

Marcia L. Croce  
Regulatory Affairs Specialist  
Lanxess Corporation  
111 RIDC Park West Drive  
Pittsburgh, PA 15275-1112

Subject: Label Notification per PRN 98-10 –Correct Company name, registration number  
emergency contact information and add not for use in California Statement  
Product Name: Vericide Bronopol Solution  
EPA Registration Number: 39967-114  
Application Date: October 28, 2014  
Decision Number: 496807

Dear Ms. Ryder:

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10 for the above referenced product. The Antimicrobials Division has conducted a review of this request for its applicability under PRN 98-10 and finds that the action requested falls within the scope of PRN 98-10.

To add the statement "*Not registered for the use in California*" has been added to the product record.

If you have any questions, you may contact Zebora Johnson at (703) 308-7080 or via email at [johnson.zebora@epa.gov](mailto:johnson.zebora@epa.gov).

Sincerely

A handwritten signature in black ink, appearing to read "Seiichi Murasaki".

Seiichi Murasaki  
Acting Product Manager (33)  
Regulatory Management Branch I  
Antimicrobial's Division (7510P)

# VERICIDE BRONOPOL SOLUTION

A LIQUID MICROBICIDE FOR USE IN CONTROLLING THE GROWTH OF BACTERIA AND ALGAE IN INDUSTRIAL APPLICATION  
Not for the control of algae in the State of California.

## Active Ingredients:

2-bromo-2-nitropropane-1,3-diol.....10.0%  
Inert Ingredients:.....90.0%  
Total:.....100.0%

**KEEP OUT OF REACH OF CHILDREN  
DANGER!**

EPA Reg. No. 39967-114

EPA Est. No.

LOT NO.:

NET WEIGHT:

## PRECAUTIONARY STATEMENTS

### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

Corrosive. Causes eye and skin damage. Do not get in eyes, on skin or on clothing. Avoid breathing spray mists. Wear long sleeve shirt and long pants, socks plus shoes. Wear goggles or face shield and chemical resistant rubber gloves when handling. Do not apply this product in a way that will contact workers or other persons. Harmful or fatal if swallowed. May cause allergic skin reactions in certain individuals. Wash thoroughly with soap and water after handling. Discard clothing or other absorbent materials that have been heavily contaminated with this product's concentrate. Do not reuse them. Remove tightly contaminated clothing and wash separately from other laundry using detergent and hot water before Users should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. Users should remove PPE immediately after handling this product. Wash the outside of the gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

### FIRST AID

**If in eyes:** Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.  
**If on skin or clothing:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center for treatment advice.  
**If swallowed:** Call 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 do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.  
**If inhaled:** Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for treatment advice. 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 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 sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA. Do not apply in marine and/or estuarine oil fields. 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. Keep away from heat  
**PESTICIDE STORAGE:** Store in a cool dry place in tightly closed original containers. Prolonged storage under freezing conditions may cause the active ingredients to crystallize.  
**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 the label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA regional Office for guidance.

**CONTAINER HANDLING AND DISPOSAL**  
**NONREFILLABLE CONTAINER.** Do not refill or reuse container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows:  
**PAILS** (equal to or less than 5 gallons): Empty remaining contents into application equipment or mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

**DRUMS and TOTES/BINS** (greater than 5 gallons): Empty remaining contents into application equipment or mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn container over onto its other end and tip it back and forth several times. Empty the rinsate into the application equipment or mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

**ALL NONREFILLABLE CONTAINERS:** Offer for recycling or reconditioning. If not available, puncture and dispose in a sanitary landfill.

## DIRECTIONS FOR USE

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

## INDUSTRIAL PROCESSES AND WATER SYSTEMS

To control the growth of slime forming, spoilage, odor causing and corrosion inducing bacteria and algae in industrial applications, Vericide Bronopol Solution can be dosed directly either by open pouring (not cooling water treatment) or by metered pump. For product preservation Vericide Bronopol Solution is best added after any heating stage or when the product has cooled below 40° C.

