

48301-28

9-5-2000

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U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Pesticide Programs
Registration Division 7504C
401 "M" St., S.W.
Washington, D.C. 20460

EPA Reg.
Number:

48301-28

Date of Issuance:

SEP 05 2000

NOTICE OF PESTICIDE:

 Registration
 X Reregistration

Term of Issuance:

Conditional

Name of Pesticide Product:

MYACIDE S2

(under FIFRA, as amended)

Name and Address of Registrant (include ZIP Code):

Angus Chemical Company
1500 East Lake Cook Road
Buffalo Grove, IL 60089

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

Based on your response to the Bronopol Reregistration Eligibility Document, EPA has reregistered the product listed above. This action is taken under the authority of section 4 (g) (2) (C) of the Federal Insecticide, Fungicide, and Rodenticide Act, as amended. Reregistration under this section does eliminate the need for continuous reassessment of pesticides. EPA may require submission of data at any time to maintain the registration of your product.

Make the following labeling changes before you release the product for shipment:

1. Add a Net Contents statement to the product labeling or container.
2. Change the subheading Statement of Practical Treatment to First Aid.

Signature of Approving Official:

Marshall Swindell, Product Manager 33,
RMBI, AD

Date:

SEP 05 2000

3. Revise the First Aid section to read as follows:

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 ON SKIN: Take off contaminated clothing

OR CLOTHING: Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

IF SWALLOWED: Call a Poison Control Center or doctor for treatment advice

Have person sip a glass of water if able to swallow

Do not induce vomiting unless told by a Poison Control Center or doctor

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 advice

4. Applicators and handlers must wear:

- Coveralls over long-sleeved shirt and long pants
- socks and chemicals resistant footwear
- goggles or face shield
- chemical-resistant gloves (such as Barrier/amine, butyl rubber, nitrile rubber, neoprene rubber, poly-Vinyl/chloride (PVC), and Viton).

5. As per the RED, the Engineering Controls statement is required to read as follows:

Engineering Controls

Do not apply by open pouring of liquid to cooling water System; a metering pump delivery system is required for this use and application method.

6. Place the Engineering Controls statement directly below the User Safety Recommendations section.
7. Revise the following statements that appear in the Hazards to Humans and Domestic Animals section to read as follows:

Follow manufacturer's instructions for cleaning/ maintaining PPE.

If there are no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

8. The Note to Physician section should include the following:

- technical information on symptomatology
- use of supportive treatments to maintain life functions
- medicine that will counteract the specific physiological effects of pesticides
- company telephone number to specific medical personnel who can provide specialized medical advice.

9. Modify the Hazards to Humans and Domestic Animals to read as follows:

DANGER

Corrosive. Causes irreversible eye damage or skin burns. Harmful if swallowed or absorbed through the skin. Do not get in eyes or skin or on clothing. Avoid breathing spray mist. Prolonged or frequently repeated skin contact may cause allergic reaction in some individuals. Remove contaminated clothing and wash clothing before reuse.

10. As per the RED, the User Safety Recommendations must be modified and read as follows:

User Safety Recommendations

User 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.

11. Revise the Storage and Disposal section to read as follows:

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage and disposal.

PESTICIDE STORAGE: Keep away from heat.

PESTICIDE DISPOSAL:.....office for guidance.

CONTAINER DISPOSAL:stay out of smoke.

12. Place the following statements under the Hazards to Humans and Domestic Animals section to read as follows:

Do not apply by open pouring of liquid to cooling water systems; a metering pump delivery system is required for this use and application method.

For use in terrestrial wells only. Do not apply in marine and/or estuarine oil fields.

13. Add a subheading Application Instructions section to the product labeling to read as follows:

APPLICATION INSTRUCTIONS

INDUSTRIAL RECIRCULATING WATERSYSTEMS...of bleed off.

PRODUCED WATER.....with 0.0036-0.072 pt./barrel.

INDUSTRIAL PROCESS WATER.....of at least one hour.

OIL FLOODING/INJECTION WATERS.....0.4-1.6 pt/1000 gallons.

WATER BOTTOMS IN OIL OR TRANSPORTATION TANKS...during the long term.

METALWORKING FLUIDS....recommend for the concentration.

PAPERMILL PROCESS WATER....degree of contamination.

PIPELINE MAINTENANCE.....expected water fraction.

DRILLING FLUIDS AND COMPLETION FLUIDS.....0.036-0.72 pt./barrel total mud.

INJECTION FLUIDS.....of the injection field.

ENHANCED OIL RECOVERY (OR) FLUIDS.....the make up water.

WELL SQUEEZE FLUIDS.....well squeeze procedure.

FRACTURING FLUIDS.....of the make up water.

ADHESIVES.....into the formulation.

WATER-BASED PRINTING INKS AND FOUNT SOLUTIONS...in the

STARCH, PIGMENT AND EXTENDER SLURRIES....pt/1000 gallons.

PAINTS, LATEX, AND ANTIFOAM EMULSIONS SYSTEMS...volume (1.6 to 8 pt/1000 gallons).

