

MAY 24 1994

Champion Technologies, Inc.
P. O. Box 450499
Houston, TX 77245-0499

Attn: Kyle H. Sibinovic, Ph.D.

Subject: Bactron K-55W Microbiocide
EPA Registration No. 8133-28
Letter Dated February 23, 1994

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for use in hatcheries as a fumigant for hatching eggs, disinfecting and fumigating rooms, railroad cars, citrus packing houses, poultry houses, mushroom houses, tools and equipment, is acceptable, provided that you:

1. Make the following labeling changes below before you release the product for shipment bearing the amended labeling:

a. Delete the use patterns "for use in treating seed potatoes, seed, grains and seed beds". The proposed uses, a raw agricultural commodities, will require a Petition for a Tolerance or exemption from the requirement of a tolerance. You may also wish to submit a data matrix identifying the names and MRID numbers of studies already submitted on similar products.

b. All data must be formatted in accordance with PR Notice 86-5.

2. The revised Confidential Statement of Formula (CSF) dated April 6, 1994 agrees with the label and is acceptable.

CONCURRENCES							
SYMBOL							
SURNAME							
DATE							

3. Submit five (5) copies of final printed labels before you release the product for shipment.

Your release for shipment of the product bearing the amended labeling constitutes acceptance of these conditions.

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

If you have any questions concerning this letter, please contact Martha Terry at (703) 305-6982.

Sincerely,



Marshall Swindell
Acting Product Manager 31
Antimicrobial Program Branch
Registration Division 7505C

Enclosure

BEST AVAILABLE COPY

3 of 9

BACTRON K-55W MICROBIOCIDES

FOR USE IN CONTROLLING SULFATE-REDUCING BACTERIA IN OIL WELL DRILLING AND OIL FIELD PROCESSING, AND WATER FLOOD APPLICATION. FOR USE IN HATCHERIES AS A FUMIGANT FOR HATCHING EGGS. FOR USE IN POULTRY HOUSES.

AND GREENHOUSES. FOR USE IN DISINFECTING AND FUMIGATING ROOMS, RAILROAD CARS. FOR USE IN CITRUS PACKING HOUSES. FOR USE IN DISINFECTING MUSHROOM HOUSES, TOOLS AND EQUIPMENT.

Active Ingredient:

Formaldehyde.....	37.0%
Inert Ingredients.....	63.0%
TOTAL	100.0%

(Contains Methanol)

KEEP OUT OF REACH OF CHILDREN

DANGER

skull & x-bones
Poison in RED

POTENTIAL CANCER HAZARD based on animal data and limited epidemiological evidence. May cause allergic skin reaction, reproductive disorders, lung damage, liver damage, kidney damage, brain and nervous system damage.

STATEMENT OF PRACTICAL TREATMENT

IF INHALED: Remove to fresh air. If breathing has stopped, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen. Call a physician.

IN CASE OF CONTACT: Immediately flush eyes or skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Call a physician. Wash clothing before re-use. Discard contaminated leather clothing.

IF SWALLOWED: Drink large quantities of water. Avoid alcohol. Call a physician immediately.

Note to Physician: Probable mucosal damage may contraindicate the use of gastric lavage.

SEE LEFT SIDE PANEL FOR ADDITIONAL PRECAUTIONARY STATEMENTS

Net Weight (lbs)	481
Net contents (U.S. gals.)	55

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MANUFACTURED FOR.
Champion Technologies, Inc.
3355 W. Alabama Suite 400
Houston, Texas 77098

EPA Reg. No. 08785-WA-001

ACCEPTED
with COMMENTS
in EPA Reg. No. 8133-28

MAY 24 1994

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

4049

PRECAUTIONARY STATEMENTS**DANGER****HAZARDS TO HUMANS
AND DOMESTIC ANIMALS**

Corrosive. Causes eye damage and skin irritation. Methanol may cause blindness. Harmful or fatal if swallowed. **DO NOT** get in eyes, on skin or on clothing. Avoid contamination of food. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse. Vapors harmful. Avoid breathing spray, mist or vapors. Wear a NIOSH/MSHA respirator approved for formaldehyde exposure, chemical resistant boots or shoe covers, chemical resistant gloves and goggles (if a full face respirator is not used) when handling.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish. **DO NOT** discharge effluent containing this active ingredient into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with the requirements of an 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 into sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

PHYSICAL AND CHEMICAL HAZARDS

Do not use or store near heat or open flames.