**INDUSTRIAL RECIRCULATING WATER COOLING TOWERS AND EVAPORATIVE CONDENSERS:** Vericide Bronopol Solution may be dosed directly into the sump or basin or added by a suitable chemical pump. Where metering 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 insure rapid dispersal around the system. Do not apply by open pouring of the liquid. Shock dose Vericide Bronopol Solution once or twice weekly as a normal routine or more frequently where contamination is heavy. In heavily fouled systems, the tower should be drained and cleaned before treating. Vericide Bronopol Solution should be shocked dosed at 250 to 1000 ppm (2 pt to 8 pt per 1000 gallons) depending on the condition of the tower, the quality of raw water input and the amount of bleed off.

**INDUSTRIAL PROCESS WATER:** For use in closed circuit machine cooling (injection moulding etc.) and stored (non-potable) water. To reduce the biofouling of pipework, heat exchangers, condenser tubes and minimize microbial produced corrosion. Shock dosing in the sump/tank of the process water system is preferred. In open systems shock dose once weekly to once monthly depending on the degree of contamination. Closed circuit systems require less frequent dosing. Dose initially at 500 ppm (4 pt/1000 gallons) then when successful, lower to a minimum of 100 ppm. For intermittent treatment during routine maintenance use Vericide Bronopol Solution at 1000 ppm and a contact time of at least one hour.

**OIL AND GAS FLUIDS:** For use in both terrestrial and offshore drilling muds and packer fluids, for the control of contamination and degradation of a wide range of gels and fluids including fracturing, enhanced oil recovery, injection, well squeezing, drilling, workover and completion fluids. Add Vericide Bronopol Solution at 500 to 1000 ppm (4 to 8 pt/1000 gallons or 0.18 to 0.36 pt per barrel). For well squeezed fluids add Vericide Bronopol Solution at 250 to 2000 ppm (2 to 16 pt / 1000 gallons). **OIL PROCESS WATERS:** For use in oil and gas well injection and formation waters. Vericide Bronopol Solution should be injected as a slug dose for any convenient point at 250 to 1000 ppm (2 pt to 8 pt/1000 gallons). A slug dose should be applied from once per week to once per month depending on the severity of the contamination.

contamination. **OIL AND GAS PIPE** hydrocarbon storage tanks, piping at bottoms or pipeline, or add to the fluid months for both storage and transport ppm in the aqueous phase. Add high by the gradual diffusion into the water.

**PAPER MILL PROCESS WATER'S** constant head box or backwater loop ppm in the process water depending contamination. This equates to 100 to **PAPER MILLS -BULK PULP:** Add Vericide Bronopol Solution once 16 pt / 1000 gallons) depending on the

**INDUSTRIAL AND/OR COMMERCIAL** control of bacterial and algal growth. carried out into the water sump on a weekly treatment. The initial dose of (equivalent to 50 ppm active ingredient maintenance and cleaning at a level 1c hour.

**ADHESIVES:** Add 1 to 5 pt of Ve to be incorporated into the formul

**ABSORBENT CLAYS:** Impregne Bronopol Solution (0.4 to 3.2 oz. &

**STARCH, PIGMENT AND MINI** suspension concentrates at 1000 gallons). Not for use in pigments

**METAL-WORKING FLUIDS:** For sump and circulate for about one in metalworking fluid concentrate affect efficacy. In diluted fluids 2;

microbial growth (5 gallons of Ve ppm). For maintenance, add 1000

**PAINTS AND OTHER EMULSIC** acetate and other latex emulsion, antifoam emulsion systems. Add

formulation volume (8 to 40 l

**SOLUTIONS:** During the use of f

ppm (4 to 8 pt / 1000 gallons) dep

routine, or more frequently if requ

5000 ppm based on the final form!

IN CASE O

The LANXESS Pittsburgh Er

1 Pi  
2/3  
Label Date: 10/28/14

# LANXESS

GROWTH OF BACTERIA AND  
TION  
of California.

- .....10.0%
- .....90.0%
- .....100.0%

CHILDREN

!

