

MYACIDE® S-15

ACTIVE INGREDIENT:

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

10.0%

INERT INGREDIENTS:

90.0%

TOTAL 100.0%

KEEP OUT OF REACH OF CHILDREN

DANGER

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CORROSIVE: CAUSES IRREVERSIBLE EYE DAMAGE AND SKIN IRRITATION. HARMFUL IF SWALLOWED, ABSORBED THROUGH SKIN, OR INHALED. PROLONGED OR FREQUENTLY REPEATED SKIN CONTACT MAY CAUSE ALLERGIC REACTION IN SOME INDIVIDUALS.

Do not get in eyes, on skin, or on clothing. Wear overalls over long-sleeved shirt and long pants, socks, chemical resistant footwear, goggles or face shield, and chemical resistant gloves (such as nitrile, butyl rubber, neoprene rubber, or barrier laminate). Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. 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. 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.

E.P.A. Reg. No. 464-680

Est. No. 73721-KOR-001

Printed in U.S.A.



The Dow Chemical Company
Midland, Michigan 48674 U.S.A.
1-800-258-CHEM

*Trademark of THE DOW CHEMICAL COMPANY

MYACIDE is a registered trademark of Knoll AG

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.

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 the first 5 minutes, then continue rinsing. 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.

NOTE TO PHYSICIAN

Probable mucosal damage may contraindicate the use of gastric lavage.

DIRECTIONS FOR USE

IT IS A VIOLATION OF FEDERAL LAW TO USE THIS PRODUCT IN A MANNER INCONSISTENT WITH ITS LABELING

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

PESTICIDE STORAGE: Do not store or transport in unlined metal container.

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 drum for recycling or reconditioning, or puncture. Dispose of container in sanitary landfill, or by incineration, if allowed by State and local authorities. If burned, stay out of smoke.

GENERAL USE DIRECTIONS: To control the growth of slime-forming, spoiling, odor-causing and corrosion inducing bacteria and algae in industrial applications. Not for control of algae in California.

MYACIDE® S15 can be dosed directly by preparing a stock solution immediately prior to application either by open pouring (not cooling water treatment) or by metered pump.

For product preservation MYACIDE S15 is best added after any heating stage or when the product has cooled below 40°C.

See Additional Precautionary Statements on Side Panel.

ACCEPTED

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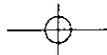
Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide, registered under EPA Reg. No. 464-680

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DIRECTIONS FOR USE

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

INDUSTRIAL RECIRCULATING WATER COOLING TOWERS AND EVAPORATIVE CONDENSERS

To control slime-forming bacteria and algae in industrial recirculation cooling towers and evaporative condensers, MYACIDE S-15 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-15 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-15. MYACIDE S-15 should be shock-dosed at between 2-8 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-15 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-15 should be slug-dosed from once a week to once a month with 0.083-0.33 pt./barrel.

INDUSTRIAL PROCESS WATER

Use MYACIDE S-15 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-15 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-15 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 500 ppm MYACIDE S-15 (4 pt./1000 gallons). When the above treatment has been successful, dosing can be lowered to a minimum of 100 ppm MYACIDE S-15 (0.8 pt./1000 gallons). For intermittent treatment of industrial process waters during routine maintenance, MYACIDE S-15 should be used at 1000 ppm (8 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-15 as a slug dose at any convenient point.

FREQUENCY AND DOSE: Depending on severity and rapidity of contamination, MYACIDE S-15 should be used from once a week to once a month at a concentration of 2-8 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-15 directly into the pipeline or add to the hydrocarbon phase. Addition of the MYACIDE S-15 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-15 should be dosed at a rate which will achieve concentrations of 250-2000 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.

FRACTURING FLUIDS

MYACIDE S-15 reduces bacterial contamination and degradation of fracturing gels and fluids used as well stimulants in the oil and gas industry. Add MYACIDE S-15 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-15 should be used for each fracturing operation

to ensure best results. Add MYACIDE S-15 at a rate of 4-8 pt./1000 gallons, depending on the quality of the makeup water.

WATER BOTTOMS IN OIL OR TRANSPORTATION TANKS

For effective control of bacterial contamination in water bottoms, in crude, and refined hydrocarbon storage systems. Above and below ground storage tanks and large marine systems are all suitable for treatment. MYACIDE S-15 may be injected directly into the water bottom or may be sprayed over the surface of the hydrocarbon phase and allowed to percolate through.