IN CASE OF FIRE: Use CO₂ or dry chemical for small fires, alcohol type aqueous film forming foam or water spray for large fires. Use water spray to cool fire exposed containers. Wear self-contained breathing apparatus and complete personal protective equipment when potential for exposure to vapors or products of combustion exists.

IN CASE OF SPILL: Clean up immediately. Place leaking containers in well ventilated area. Eliminate ignition sources. To clean up spills, flush area sparingly with water or use absorbent. Avoid run-off to storm sewers and ditches leading to natural waterways. Neutralize with ammonium hydroxide or sodium hydroxide.

Do not allow access to treated areas by any person unless provided with a respirator approved by NIOSH/MSHA for formaldehyde exposure unless the formaldehyde vapor level has been determined to be below 0.75 PPM. Warning signs may be removed only after the vapor level drops below 0.75 PPM as determined by Dräger Multi-Gas Detector and a 0.5 - 10 PPM formaldehyde tube (or equivalent system) in accordance with the manufacturer's instructions.

MAY 24 1994

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

5049

DIRECTIONS FOR USE

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

ENHANCED OIL RECOVERY: Inject BACTRON K-55W full strength to control bacteria in conjunction with the injection of miscible solvent, oil displacement fluids, including produced water, or carbon dioxide. Dosage in the target area may be 25 - 5000 ppm of active ingredient in either continuous treatment or slug applications.

For repressuring depleted oil or gas zones continuous injection of BACTRON K-55W at 25 - 100 ppm into fresh or salt water should be adequate.

For preserving drilling fluids, work-over fluids or water based packer fluids 100 - 500 ppm of BACTRON K-55W will be adequate.

For batch treating the annulus of producing oil wells, 1 - 5 gallons of BACTRON K-55W can be flushed down the annulus weekly with produced fluids.

For treatment of injection water, inject BACTRON K-55W full strength to attain concentrations of 200 - 500 ppm of active ingredient in target areas on a continuous basis or in slug treatment.

USE AS HYDROGEN SULFIDE SCAVENGER (NON-BIOCIDAL): This product may also be used as a hydrogen sulfide scavenger in oil field processing and refining operations. For hydrogen sulfide scavenging applications, inject BACTRON K-55W full strength to attain concentrations of up to 500 ppm of active ingredient in target areas on a continuous basis or in slug treatment.

~~NOT FOR USE IN DISINFECTION OF MUSHROOM HOUSES, TOOLS AND EQUIPMENT: This product may be used in the disinfection of mushroom houses, tools and equipment. APPLICATION: 1. Tools and Equipment: Wash thoroughly with water to remove debris; then, dip with a solution made by mixing 1 gallon of BACTRON K-55W with tap water to make 100 gallons [a 0.37% solution of formaldehyde]. Rinse with water to remove all traces of formaldehyde. 2. Non producing areas - corridors, packing sheds, empty growing sheds, etc. PROCEDURE: WEAR FULL PROTECTIVE CLOTHING AND FULL FACE RESPIRATOR WHEN USING FORMALDEHYDE.~~

FOR USE IN DISINFECTION OF MUSHROOM HOUSES, TOOLS AND EQUIPMENT: This product may be used in the disinfection of mushroom houses, tools and equipment.

APPLICATION: 1. Tools and Equipment: Wash thoroughly with water to remove debris; then, dip with a solution made by mixing 1 gallon of BACTRON K-55W with tap water to make 100 gallons [a 0.37% solution of formaldehyde]. Rinse with water to remove all traces of formaldehyde.

2. Non producing areas - corridors, packing sheds, empty growing sheds, etc.

PROCEDURE: WEAR FULL PROTECTIVE CLOTHING AND FULL FACE RESPIRATOR WHEN USING FORMALDEHYDE.

ACCEPTED

FOR COMMENTS

to EPA Dated:

MAY 24 1994

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

6049

DIRECTIONS FOR USE

A. Empty mushroom house of all growing media. Sweep out thoroughly. B. Wet out growing boards. C. Close up house, sealing as appropriate, to avoid formaldehyde fume seepage. D. Inject steam into house until interior temperature reads 140° to 150°F [about 12 hours of steam injection required]. E. Inject BACTRON K-55W into steam [4 gallons in small houses of up to 37 ft by 48 ft by 15 ft high]; [5 gallons in regular dimension houses of 37 ft by 60 ft by 15 ft high]; [8 gallons in large houses 37 ft by 80 ft by 15 ft high]. F. Continue steaming for 12 hours. G. Turn on exhaust fans for 4 hours and, then, open doors for 24 hours before permitting reentry into the house. Prior to reentry, check house for formaldehyde fumes at outside of exhaust fans and at entrances. Houses may be reentered when the level of formaldehyde is below 0.75 ppm as determined by Drager Multi Gas Detector and a 0.5 - 10 PPM formaldehyde tube (or equivalent system) in accordance with the manufacturer's instructions.

