

MAY 03 1995

The Boots Company
 Boots Microcheck
 Thane Road
 Nottingham NG2 3AA
 United Kingdom

Attention: John Kennedy, Agent
 Clive S Aveyard, Regulatory Affairs Manager

Subject: Myacide S2
 EPA Registration No. 33753-7
 Your Submission Dated March 20, 1995

The amendment (label update) referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is acceptable provided that you:

1. Make the following labeling changes below before you release the product for shipment bearing the amended labeling.
 - a. The statement "Causes eye and skin damage" must be retained. Please refer to the last stamped label for this file.
 - b. Include the heading: Net Contents.
 - c. The Environmental Hazards section must be revised to conform to PR Notice 93-10.
2. A release for shipment of the product bearing the amended labeling constitutes acceptance of these conditions.

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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3. A stamped copy of the labeling is enclosed for your records. Submit one (1) copy of the final printed label prior to release of the product for shipment.

4. Our records have been adjusted to reflect your product name change:

OLD PRODUCT NAME: Myacide S-2

NEW PRODUCT NAME: Myacide S2

If you have any questions concerning this letter, contact V. Goncarovs at 703-305-6663.

Sincerely yours,

Marion Johnson
Product Manager (31)
Antimicrobial Program Branch
Registration Division (7505C)

Enclosures

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MYACIDE[®] S2

MYACIDE S2 is a liquid microbicide for use in controlling bacteria and algae in industrial applications.

ACTIVE INGREDIENT	
2-bromo-2-nitropropane-1,3-diol	40.8%
INERT INGREDIENTS	59.2%
TOTAL	100.0%

KEEP OUT OF REACH OF CHILDREN

DANGER

STATEMENT OF PRACTICAL TREATMENT

If swallowed	Drink egg whites, gelatin solution or, if these are not available, drink large quantities of water. Do not administer liquids to an unconscious person. 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.

SEE SIDE PANEL FOR ADDITIONAL PRECAUTIONARY STATEMENTS

MYACIDE S2 IS A RESEARCH DISCOVERY OF THE ROOTS COMPANY PLC, NOTTINGHAM, ENGLAND

MYACIDE IS A REGISTERED TRADEMARK OF THE ROOTS COMPANY PLC

EPA REG. NUMBER 33753-7
EPA LIST NUMBER 33753 (N 1)

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER

Corrosive Causes eye damage and skin irritation. Do not get in eyes, on skin or clothing. May be fatal if swallowed. Wear goggles or face shield and rubber gloves when handling. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before re-use.

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

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 rinseate 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.

DIRECTIONS FOR USE

IT IS A VIOLATION OF FEDERAL LAW TO USE THIS PRODUCT IN A MANNER NOT SPECIFIED ON THE LABEL

INDUSTRIAL COOLING TOWERS

For the control of slime

MYACIDE S2 may be used in cooling towers. Where metering pumps deliver the required dosage should be located close to the tower to ensure rapid dispersal.

MYACIDE S2 may be used in cooling towers. Where contamination is severe, frequent dosing may be required. In heavily fouled towers, the system should be drained and cleaned.

MYACIDE S2 should be used at a concentration of 0.8 pts (100 gallons) depending on the quality of raw water input.

INDUSTRIAL

For the control of bacteria in circuit machine cooling (non-potable) water. To prevent heat exchangers, condenser produced corrosion. Shock dosing into the system is preferred. Maintenance treatment of industrial cooling water tanks.

In open systems shock dose weekly to once weekly to once monthly, depending on degree of contamination. Frequent dosing (once or twice weekly) is sufficient.

Dosing should be carried out at a concentration of 100 ppm MYACIDE S2 (0.8 pts/1000 gallons) lowered to a minimum for maintenance. MYACIDE S2 and a contact time of at least 24 hours.

ACCEPTED WITH COMMENTS
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OIL PROCESS WATERS

To inhibit the growth of slime forming or corrosion inducing sulfate reducing bacteria in oil and gas well injection and formation waters.

MYACIDE S2 should be injected as a slug dose at any convenient point at 50 to 200 mls/1000 l (0.4 to 1.6 pts/1000 gallons). A slug dose should be applied from once per week to once per month depending on the severity and rapidity of contamination.

OIL AND GAS FLUIDS

For the control of contamination and degradation of a wide range of gels and fluids caused by cellulolytic, slime forming or sulfate reducing bacteria. The type of fluids include fracturing enhanced oil recovery, injection, well squeeze, drilling, workover and completion fluids.

