

U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Pesticide Programs
Registration Division (H7505C)
401 "M" St., S.W.
Washington, D.C. 20460

EPA Reg. Number:

Date of Issuance:

48301-35

FEB 0 7 2001

NOTICE OF PESTICIDE:

__ Registration X Reregistration

(under FIFRA, as amended)

Name of Pesucide Product

Term of Issuance: Conditional

Myacide S-15

Name and Address of Registrant (include ZIP Code):

Angus Chemical Company 500 East Lake Cook Road Buffalo Grove, ILL 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 the 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 Reregistration Eligibility Document for Bronopol RED, EPA has reregistered the above named product subject to the comments recorded in the succeeding paragraph. 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 not eliminate the need for continual reassessment of pesticides. EPA may require submission of data at any time to maintain the registration of your product.

- 1. Make the following label changes:
 - a. Revise the EPA Registration No. to read "EPA Reg. No. 48301-35".

Signature of Approving Official:

Marshall Swindell, PM 33 Martha Stry / 767

Regulatory Management Branch 1

Antimicrobial Division (7510C)

Date:

FEB 0 7 2001

EPA Form 8570-6

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c. Revise the "First Aid" statements 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 SWALLOWED:

Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of er 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.

d. Revise the "Precautionary Statements" that appear under the subheading "Hazards to Humans and nestic Animals" to read:

"Corrosive. Causes irreversible eye damage. Causes skin irritation. Harmful if swallowed or absorbed through skin or inhaled. Do not get in eyes, on skin, or on clothing. Avoid breathing spray mist. Prolonged or frequently repeated skin contact may cause allergic reaction in some individuals. Wear coveralls over long-sleeved shirt and long pants, socks chemical resistant footwear, goggles or face shield and chemical resistance 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.

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- e. Include a "Physical and Chemical Hazards" heading and the phrase "This product is corrosive to mild steel".
- f. In the Storage and Disposal section, include a subheading "Pesticide Storage" and include the phrase "Do not store or transport in unlined metal container".
 - g. A net contents field must be added to the label.

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

Submit two (2) copies of final printed labeling for our review. A stamped copy of the label is enclosed for your records.

If you have any questions concerning this letter, please contact Martha Terry at (703) 308-6217.

Sincerely,

Martha Sterry Hon Marshall Swindell

Product Manager 33

Regulatory Management Branch 1 Antimicrobial Division (7510C)

Enclosure

DRAFT LABEL

MYACIDE® S15

ACCEPTED with COMMENTS in EFA Letter Dated:

FEB 0 7 2001

Active Ingredient:

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

Inert Ingredients:

Total

10.0%

90.0% 100.0% by wt. Under the Federal insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide, registered under EPA Reg. No.

48301-35

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.

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.

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

ACCEPTED with COMMERCES in EPA Letter Dated: FEB 0 7 2001

EPA Reg. No. 48301-35 EPA Est, No. 33753-EN-01 Under the Federal Installate
Fungicide, and Rodentzide Act as
amended, for the pesticide,
registered under EPA Reg. No
4830/-3.5

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

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

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

with COMMENTS in EPA I or Dated:

DIRECTIONS FOR USE

FEB 0 7 2001

It is a violation of Federal law to use this producted in a Manned Insecticide, amended, for the pesticide,

registered under EPA Reg. No.

INDUSTRIAL RECIRCULATING WATER COOLING TOWERS AND EVAPORATIVE CONDENSERS

To control stime-forming bacteria and algae in industrial recirculation cooling towers and evaporative condensers, MYACIDE S-15 may be stug-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 stime-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 stug 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 intermittant, 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 intermittant 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: Stug treatments are recommended and can vary from daily to monthly to control growth. MYACIDE 5-15 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 AN 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 gailons, 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 ever 30-60 days, depending on the severity of the problem. Addition to the hydrocarbon phase will result in longer tern 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. Large 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 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 shut down.

IN DILLYTED 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 manufacture However, the manufacturer should determine the storage stability of MYACIDE S-15 in the concentrate to ensure the incompatability 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 a convenient point early in the process system. Suitable dosing points are the machine chest, constant head be 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 pint per ton of finished paper or paperboard depending on the complexity of the system, quality of raw paper and typ 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 an general blodeterioration of stock when it is stored in bulk for any significant period of time, add MYACIDE S-15 directl 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 dependin upon the initial level of contamination in the stock. In situations where contamination is high, repeat dosing ever 1-7 days may be required. MYACIDE S-15 should be dosed at 4-16 pt./1000 gallons per ton of stock depending of the type and degree of contamination.



DRILLING FLUIDS

To preserve all and gas well drilling muds by tranibiting growth of cellulolytic, siline-forming or sulfate-reducing bactaria, MYACIDE S-15 may be dosed directly into the mud hopper.

FREQUENCY AND DOSE: A single slug dose once to three times each 24 hrs. Each slug dose should be 0.18-0.36 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.

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 0.18-0.36 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 MYA-CIDE 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

1000

For the control of microbial contamination, add 1-5 pints of MYACIDE S-15 per 1907 b 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 spotlage 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 turbulance 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 (8-40 pt./1000 gallons).

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 spollage 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 formulation volume (8-40 pt/1000 gallons).

PAINTS. LATEX AND ANTIFOAM EMULSION SYSTEMS

To provide in-can preservation and prevent bacterial spollage during shelf-life storage of acrylic, styrene-acrylic, polyvinyl acetate and other latex emulsion concentrates and tatex 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, and MYACIDE S-15 after this stage when the product has cooled to balow 40°C.

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

ANGUS CHEMICAL COMPANY

Recommended doses expressed as ppm are ppm-active

ABSORBENT CLAYS

Impregnate absorbent clays by spraying or pouring 250-2000 ppm of MYACIDE S15 (0.4-3.2 oz av. per 100 pounds of clayl.

ACCEPTED with COMMENTS in EPALletter Dated:

A-161-2

Under the Federal Insecticide, Pungicide, and Rodenticide Act as amended, for the posticide, registered under EPA Reg. No.

48301-35