FOR DISINFECTING AND FUMIGATING ROOMS, RAILWAY CARS: For each 1,000 cubic feet of space to be fumigated, use 16²/₃ oz. Potassium Permanganate and 20 oz. BACTRON K-55W. Place on floor, a large dishpan in which a smaller pan is set. Put Potassium Permanganate into smaller pan and pour BACTRON K-55W over it. Leave room immediately, closing tightly for about five hours, then, ventilate. Room may be reentered when the level of formaldehyde is below 0.75 ppm as determined by Drager Multi Gas Detector and a 0.5 - 10 PPM formaldehyde tube (or equivalent system) in accordance with the manufacturer's instructions.

~~FOR TREES AND SHRUBS: Dilute 1 pint BACTRON K-55W with water to make 30 gallons [1:320 dilution]. Potatoes should be soaked in this dilute solution for a period of 1 to 2 hours.~~

~~FOR SEED AND GRAINS: Dilute in open barrels or vats 1 pint BACTRON K-55W with water to make 10 gallons [1:320 dilution]. Place grain in bags, seal bags, and immerse in the dilute solution for 10 minutes. Bags containing treated seed should, then, be hung up to drain and dry.~~

~~FOR SOIL-BORNE PESTS: For controlling damping-off (Fungus infection) caused by infected seed, drench soil with solution consisting of 1 pint BACTRON K-55W diluted with water to make 10 gallons. Apply 1 gallon of this dilute solution per square foot of area several days before seed is planted.~~

FOR FUMIGATION OF HATCHING EGGS: Incubators may be fumigated using a maximum of 1 fl. oz. of BACTRON K-55W for each 30 cu. ft. of space. The manufacturers information should be consulted for the area of a particular incubator. The dilute solution is to be placed in an open container and allowed to naturally evaporate. Potassium permanganate should not be used as a catalyst to generate formaldehyde gas.

ACCEPTED
with COMMENTS
in EPA Letter 1-82

BEST AVAILABLE COPY MAY 24 1994

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

7049

DIRECTIONS FOR USE (continued)

Fumigation may be performed on both empty incubators and incubators containing eggs. The incubator/hatcher must be vented directly to the outside air. The room housing the incubator/hatcher should also have adequate ventilation. Warning signs must be placed on the incubator/hatcher and in the surrounding area before fumigation may begin.

Eggs to be fumigated should be held on clean racks or egg flats which permit air circulation. Fumigation is most effective if applied to nest clean eggs as soon after collection as possible or when eggs are delivered to the hatchery or when set in incubator(s). Fumigation of eggs **should not** be done between 24 hours and five (5) days incubation because embryo damage may occur at this time.

The fumigation procedure may be repeated at 24 hour intervals up to the 19th day of incubation. If fumigation is to be continued after the 19th day, the amount of BACTRON K-55W normally used must be reduced by 50% (1/2 fl. oz. / 30 cu. ft.). The last application of formaldehyde solution should be added at least 12 hours before the chicks are pulled to allow time for its complete evaporation. General access to the area may be allowed, and the warning signs may be removed, when sufficient aeration has occurred to reduce formaldehyde vapor level to below 0.75 ppm as determined by Drager Multi Gas Detector and a 0.5 - 10 PPM formaldehyde tube (or equivalent system) in accordance with the manufacturer's instructions.

FOR USE IN POULTRY HOUSES: Remove all poultry and feed from the premises to assure adequate surface coverage. Remove all portable equipment. Remove all litter and manure from floors and other surfaces. Empty all water troughs and feed racks. Clean rinse all surfaces with water. Sanitize with a suitable and approved sanitizing solution. Fumigate with BACTRON K-55W by mixing 1 part BACTRON K-55W with 10 parts water (a 1:11 dilution) (applying approximately 20 ounces of BACTRON K-55W per 1000 cubic feet of space). Applications may only be made through a sprinkler system installed within the confinement building prior to treatment. No workers can be in the confinement area during treatment. All application activities must be carried out from outside the confinement building. Application sprinklers should be rinsed following the application solution with clean water and left in the confinement house until reentry is acceptable. Treated buildings should be left for a minimum of 24 hours, then, ventilated for sufficient time so that airborne levels of formaldehyde are less than 0.75 ppm as determined by Drager Multi Gas Detector and a 0.5 - 10 PPM formaldehyde tube (or equivalent system) in accordance with the manufacturer's instructions.

