MYACIDE® S-2

ACTIVE INGREDIENT:	
2-Bromo-2-nitropropane-1.3-diol	**40.8%**
INERT INGREDIENTS:	**59.2%**
TOTAL	**100.0%**

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

KEEP OUT OF REACH OF CHILDREN

DANGER

CORROSIVE: CAUSES EYE AND SKIN DAMAGE. MAY BE FATAL IF SWALLOWED.

Avoid breathing vapor or mist.
Wash thoroughly with soap and water after handling.
Wear goggles or face shield and rubber gloves when handling.
Remove contaminated clothing and wash before reuse.

STATEMENT OF PRACTICAL TREATMENT

IF SWALLOWED: Drink egg whites, gelatin solution, or if these are not available, drink large quantities of water. Call a Physician.

IF INHALED: Remove person to fresh air

IF ON SKIN: Immediately flush skin with plenty of water for 15 minutes.

IF IN EYES: Immediately flush eyes with plenty of water for 15 minutes. Call a Physician

NOTE TO PHYSICIAN
Probable mucosal damage may contraindicate the use of gastric lavage

ANGUS Chemical Company assumes no responsibility when this product is not used in accordance with the instructions and information contained on this label

ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public waters unless this product is specifically identified and addressed in an NPDES permit. 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 contaminate water by cleaning of equipment or disposal of waste.

STORAGE AND DISPOSAL

STORAGE AND DISPOSAL: Do not contaminate water, food, or feed by storage or disposal 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: Completely empty container and triple rinse (or equivalent) Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities

See Additional Precautionary Statements on Side Panel and in Technical Bulletin.

E.P.A. Reg. No. 48301-26 **A-1258-1**
Est. No. 48301-LA-1 **Printed In U.S.A.**

ANGUS Chemical Company
2211 Sanders Road
Northbrook, IL 60062 U.S.A.

ACCEPTED
AUG 28 1991
Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 48301-26

PM 31 48301-28

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Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 48301-28

DIRECTIONS FOR USE

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

INDUSTRIAL RECIRCULATING WATER SYSTEMS

To control slime-forming bacteria and algae in industrial recirculation cooling towers and evaporative condensers, MYACIDE S-2 may be slug-dosed directly into the sump or basin or it may be added by a suitable chemical pump. Where metering pumps are used, these must be set to deliver the required dose as fast as possible (e.g. within 1 hour). The dosing point should be located close to the outlet from the basin to ensure rapid dispersal around the system.

FREQUENCY AND DOSE: MYACIDE S-2 may be shock-dosed once or twice weekly as a normal routine. Where contamination is heavy, more frequent dosing may be required. In heavily fouled systems, the tower should be drained and cleaned before treating with MYACIDE S-2. MYACIDE S-2 should be shock-dosed at between 0.4-1.6 pt./1000 gallons depending on the condition of the tower, the quality of raw water input, and the amount of bleed off.

PRODUCED WATER

To inhibit the growth of slime-forming or corrosion-inducing sulfate-reducing bacteria in formation water produced from wells together with oil or gas, inject MYACIDE S-2 into the water-containing oil or gas stream at any convenient point. It should be injected as slug doses, not as a continuous feed.

FREQUENCY AND DOSE: Depending on severity and rapidity of contamination, MYACIDE S-2 should be slug-dosed from once a week to once a month with 0.018-0.072 pt./barrel.

INDUSTRIAL PROCESS WATER

Use MYACIDE S-2 to effectively control bacterial and algal growth in industrial process water, including closed circuit machine cooling (injection molding, etc.) and stored (non-potable) water, as well as to reduce the biofouling of pipework, heat exchangers, condenser tubes, and to minimize microbially produced corrosion. Dosing should be carried out into the sump/tank of the process water system. Shock-dosing is preferred. MYACIDE S-2 can also be used as an intermittent, flush treatment during regular maintenance cleaning of water tanks (non-potable) or equipment.

FREQUENCY AND DOSE: In open systems, shock-dosing should be carried out on a once weekly to once monthly basis, depending on the degree of contamination. In closed circuit systems, with little possibility of re-infection or loss of MYACIDE S-2 because of makeup or dilution, less frequent dosing (once monthly/twice monthly) should be sufficient. Dosing should be carried out to give an initial concentration of 100 ppm MYACIDE S-2 (0.8 pt./1000 gallons). When the above treatment has been successful, dosing can be lowered to a minimum of 20 ppm MYACIDE S-2 (0.16 pt./1000 gallons). For intermittent treatment of industrial process waters during routine maintenance, MYACIDE S-2 should be used at 200 ppm (1.6 pt./1000 gallons) and a contact time of at least one hour.