FREQUENCY AND DOSE: Direct addition to the water phase by injection or percolation 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). Incorporate MYACIDE S-15 at a rate which will achieve concentrations of 500-1000 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-15 is recommended for such use in soluble oils, semi-synthetic, and synthetic fluids. It should be added directly to the sump (with agitation). A dose of 2500 ppm is recommended for initial treatment, higher levels up to 10,000 ppm, but no greater for fouled systems. After addition of MYACIDE S-15, the system should be circulated for about one hour before shutdown.

IN DILUTED FLUIDS: A concentration of 2500 to 10,000 ppm of MYACIDE S-15 in the fluid is sufficient to control gross microbial growth. For example, add 5 gallons of MYACIDE S-15 to 1000 gallons of fluid to obtain a dose level of 5000 ppm in the fluid.

MAINTENANCE DOSAGE: Add 1000-2000 ppm of MYACIDE S-15 to maintain control of the system.

IN CONCENTRATES: MYACIDE S-15 may be incorporated in metalworking fluid concentrate by the manufacturer. However, the manufacturer should determine the storage stability of MYACIDE S-15 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 concentration.

PAPER MILL PROCESS WATER

To control slime-forming bacteria in paper or paperboard process water systems, MYACIDE S-15 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-15 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 0.2-5 pints per ton of finished paper or paperboard depending on the complexity of the system, quality of the raw paper and type and the degree of contamination.

PAPER MILLS - BULK PULP

To preserve bulk quantities of pulp in paper and paperboard manufacturing systems or to prevent foul odors and general biodeterioration of stock when it's stored in bulk for any significant period of time, add MYACIDE S-15 directly 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 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-15 should be dosed at 4-16 pt./1000 gallons per ton of stock depending on the type and degree of contamination.

DRILLING FLUIDS

To preserve oil and gas well drilling muds by inhibiting growth of cellulolytic, slime-forming or sulfate-reducing bacteria. MYACIDE S-15 may be dosed directly into the mud hopper.

FREQUENCY AND DOSE: A single slug dose once to three times each 24 hours. Each slug dose should be 0.18 to 0.36 pt./barrel total mud volume.

DRILLING FLUIDS AND WORKOVER AND COMPLETION FLUIDS

For use in oil and gas well drilling muds, and brines, inhibiting growth of cellulolytic, slime-forming or sulfate-reducing bacteria. MYACIDE S-15 may be dosed directly into the mud or brine.

Recommended doses expressed as ppm are ppm product.

FREQUENCY AND DOSE: A single slug dose once to three times each 24 hours. Dosing may be less frequent where the contamination is low. Each slug dose should be 0.18 to 0.36 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-15 to each volume of fluid prior to injection.

FREQUENCY AND DOSE: MYACIDE S-15 should be added at a rate of 500-1000 ppm (0.18-0.36 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-15 during mixing or by injection during the EOR procedure.

FREQUENCY AND DOSE: MYACIDE S-15 should be added throughout the EOR operation. MYACIDE S-15 should be added at the rate of 500-1000 ppm (0.18-0.36 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-15 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-15 should be used for each well squeeze operation to ensure best results. Add MYACIDE S-15 at a rate of 2-16 pt./1000 gallons, depending on the quality of the makeup water.

ADHESIVES

For the control of microbial contamination, add 1-5 pints of MYACIDE S-15 per 1000 lb total formulation weight. The addition is best accomplished by adding the MYACIDE S-15 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-15 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-15 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-15 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-15 should be dosed at 1000-5000 ppm based on the final formulation volume pending on the contamination levels in the fount reservoir.

FOUNT SOLUTIONS: MYACIDE S-15 should be shock-dosed at between 200-1000 ppm (1.6-8 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-15 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-15 should be added after this stage when the product has cooled to below 40°C.

FREQUENCY AND DOSE: MYACIDE S-15 should be dosed at 1000-5000 ppm based on the final formation volume (8-40 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-15 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-15 after this stage when the product has cooled to below 40°C.

FREQUENCY AND DOSE: MYACIDE S-15 should be dosed at 1000-5000 ppm based on the final formation volume (8-40 pt./1000 gallons.)

ABSORBENT CLAYS, CORN COBS AND GROUND WOOD

Impregnate absorbent clays, corn cobs or ground wood with MYACIDE S-15 to inhibit growth of odor-causing bacteria. The suggested application rate is 250-2000ppm (0.4-3.2oz. av. per 100 pounds absorbent material.)

A-161F-2



2/2