

NOTICE OF PESTICIDE**REGISTRATION
REREISTRATION****Hyacide As Plus****(Under the Federal Insecticide, Fungicide,
and Rodenticide Act, as amended)****NAME AND ADDRESS OF REGISTRANT (Include ZIP code)**

Angus Chemical Company
2211 Sanders Road
Northbrook, IL 60062

NOTE: Changes in labeling formula differ... 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 U.S. 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.

A copy of the labeling accepted in connection with this Registration/Reregistration is returned herewith.

Registration is in no way to be construed as an indorsement or approval of this product by this 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.

This product is conditionally registered in accordance with FIFRA section 3(c)(7)(A) provided that you:

1. Submit/cite all data required for registration/reregistration of your product under FIFRA section 3(c)(5) when the Agency requires all registrants of similar products to submit such data.

2. Make the labeling changes listed below before you release the product for shipment:

- a. Add the phrase "EPA Registration No. 48301-27."
- b. Delete:

Measures against circulatory shock, respiratory depression, and convulsion may be needed.

- c. Add the following additional statements to the precautionary labeling section:

Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

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d. Delete "milk."

- e. Several treatment dosages are in error, e.g., Industrial process water "50 ppm (0.042 lb/1000 gallons)" is in error. It should read "50 ppm (0.42 lb/1000 gallons)."

Please recheck all your calculations.

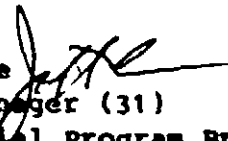
- f. It is preferred that the ppm levels be included for all your use patterns.
- g. Clearly indicate the ppm level as ppm-active.
- h. It is preferred that the:

KEEP OUT OF REACH OF CHILDREN
DANGER

be placed directly below the ingredient section, instead of buried in a left panel precautionary statement section.

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

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

John H. Lee 
Product Manager (31)
Antimicrobial Program Branch
Registration Division (H7505C)

Enclosure

MYACIDE[®] AS PLUS

ACTIVE INGREDIENT:

2-Bromo-2-nitropropane-1,3-diol 95.0%

INERT INGREDIENTS: 5.0%

TOTAL 100.0%

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS
KEEP OUT OF REACH OF CHILDREN

DANGER

CORROSIVE: CAUSES EYE AND SKIN DAMAGE.

DO NOT GET IN EYES, ON SKIN OR CLOTHING.

MAY BE FATAL IF SWALLOWED.

AVOID BREATHING DUST.

WEAR GOGGLES OR FACE SHIELD AND RUBBER GLOVES
WHEN HANDLING.

STATEMENT OF PRACTICAL TREATMENT

IF SWALLOWED: Drink milk, 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 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. Measures against circulatory shock, respiratory depression, and convulsion may be needed.

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 at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL: Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application equipment. Triple rinse (or equivalent) then offer drum for recycling or reconditioning, or puncture. Dispose of drum and liner in a sanitary landfill, or by incineration, if allowed by State and local authorities. If burned, stay out of smoke.

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

E.P.A. Reg. No. 48301

Est. No. 33753-EN-1

Printed in U.S.A.

ANGUS[®]

Sold by:

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

MYACIDE is a registered trademark of The Boots Company PLC

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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, MYRCIDE AS PLUS may be dosed as the solid directly into the sump or basin or it may be added to the cooling water stream at a suitable point. The MYRCIDE AS PLUS should be added at a point where there is adequate flow or turbulence to ensure quick dissolution (e.g. the pump outlet from the tower sump).

FREQUENCY AND DOSE: MYRCIDE AS PLUS may be slug-dosed once or twice weekly as a normal routine. Where contamination is heavy, more frequent shock-dosing may be required. MYRCIDE AS PLUS should be shock-dosed at between 0.21-0.84 lbs/1000 gallons depending on the condition of the tower, the quality of the 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, MYRCIDE AS PLUS may be used as the solid or pre-dissolved in a quantity of warm water or alcohol, then injected into the water-containing oil or gas stream at any convenient point. It should be injected in slug doses, not as a continuous feed.

FREQUENCY AND DOSE: Depending on severity and stability of contamination, MYRCIDE AS PLUS should be slug-dosed from once a week to once a month with 0.21-0.84 lbs per barrel.

INDUSTRIAL PROCESS WATER

Use MYRCIDE AS PLUS 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 fouling of pipework, heat exchangers, condenser tubes, and to minimize microbially produced corrosion. Dosing should be carried out into the sump/basin of the process water system. Shock-dosing is preferred. It is not necessary to dilute MYRCIDE AS PLUS concentrate prior to dosing. MYRCIDE AS PLUS can also be used as an intermittent flush treatment during regular maintenance cleaning of tanks and 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, less frequent dosing (once or twice monthly) would be sufficient. Dosing should be carried out to give an initial concentration of 50 ppm (0.84 lbs/1000 gallons). When the above treatment has been successful, dosing can be lowered to a maximum of 10 ppm MYRCIDE AS PLUS (0.084 lbs/1000 gallons). For intermittent treatment of industrial process waters during routine maintenance, MYRCIDE AS PLUS should be used at 100 ppm (0.84 lbs/1000 gallons) and a contact time of at least one hour.