MYACIDE S2 may be pre-mixed or added directly to the fluids during each industrial procedure. MYACIDE S2 should be added at the rate of 100-200 ppm (0.036 to 0.072 pts/barrel or 0.8 to 1.6 pts/1000 gallons).

For well squeeze fluids Myacide S2 should be added at a rate of 50-400 mls/cubic meter (0.42 to 3.36 pts/1000 gallons) depending on the quality of the makeup water.

OIL AND GAS PIPELINE AND TANK MAINTENANCE

To control bacterial contamination in water bottoms in crude and refined hydrocarbon storage tanks, piping and transportation systems.

MYACIDE S2 may be injected directly into the water bottom, pipeline or may be added to the hydrocarbon phase.

Treatment can vary from once daily for pipeline maintenance to once every one or two months for both storage and transportation systems. Addition to the hydrocarbon phase will result in longer term protection by gradual diffusion into the water phase. MYACIDE S2 should be applied to achieve 50 to 400 ppm in the aqueous phase. Higher concentrations may be added when dosing the hydrocarbon phase.

PAPER MILL PROCESS WATER

For the control of slime forming bacteria in paper or paperboard process water systems.

MYACIDE S2 may be dosed at a convenient point early in the process system (machine chest, constant head box or backwater loop system).

MYACIDE S2 should be shock dosed once, twice or three times daily at between 20 mls and 500 mls (0.04 and 1.0 pts) per tonne of finished paper or paperboard depending on the complexity of the system, quality of raw paper and degree of contamination.

PAPER MILLS - BULK PULP

For the preservation of bulk quantities of pulp in paper and paperboard manufacturing systems. To control foul odours and general biodeterioration of stock when it is stored in bulk for any significant period of time.

MYACIDE S2 may be dosed directly into the hydropulper, machine chest or stock chest.

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 S2 should be dosed at between 100 mls and 400 mls per tonne of stock (0.8 pts to 3.2 pts/1000 gallons) depending on the type and degree of contamination.

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.

In-can preservation MYACIDE S2 should be added at any convenient point during the manufacturing process, ideally after any heating stage and when the product has cooled to below 40°C.

For control of bacterial spoilage during the use of fount solutions, MYACIDE S2 should be shock dosed at a suitable point in the fount reservoir where there is adequate flow or turbulence to ensure quick mixing. MYACIDE S2 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 S2 should be dosed at 200 to 1000 ppm based on the final formulation volume (200 to 1000 mls/cubic meter or 1.6 to 8 pts/1000 gallons). Fount solution - MYACIDE S2 should be shock dosed at between 40 to 200 ppm (40 to 200 mls/cubic meter, 0.32 to 1.6 pts/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 S2 may be dosed at or close to the end of the manufacturing process. If a heating stage is involved, the MYACIDE S2 should be added after this stage when the product has cooled to below 40°C.

MYACIDE S2 should be dosed at 200 to 1000 ppm based on the final formulation volume (200 to 1000 mls cubic meter or 1.6 to 8 pts/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.

MYACIDE S2 may 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.

If a heating stage is involved in the manufacture, add MYACIDE S2 after this stage when the product has cooled to below 40°C.

MYACIDE S2 should be dosed at 200 to 1000 ppm based on the final formulation volume (200 to 1000 mls cubic meter or 1.6 to 8 pts/1000 gallons).

METALWORKING FLUIDS

MYACIDE S2 is recommended for use in soluble oils, semi-synthetic and synthetic fluids. It should be added directly to the sump (with agitation).

After addition of MYACIDE S2 the system should be circulated for about one hour before shutdown.

In diluted fluids, a concentration of 500 to 2000 ppm of MYACIDE S2 in the fluid is sufficient to control microbial growth. A dose of 1.0 gallon of MYACIDE S2 in 1000 gallons will give 1000 ppm. For maintenance, add 200-400 ppm of MYACIDE S2.

MYACIDE S2 may be incorporated in metalworking fluid concentrate by the manufacturer who should ensure that any incompatibility will not affect efficacy.

ADHESIVES

For the control of microbial contamination, add 0.2-1.0 pint of MYACIDE S2 per 100 lb total formulation weight. The addition is best accomplished by adding the MYACIDE S2 to any water to be incorporated into the formulation.

ABSORBENT CLAYS

Impregnate absorbent clays with MYACIDE S2 to inhibit the growth of odor causing bacteria. The suggested application is 50-400 ppm of Myacide S2 (0.08 to 0.64 pts per 100 pounds of clay).

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