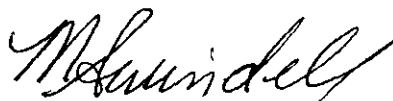
ABSORBENT CLAYS.....per 1000 pounds of clay.

3. Submit tow copies of the revised final printed label for the record.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

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A stamped copy of the labeling is enclosed for your records.



Marshall Swindell
Product Manager 33
Regulatory Management Branch I
Antimicrobial Division(7505C)

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DRAFT LABEL

MYACIDE® S2

Active Ingredient:

2-Bromo-2-nitropropane-1,3-diol 40.6%

Inert Ingredients:

Total 59.4%
100.0% by wt.

KEEP OUT OF REACH OF CHILDREN

DANGER!

**PRECAUTIONARY STATEMENTS
HAZARDS TO HUMAN AND DOMESTIC ANIMALS**

CORROSIVE: Causes irreversible eye damage. Harmful if swallowed, absorbed through the skin, or inhaled. May cause allergic skin reaction in certain individuals.

Do not get in eyes, on skin, or clothing. Wear goggles or face shield and chemical resistant rubber gloves when handling. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Users should remove clothing immediately if pesticide gets inside. Remove contaminated clothing and wash separately from other laundry using detergent and hot water before re-use. Wash the outside of gloves before removing.

Do not apply this product in a way that will contact workers or other persons.

ACCEPTED
with COMMENTS
in EPA Letter Dated:

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FIRST AID:

If in eye(s): Hold eyelids open and flush with a steady, gentle stream of water for 15 minutes. Get medical attention.

If on skin: Wash with plenty of soap and water. Get medical attention.

If swallowed: Call a doctor or get medical attention. Do not induce vomiting. Drink large quantities of water.

If inhaled: Remove victim to fresh air. Get medical attention.

Under the Federal Insecticide,
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registered under EPA Reg. No.

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



ANGUS Chemical Company
1500 E. Lake Cook Road
Buffalo Grove, IL 60089 USA

EPA Reg. No. 48301-28
EPA Est. No. 33753-EN-01

ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other water 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.

DIRECTIONS FOR USE

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

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STORAGE AND DISPOSAL

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

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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

Empty residue into application equipment. Triple rinse (or equivalent), then offer drum 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.

GENERAL USE DIRECTIONS

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

MYACIDE® S2 can be dosed directly or 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 S2 is best added after any heating stage or when the product has cooled below 40°C.

PIPELINE MAINTENANCE

To control aerobic and anaerobic bacteria, particularly sulfate-reducing bacteria, 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.

DRILLING 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-2 may be dosed directly into the mud or brine.

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 0.036 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 mldng 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-mldng 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 AND DOSE: MYACIDE S-2 should be used for each fracturing operation to ensure best results. Add MYACIDE S-2 at a rate of 0.6-1.6 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 180 lb total formulation weight. The addition is the 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 turbulence to ensure quick mldng. 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).

ABSORBENT CLAYS

Impregnate absorbent clays with MYACIDE S-2 to inhibit the growth of odor-causing bacteria. The suggested application rate is 50-400 ppm (0.08-0.64 oz.av.) per 100 pounds of clay.

ANGUS CHEMICAL COMPANY

Recommended doses expressed as ppm are ppm product as sold.

A-125D-2

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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 by 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 0.036-0.072 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 blofouling 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 to 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 once a week to once a month at a concentration of 0.4-1.6 pt./1000 gallons.

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-2 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-2 at a rate which will achieve concentrations of 100-200 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-2 is recommended for use in soluble oils, semi-synthetic, and synthetic fluids. It should be added directly to the sump (with agitation). A dose of 500 ppm, is recommended for initial treatment, higher levels up to 2000 ppm, but no greater for fouled systems. After addition of MYACIDE S-2, the system should be circulated for about one hour before shut down.

IN DILUTED FLUIDS: A concentration of 500 to 2000 ppm of MYACIDE S-2 in the fluid is sufficient to control gross microbial growth. For example, add 1.0 gallon of MYACIDE S-2 per 1000 gallons fluid to obtain a dose level of 1000 ppm in the fluid.

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

IN CONCENTRATES: MYACIDE S-2 may be incorporated in metalworking fluid concentrate by the manufacturer. However, the manufacturer should determine the storage stability of MYACIDE S-2 in the concentrate to ensure that incompatibility will not affect its efficacy. The amount to be incorporated will depend on the dilution factor recommend for the concentration.

PAPER MILL PROCESS WATER

To control slime-forming bacteria in paper or paperboard process water systems, MYACIDE S-2 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-2 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 0.04 and 1.0 pint 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

To preserve bulk quantities of pulp in paper and paperboard manufacturing systems or to prevent foul odors and general biodegradation of stock when it is stored in bulk for any period of time, add MYACIDE S-2 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-2 should be dosed at between 0.8-3.2 pt./1000 gallons per ton of stock depending on the type and degree of contamination.

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