## NOTIFICATION

Date Reviewed: *[Signature]*  
Reviewed By: *[Signature]*

## NTS

thing. Avoid breathing spray mists. Wear  
lid and chemical resistant rubber gloves  
er persons. Harmful or fatal if swallowed.  
soap and water after handling. Discard  
this product's concentrate. Do not reuse  
dry using detergent and hot water before  
obacco, or using the toilet. Users should  
and put on clean clothing. Users should  
he gloves before removing. As soon as

or 15-20 minutes. Remove contact  
3. Call a poison control center or  
immediately with plenty of water  
e.  
or treatment advice. Have person  
less told to do so by the poison  
onscious person.  
Call 911 or an ambulance, then give  
Call a poison control center or  
with you when calling a poison  
ate 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 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 sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA. Do not apply in marine and/or estuarine oil fields. 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. Keep away from heat.  
**PESTICIDE STORAGE:** Store in a cool dry place in tightly closed original containers. Prolonged storage under freezing conditions may cause the active ingredients to crystallize.  
**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 the label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA regional Office for guidance.  
**CONTAINER HANDLING AND DISPOSAL**  
**NONREFILLABLE CONTAINER.** Do not refill or reuse container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows:

**PAILS** (equal to or less than 5 gallons): Empty remaining contents into application equipment or mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

**DRUMS and TOTES/BINS** (greater than 5 gallons): Empty remaining contents into application equipment or mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn container over onto its other end and tip it back and forth several times. Empty the rinsate into the application equipment or mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

**ALL NONREFILLABLE CONTAINERS:** Offer for recycling or reconditioning. If not available, puncture and dispose in a sanitary landfill.

## DIRECTIONS FOR USE

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

## INDUSTRIAL PROCESSES AND WATER SYSTEMS

To control the growth of slime forming, spoilage, odor causing and corrosion inducing bacteria and algae in industrial applications. Vericide Bronopol Solution can be dosed directly either by open pouring (not cooling water treatment) or by metered pump. For product preservation Vericide Bronopol Solution is best added after any heating stage or when the product has cooled below 40° C.

**INDUSTRIAL RECIRCULATING WATER COOLING TOWERS AND EVAPORATIVE CONDENSERS:** Vericide Bronopol Solution may be dosed directly into the sump or basin or added by a suitable chemical pump. Where metering 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 insure rapid dispersal around the system. Do not apply by open pouring of the liquid. Shock dose Vericide Bronopol Solution once or twice weekly as a normal routine or more frequently where contamination is heavy. In heavily fouled systems, the tower should be drained and cleaned before treating. Vericide Bronopol Solution should be shocked dosed at 250 to 1000 ppm 2 pt to 8 pt per 1000 gallons) depending on the condition of the tower, the quality of raw water input and the amount of bleed off.

**INDUSTRIAL PROCESS WATER:** For use in closed circuit machine cooling (injection moulding etc.) and stored (non-potable) water. To reduce the biofouling of pipework, heat exchangers, condenser tubes and minimize microbial produced corrosion. Shock dosing in the sump/bank of the process water system is preferred. In open systems shock dose once weekly to monthly depending on the degree of contamination. Closed circuit systems require less frequent dosing. Dose initially at 500 ppm (4 pt/1000 gallons) then when successful, lower to a minimum of 100 ppm. For intermittent treatment during routine maintenance use Vericide Bronopol Solution at 1000 ppm and a contact time of at least one hour.

**OIL AND GAS FLUIDS:** For use in both terrestrial and offshore drilling muds and packer fluids, for the control of contamination and degradation of a wide range of gels and fluids including fracturing, enhanced oil recovery, injection, well squeezing, drilling, workover and completion fluids. Add Vericide Bronopol Solution at 500 to 1000 ppm (4 to 8 pt/1000 gallons) or 0.18 to 0.36 pt per barrel). For well squeezed fluids add Vericide Bronopol Solution at 250 to 2000 ppm (2 to 16 pt / 1000 gallons). **OIL PROCESS WATERS:** For use in oil and gas well injection and formation waters. Vericide Bronopol Solution should be injected as a slug dose at any convenient point at 250 to 1000 ppm (2 pt to 8 pt / 1000 gallons). 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 Vericide Bronopol Solution directly into the water bottoms or pipeline, or add to the hydrocarbon phase. Treat once daily for pipeline maintenance to once every one to two months for both storage and transportation systems. Vericide Bronopol Solution should be applied to achieve 250-2000 ppm in the aqueous phase. Add higher concentrations to the hydrocarbon phase which will result in longer term protection by the gradual diffusion into the water. Doses will depend on the volume of crude or oil and the expected water fraction.