DRILLING FLUIDS AND WORKOVER AND COMPLETION FLUIDS

To inhibit the growth of coliform, sulfate-reducing or sulfate-reducing bacteria in oil and gas well drilling fluids and brines, MYRCIDE AS PLUS may be used as the solid or pre-dissolved in a quantity of warm water then 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 contamination is low. Each slug dose should be 0.018 to 0.036 pounds per barrel total mud volume.

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 MYRCIDE AS PLUS in warm water or in a carrier solvent to give up to a 20% concentrate. This concentrate can be injected directly into the pipeline or may be added to the hydrocarbon phase. Using carrier solvent addition of the MYRCIDE AS PLUS will produce long term water phase concentrations by a diffusion process.

FREQUENCY AND DOSE: Carrier additions will vary with the degree of contamination and volume of fluids through the pipeline. Slug treatments are recommended and can vary from daily to monthly to control growth. MYRCIDE AS PLUS should be dosed at a rate which will achieve concentrations of 25-200 ppm in the aqueous phase. When using a carrier solvent, higher concentrations may be used to allow diffusion into the aqueous phase. Dose will depend on the volume of oil or crude and the expected water fraction.

WATERFLOOD

To inhibit the growth of anaerobic and aerobic bacteria in all waterflood base fluids used in the recovery of oil and gas reservoirs, add MYRCIDE AS PLUS as a dry product or pre-dissolve in any base fluid or inject directly at the well head.

FREQUENCY AND DOSE: MYRCIDE AS PLUS should be added continuously to waterflood fluids or slug-dosed depending on the bottom hole temperature and fluid chemistry at the rate of 25-100 ppm (0.009 to 0.036 lbs per barrel) depending on the quality of the base fluid.

INJECTION FLUIDS

For the control of contamination and corrosion from bacterial sources in fluids/waste fluids that are disposed of through injection into an approved well following approved guidelines, add MYRCIDE AS PLUS as a dry product or pre-dissolve in each volume of fluid prior to injection.

FREQUENCY AND DOSE: MYRCIDE AS PLUS should be added at a rate of 50-100 ppm (0.018-0.036 lbs per 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 MYRCIDE AS PLUS during mixing as a dry product or pre-dissolve or add by injection during the EOR procedure.

FREQUENCY AND DOSE: MYRCIDE AS PLUS should be added throughout the EOR operation at the rate of 50-100 ppm (0.018-0.036 lbs per 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 MYRCIDE AS PLUS during pre-mixing of the well squeeze fluid or (in the case of direct mix injection systems) an aqueous solution may be added by direct injection at the well head during the well squeeze procedure.

FREQUENCY AND DOSE: MYRCIDE AS PLUS should be used for each well squeeze operation to ensure best results. Add MYRCIDE AS PLUS at a rate of 0.21-1.56 lbs/1000 gallons, depending on the quality of the makeup water.

FRACTURING FLUIDS

MYRCIDE AS PLUS reduces bacterial contamination and degradation of fracturing gels and fluids used as well stimulants in the oil and gas industry. MYRCIDE AS PLUS may be added during pre-mixing of the fracturing fluid or (in the case of direct mix-injection systems) an aqueous solution may be added by direct injection at the head during the fracturing procedure.

FREQUENCY AND DOSE: MYRCIDE AS PLUS should be used for each fracturing operation to ensure best results. MYRCIDE AS PLUS should be added at a rate of 0.42-0.84 lbs/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, in crude, and refined hydrocarbon storage systems, above and below ground storage tanks and large marine systems are all suitable for treatment. MYRCIDE AS PLUS may be pre-dissolved in warm water to give up to a 20% concentrate. This concentrate can be injected directly into the water bottom or may be sprayed over the surface of the hydrocarbon phase and allowed to percolate through using a carrier solvent for addition of MYRCIDE AS PLUS into the hydrocarbon phase will provide long-term water concentrations by a diffusion process.

FREQUENCY AND DOSE: Direct addition to the water phase should be carried out every 30-60 days. Using a carrier solvent for addition to the hydrocarbon phase will provide longer term water concentrations depending on frequency of hydrocarbon movement, draining of water bottom, and other factors. MYRCIDE AS PLUS should be dosed at a rate which will achieve concentrations of 50-100 ppm in the aqueous phase. When using a carrier solvent, higher water concentrations may be used to allow diffusion into the aqueous phase.

METALWORKING FLUIDS

MYRCIDE AS PLUS is recommended for use in soluble oils, semi-synthetic, and synthetic fluids. It should be added directly to the sump (with agitation) or pre-dissolved in water and added as a solution. A dose of 250 ppm is recommended for initial treatment, higher levels up to 1000 ppm, but no greater for fouled systems. After addition of MYRCIDE AS PLUS, the system should be circulated for about one hour before shut-down.

IN DILUTED FLUIDS: A concentration of 250 to 1000 ppm of MYRCIDE AS PLUS is sufficient to control gross microbial growth. For example, add 0.5 lb of MYRCIDE AS PLUS to 1000 lb of fluid to obtain a dose level of 500 ppm in the fluid.

MAINTENANCE DOSAGE: Add 100-200 ppm of MYRCIDE AS PLUS to maintain control of the system.

IN CONCENTRATES: MYRCIDE AS PLUS may be incorporated in metalworking fluid concentrates by the manufacturer. However, the manufacturer should determine the storage stability of MYRCIDE AS PLUS 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.

ANGUS CHEMICAL COMPANY

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