

MYACIDE® S-1

ACTIVE INGREDIENT:

2-Bromo-2-nitropropane-1,3-diol 18.2%

INERT INGREDIENTS: 81.8%

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.

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 at 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 any other procedures approved by state and local authorities.

See Additional Precautionary Statements on Side Panel and Technical Bulletin.

EPA Reg. No. 48301-29
EPA Est. No. 48301-LA-1

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ANGUS®

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

MYACIDE is a registered trademark of The Boots Company PLC

ACCEPTED

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Under the Federal Insecticide,
Fungicide, and Rodenticide Act,
as amended, for the pesticide
registered under
EPA Reg. No. 48301-29

2072

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 recirculating cooling towers and evaporative condensers, MYACIDE S-1 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-1 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-1. MYACIDE S-1 should be shock dosed at between 1-4 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 by wells together with oil or gas, inject MYACIDE S-1 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 rapidly of contamination, MYACIDE S-1 should be slug dosed from once a week to once a month with 0.042-0.17 pt./barrel.

INDUSTRIAL PROCESS WATER

Use MYACIDE S-1 to effectively control bacterial and algal growth in industrial process water including closed circuit machine cooling (machines including etc.) and stored steam boiler water, as well as to reduce the fouling of pipework, heat exchangers, and 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-1 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-injection or loss of MYACIDE S-1 because of makeup or bleed, less frequent dosing (once monthly/twice monthly) should be sufficient. Dosing should be carried out to give an initial concentration of 250 ppm (2 pt./1000 gallons). When the above treatment has been successful, dosing can be lowered to a minimum of 50 ppm MYACIDE S-1 (4 pt./1000 gallons) and a contact time of at least one hour.

OIL FLOODING/INJECTION WATERS

To inhibit the growth of slime forming or sulfate-reducing bacteria in oil well injection waters, inject MYACIDE S-1 as a slug dose at any convenient point.

FREQUENCY AND DOSE Depending on severity and rapidly of contamination, MYACIDE S-1 should be used from once a week to once a month at a concentration of 1-4 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, pre dissolve MYACIDE S-1 directly into the pipe, or add to the hydrocarbon phase. Addition of the MYACIDE S-1 will produce long term water phase concentrations by a diffusion process.

FREQUENCY AND DOSE Slug treatments are recommended and can vary from daily to monthly to control growth. MYACIDE S-1 should be dosed at a rate which will achieve concentrations of 125-1000 ppm in the aqueous phase. Higher concentrations may be used to force diffusion into the hydrocarbon phase. Dose will depend on the volume of crude oil and the expected water fraction.

DRIILLING FLUIDS AND WORKOVER AND COMPLETION FLUIDS

For use in oil and gas well drilling fluids and brines, inhibiting growth of cellulolytic, slime forming or sulfate-reducing bacteria. MYACIDE S-1 may be dosed directly into the mud or brine.

FREQUENCY AND DOSE A single slug dose once or three times each 24 hrs. Dosing may be less frequent where the contamination is low. Each slug dose should be 0.05-0.10 pt./barrel total fluid volume.

INJECTION FLUIDS

To control contamination and corrosion from bacterial sources in fluids/injection fluids that are disposed of through injection into an approved well following approved guidelines, add MYACIDE S-1 to each volume of fluid prior to injection.

FREQUENCY AND DOSE MYACIDE S-1 should be added at a rate of 250-500 ppm (0.09-0.18 pt./barrel) based on the water content of the injection fluid.

ENHANCED OIL RECOVERY (EOR) FLUIDS

For the effective control of bacterial growth and minimizing degradation of EOR gels and fluids used in the oil and gas industry, add MYACIDE S-1 during mixing or by direct injection into the EOR procedure.

FREQUENCY AND DOSE MYACIDE S-1 should be added throughout the EOR operation. MYACIDE S-1 should be added at the rate of 1-8 pt./1000 gallons, 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-1 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-1 should be used for each well squeeze operation to ensure best results. Add MYACIDE S-1 at a rate of 1-8 pt./1000 gallons, depending on the quality of the makeup water.

FRACTURING FLUIDS

MYACIDE S-1 reduces bacteria, contamination and degradation of fracturing gels and fluids used as well stimulants in the oil and gas industry. Add MYACIDE S-1 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 AND DOSE MYACIDE S-1 should be used for each fracturing operation to ensure best results. MYACIDE S-1 should be added at a rate of 2-4 pt./1000 gallons, depending on the quality of the makeup water.

WATER BOTTOMS IN OIL STORAGE OR TRANSPORTATION TANKS

For effective control of bacterial contamination in water bottoms of crude and refined hydrocarbon storage systems, above and below ground storage tanks and large marine systems are all suitable for treatment. MYACIDE S-1 may be injected directly into the water bottom or may be sprayed over the surface of the hydrocarbon phase and allowed to permeate through.