OIL FLOODING/INJECTION WATERS

To inhibit the growth of slime-forming or corrosion-inducing sulfate-reducing bacteria in oil well injection waters, inject MYACIDE S-2 as a slug dose at any convenient point.

FREQUENCY AND DOSE: Depending on severity and rapidity of contamination, MYACIDE S-2 should be used from 1 a week to once a month at a concentration of 0.4-1.6 pt./1000 gallons.

PIPELINE MAINTENANCE

To control aerobic and anaerobic bacteria, particularly sulfate-reducing bacteria, growth in oil and gas related production piping and transportation systems, inject MYACIDE S-2 directly into the pipeline or add to the hydrocarbon phase. Addition of the MYACIDE S-2 will produce long-term water concentrations by a diffusion process.

FREQUENCY AND DOSE: Slug treatments are recommended and can vary from daily to monthly to control growth. MYACIDE S-2 should be dosed at a rate which will achieve concentrations of 50-400 ppm in the aqueous phase. Higher concentrations may be used to allow diffusion into the aqueous phase. Dose will depend on the volume of crude or oil and the expected water fraction.

WATER BOTTOMS IN OIL OR TRANSPORTATION TANKS

For effective control of bacterial contamination in water bottoms, in crude, and refined hydrocarbo
Above and below ground storage tanks and large marine systems are all suitable for treatment.
be injected directly into the water bottom or may be sprayed over the surface of the hydrocarbon
to percolate through.

FREQUENCY AND DOSE: Direct addition to the water phase by injection or percolation should b
30-60 days, depending on the severity of the problem. Addition to the hydrocarbon phase will re
protection by gradual diffusion from the hydrocarbon phase into the water phase (depending on s
Incorporate MYACIDE S-2 at a rate which will achieve concentrations of 100-200 ppm in the aqu
quantities may be added when dosing the hydrocarbon phase to allow diffusion of active ingre
bottom during the long term.

METALWORKING FLUIDS

MYACIDE S-2 is recommended for use in soluble oils, semi-synthetic, and synthetic fluids. It shou
to the sump (with agitation). A dose of 500 ppm is recommended for initial treatment, highe
ppm, but no greater for fouled systems. After addition of MYACIDE S-2, the system should be
one hour before shut down.

IN DILUTED FLUIDS: A concentration of 500 to 2000 ppm of MYACIDE S-2 in the fluid is sufficie
microbial growth. For example, add 1.0 gallon of MYACIDE S-2 to 1000 gallons of fluid to ob
1000 ppm in the fluid.

MAINTENANCE DOSAGE: Add 200-400 ppm of MYACIDE S-2 to maintain control of the sys

IN CONCENTRATES: MYACIDE S-2 may be incorporated in metalworking fluid concentrate b
However, the manufacturer should determine the storage stability of MYACIDE S-2 in the concen
Incompatability will not affect its efficacy. The amount to be incorporated will depend on the de
mended for the concentration.

PAPER MILL PROCESS WATER

To control slime-forming bacteria in paper or paperboard process water systems, MYACIDE S-
a convenient point early in the process system. Suitable dosing points are the machine chest,
or backwater loop system.

FREQUENCY AND DOSE: MYACIDE S-2 should be shock-dosed once, twice or three times dail
cient to meet the required dose based on the daily production of finished products. Dose at be
pint per ton of finished paper or paperboard depending on the complexity of the system, quali
type and degree of contamination.

PAPER MILLS — BULK PULP

To preserve bulk quantities of pulp in paper and paperboard manufacturing systems or to pre
general biodeterioration of stock when it is stored in bulk for any significant period of time, add M
into the hydropulper, machine chest or stock chest.

FREQUENCY AND DOSE: In general, a single slug dose will provide control for up to 3 days
upon the initial level of contamination in the stock. In situations where contamination is high,
1-7 days may be required. MYACIDE S-2 should be dosed at between 0.8-3.2 pt./1000 gallons per
ing on the type and degree of contamination.