**PAPER MILL PROCESS WATER SYSTEMS:** Add at a convenient point early in the process system (machine chest, constant head box or backwater loop system). Dose Vericide Bronopol Solution once to three times daily at 10 to 250 ppm in the process water depending on the complexity of the system, quality of raw paper and type and degree of contamination. This equates to 100 to 2500 ml (0.2 to 5 pt) per tonne of finished paper or paperboard.

**PAPER MILLS -BULK PULP:** Add Vericide Bronopol Solution directly into the hydropulper, machine chest or stock chest. Apply Vericide Bronopol Solution once weekly to once daily at 500 to 2000 ppm (500 to 2000 ml per tonne of stock or 4 to 16 pt / 1000 gallons) depending on the type and degree of contamination.

**INDUSTRIAL AND/OR COMMERCIAL AIR WASHERS, AIR CONDITIONERS AND HUMIDIFYING SYSTEMS:** For the control of bacterial and algal growth and to remove built up slime deposits. Shocks dosing is preferred and should be carried out into the water sump on a routine basis once per week or month. Heavily fouled systems may require twice weekly treatment. The initial dose of Vericide Bronopol Solution should be 45 ml/cubic meter or 3.8 pints/1000 gallons (equivalent to 50 ppm active ingredient). Subsequent dosing can be reduced by half. Intermittent treatment during regular maintenance and cleaning at a level to 100 ppm active ingredient is also recommended with a contact time of at least one hour.

## MATERIAL PRESERVATION

**ADHESIVES:** Add 1 to 5 pt of Vericide Bronopol Solution per 100 lb total formulation weight to any water to be incorporated into the formulation.

**ABSORBENT CLAYS:** Impregnate absorbent clays by spraying or pouring 250 to 2000 ppm of Vericide Bronopol Solution (0.4 to 3.2 oz. av. per 100 pounds of clay).

**STARCH, PIGMENT AND MINERAL SLURRIES:** Apply Vericide Bronopol Solution to water based suspension concentrates at 1000 to 5000 ppm based on the final formulation volume (8 to 40 pt / 1000 gallons). Not for use in pigments in the State of California.

**METALWORKING FLUIDS:** For use in soluble oils, semi-synthetic and synthetic fluids. Add directly to the sump and circulate for about one hour before shutdown. Vericide Bronopol Solution may be incorporated in metalworking fluid concentrate by the manufacturer who should ensure that any incompatibility will not affect efficacy. In diluted fluids 2500 to 10,000 ppm of Vericide Bronopol Solution is sufficient to control microbial growth (5 gallons of Vericide Bronopol Solution in 1000 gallons will give a dose level of 5000 ppm). For maintenance, add 1000-4000 ppm of Vericide Bronopol Solution.

**PAINTS AND OTHER EMULSION SYSTEMS:** For the preservation of acrylic, styrene acrylic, polyvinyl acetate and other latex emulsion, latex emulsion based paints, photographic emulsion, silicone and other antifouling emulsion systems. Add Vericide Bronopol Solution at 1000 to 5000 ppm based on the final formulation volume (8 to 40 pt/1000 gallons). **WATER BASED PRINTING INKS AND FOUND**

**SOLUTIONS:** During the use of fountain solutions, shock dose Vericide Bronopol Solution at 500 to 1000 ppm (4 to 8 pt / 1000 gallons) depending on the contamination. Apply once weekly in the fountain as a normal routine, or more frequently if required. For in-can preservation dose Vericide Bronopol Solution at 1000 to 5000 ppm based on the final formulation volume (8 to 40 pt / 1000 gallons).

## IN CASE OF TRANSPORTATION EMERGENCY CALL:

CHEMTREC 1-800-424-9300.

The LANXESS Pittsburgh Emergency Response Telephone Number is: 1-800-410-3063

# LANXESS

Energizing Chemistry

LANXESS Corporation  
111 RIDC Park West Drive  
Pittsburgh, PA 15275-1112

Label Date: 10/28/14

3/3