FREQUENCY AND DOSE Direct addition to the water phase by injection or permeation should be carried out every 30-60 days, depending on the severity of the problem. Addition to the hydrocarbon phase will result in longer term protection by gradual diffusion from the hydrocarbon phase into the water phase (depending on storage conditions). Provide longer term water concentrations depending on frequency of hydrocarbon movement, drawing of water bottom, and other factors. Incorporate MYACIDE S-1 at a rate which will achieve concentrations of 250-500 ppm in the aqueous phase. Larger quantities may be added when dosing the hydrocarbon phase to allow diffusion of active ingredient into the water bottom during the long term.

METALWORKING FLUIDS

MYACIDE S-1 is recommended for use in soluble oils, semi-synthetic and synthetic fluids. It should be added directly to the same with agitation. A dose of 1500 ppm is recommended for initial treatment, higher levels up to 5000 ppm, but no greater for flooded systems. After addition of MYACIDE S-1, the system should be circulated for about one hour before shut down.

IN DILUTED FLUIDS A concentration of 1500 to 5000 ppm of MYACIDE S-1 in the fluid is sufficient to control gross microbial growth. For example, add 2.5 gallons of MYACIDE S-1 to 1000 gallons of fluid to obtain a dose level of 2500 ppm in the fluid.

MAINTENANCE DOSAGE Add 500-1000 ppm of MYACIDE S-1 to maintain control of the system.

IN CONCENTRATES MYACIDE S-1 may be incorporated in metalworking fluid concentrate by the manufacturer. However, the manufacturer should determine the storage stability of MYACIDE S-1 in the concentrate to ensure that incompatibility will not affect its efficacy. The amount to be incorporated will depend on the dilution factor recommended for the concentrate.

ADHESIVES

To control microbial contamination, add 0.5-2.5 pts. of MYACIDE S-1 per 100 g of total formulation weight. The addition is best accomplished by adding the MYACIDE S-1 to any water to be incorporated into the formulation.

PAPER MILL PROCESS WATER

To control slime forming bacteria in paper or paperboard process water systems, MYACIDE S-1 may be dosed at a convenient point early in the process system. Suitable dosing points are the machine chest constant head box or backwater loop system.

FREQUENCY AND DOSE MYACIDE S-1 should be shock dosed once, twice or three times daily in quantities sufficient to meet the required dose based on the daily production of finished products. Dose at between 0.1 and 2.5 pts. per ton of finished product. The required dose will depend on the complexity of the system, quality of the paper and type of sludge.

PAPER MILLS - BULK PULP

To preserve bulk quantities of pulp in paper and paperboard manufacturing systems or to prevent foul odors and general deterioration of stock when it is stored in bulk for any significant period of time, add MYACIDE S-1 directly into the hydro-pulper machine chest or stock chest.

FREQUENCY AND DOSE In general, a single slug dose will provide control for up to 3 days or longer depending upon the initial level of contamination in the stock. In situations where contamination is high, repeat dosing every 1-7 days may be required. MYACIDE S-1 should be dosed at between 2-8 pts./1000 gallons per ton of stock depending on the type and age, or of contamination.

STARCH, PROTEIN AND EXTENDER SCORIES

To inhibit the growth of spoilage bacteria during the manufacture, storage and distribution of water based suspensions and concentrates, MYACIDE S-1 may be dosed at or close to the end of the manufacturing process, or at a number of the process stages. If the manufacturing process involves a heating stage, the MYACIDE S-1 should be added after this stage when the product has cooled to below 40°C.

FREQUENCY AND DOSE MYACIDE S-1 should be dosed at 500 to 2500 ppm based on the final formulation volume (4-20 pts./1000 gallons).

PAINTS, LATEX AND ANTIFOAM EMULSION SYSTEMS

To prevent 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 latex and other emulsion systems, add MYACIDE S-1 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-1 at this stage when the product has cooled to below 40°C.

FREQUENCY AND DOSE MYACIDE S-1 should be dosed at 500 to 2500 ppm based on the final formulation volume (4-20 pts./1000 gallons).

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, MYACIDE S-1 should be added 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. To control bacterial spoilage during the use of fount solutions, MYACIDE S-1 should be shock-dosed at a suitable point in the fount reservoir where there is adequate flow or turbulence to ensure quick mixing. MYACIDE S-1 may be shock dosed once or twice weekly as a normal routine. Where conditions indicate, more frequent shock-dosing may be required.

FREQUENCY AND DOSE

IN CAN PRESERVATION MYACIDE S-1 should be dosed at 500 to 2500 ppm based on the final formulation volume (4-20 pts./1000 gallons).

FOUNT SOLUTIONS MYACIDE S-1 should be shock dosed at between 100 and 500 ppm (0.4-2 pts./1000 gallons) depending on the contamination levels in the fount reservoir.

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Recommended doses expressed as ppm are ppm active

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for the purpose
of use
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