DRILLING FLUIDS AND WORKOVER AND COMPLETION FLUIDS

For use in oil and gas well drilling muds, mud brines, inhibiting growth of cellulolytic, slime-forming or sulfate-reducing bacteria MYACIDE S-2 may be dosed directly into the mud or brine

FREQUENCY AND DOSE A single slug dose once to three times each 24 hrs Dosing may be less frequent where the contamination is low Each slug dose should be 0.036 to 0.072 pt /barrel total mud volume

INJECTION FLUIDS

To control contamination and corrosion from bacterial sources in fluids/waste fluids that are disposed of through injection into an approved well following approved guidelines, add MYACIDE S 2 to each volume of fluid prior to injection

FREQUENCY AND DOSE: MYACIDE S-2 should be added at a rate of 100 200 ppm (0.036 0.072 pt /barrel) based on the water percent of the injection fluid

ENHANCED OIL RECOVERY (EOR) FLUIDS

For the effective control of bacterial growth and eliminating degradation of EOR gels and fluids used in the oil and gas industry, add MYACIDE S-2 during mixing or by injection during the EOR procedure

FREQUENCY AND DOSE MYACIDE S-2 should be added throughout the EOR operation MYACIDE S-2 should be added at the rate of 100 200 ppm (0.036-0.072 pt /barrel) depending on the quality of the makeup water

WELL SQUEEZE FLUIDS

For the effective control of aerobic and anaerobic bacteria in squeeze fluids and downhole well bore areas, add MYACIDE S 2 during pre mixing of the well squeeze fluid or by direct injection at the well head during the well squeeze procedure

FREQUENCY AND DOSE MYACIDE S 2 should be used for each well squeeze operation to ensure best results Add MYACIDE S 2 at a rate of 0.42 3.36 pt /1000 gallons, depending on the quality of the makeup water

FRACTURING FLUIDS

MYACIDE S 2 reduces bacterial contamination and degradation of fracturing gels and fluids used as well stimulants in the oil and gas industry Add MYACIDE S 2 directly to the water phase at any stage of the fracturing operation, for example, at the pre mixing stage or by direct injection at the well head in combined mix/injection procedures

FREQUENCY AN DOSE MYACIDE S 2 should be used for each fracturing operation to ensure best results Add MYACIDE S 2 at a rate of 0.8 1.6 pt /1000 gallons, depending on the quality of the makeup water

ADHESIVES

For the control of microbial contamination, add 0.2-1.0 pint of MYACIDE S-2 per 100 lb total formulation weight The addition is best accomplished by adding the MYACIDE S-2 to any water to be incorporated into the formulation.

WATER-BASED PRINTING INKS AND FOUNT SOLUTIONS

To inhibit the growth of spoilage bacteria during the storage and use of water-based printing inks and fount solutions. For in-can preservation, add MYACIDE S-2 at any convenient point during the manufacturing process. Ideally, it should be added as a final step after any heating stage and when the product has cooled to below 40°C. To control bacterial spoilage during the use of fount solutions, MYACIDE S-2 should be shock-dosed at a suitable point in the fount reservoir where there is adequate flow or turbulance to ensure quick mixing. MYACIDE S-2 may be shock-dosed once or twice weekly as a normal routine Where conditions indicate, more frequent shock-dosing may be required.

IN-CAN PRESERVATION. MYACIDE S-2 should be dosed at 200 to 1000 ppm based on the final formulation volume (1.6 to 8 pt /1000 gallons).

FOUNT SOLUTIONS: MYACIDE S-2 should be shock-dosed at between 40 and 200 ppm (0.32 to 1.6 pt /1000 gallons) depending on the contamination levels in the fount reservoir.

STARCH, PIGMENT AND EXTENDER SLURRIES

To inhibit the growth of spoilage bacteria during the manufacture, storage and distribution of water-based suspension concentrates, MYACIDE S-2 may be dosed at or close to the end of the manufacturing process in a quantity of the process water If the manufacturing process involves a heating stage, the MYACIDE S-2 should be added after this stage when the product has cooled to below 40°C.

FREQUENCY AND DOSE: MYACIDE S-2 should be dosed at 200 to 1000 ppm based on the final formulation volume (1.6 to 8 pt /1000 gallons)

PAINTS, LATEX AND ANTIFOAM EMULSION SYSTEMS

To provide in can preservation and prevent bacterial spoilage during shelf-life storage of acrylic, styrene-acrylic, polyvinyl acetate and other latex emulsion concentrates and latex emulsion based paints. Also for the preservation of silicone and other antifoam emulsion systems, add MYACIDE S-2 at any convenient point during the manufacturing process Ideally it should be added as a final step just prior to packing of the product into bulk or sales packs If a heating stage is involved in the manufacture, add MYACIDE S-2 after this stage when the product has cooled to below 40°C

FREQUENCY AND DOSAGE MYACIDE S-2 should be dosed at 200 to 1000 ppm based on the final formulation volume (1.6 to 8 pt /1000 gallons)