Note: For effectiveness, the relative humidity should be at least 70% and the temperature at least 70°F (21°C) or higher. Houses are to be treated no more than 4 times per year.

APPROVED
with COMMENTS
In EPA Letter Dated:

MAY 24 1994

BEST AVAILABLE COPY

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

8079

DIRECTIONS FOR USE (continued)

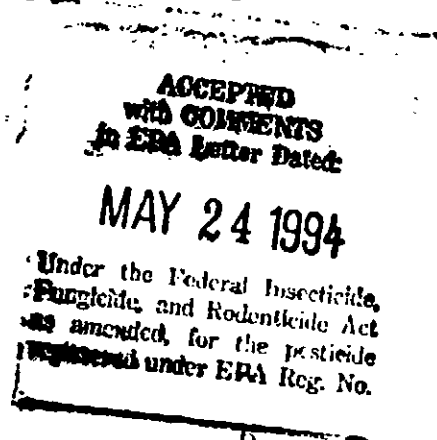
FOR USE IN CITRUS PACKING HOUSES: For use in citrus packing houses including storage, degreening and pre-cooling rooms to inhibit blue mold, green mold, sour rot, the dosage should be 1 lb of final solution (1 part Bactron K-55W plus 99 parts water) per thousand cubic feet of space to be treated. Application to be made as a fogging spray using a stationary, mounted spray manifold and suitable air operated foggers. Units are to be controlled from outside the area being fumigated. Where necessary more than one manifold or fogger may be used per room. Frequency of application is as needed.

Application Method: Room should be tightly closed and humidity introduced for at least 24 hours or longer to bring up the humidity in empty boxes, walls and floors of the room. Do not wet down with hose. Air scrubbers should be drained and water pumps turned off. Place spray manifold in an elevated position, several feet off the floor and close to a return for the recirculating fan. A compressed air connection should be hooked up to the spray manifold and the recirculating fans turned on. Air should be on 100% recirculation with no outside air intake. All persons should leave room(s) and all doors, openings shut tightly. Compressed air to the spray manifold should be turned on from a position outside the area (room) to be treated. Turn fans off two (2) hours after fogging is completed. Room should remain closed for a minimum of twenty-four (24) hours. Room may then be opened to outside fresh air for thorough venting for a minimum of twenty-four (24) hours or longer until testing has shown the formaldehyde has dissipated to less than 0.75 ppm.

Fruit may be returned to room only after testing shows the level of formaldehyde is less than 0.75 ppm.

Note: Fogging mechanism should be checked with water in the carboy prior to use. After testing, dump water and replace with diluted Bactron K-55W. A closed dispensing system is recommended. Adequate air pressure is required to obtain proper dispersion of the formaldehyde. Each fogger manifold uses about 40 cubic feet of free air per minute at 80 to 100 p.s.i.

Formaldehyde is phytotoxic to citrus. Remove all fruit from the space to be treated. Allow formaldehyde residue to dissipate from storage boxes before filling with fruit.

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9079

DIRECTIONS FOR USE (continued)**STORAGE AND DISPOSAL**

STORAGE: Do not contaminate water, food or feed by storage or disposal. Should be stored apart from other combustibles, acids or oxidizing agents. Storage facilities should be non-combustible.

PESTICIDE DISPOSAL: Do not contaminate water, food or feed by disposal. Pesticide wastes are toxic. Improper disposal of excess pesticide spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of according to label instructions, contact your State Pesticide or Environmental Control Agency, or Hazard Waste representative at nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL: Completely empty drum, then, dispose of empty drum in accordance with Federal, State or Local regulations.

SPILL CLEAN UP REQUIREMENTS: Should a spill occur, contaminated soil and other clean up debris is a hazardous waste. If a reportable quantity is exceeded, report spill/leak to the National Response Center (800-424-8802), Reportable quantity (RQ) for formaldehyde is 1000 pounds.

PHYSICAL PROPERTIES

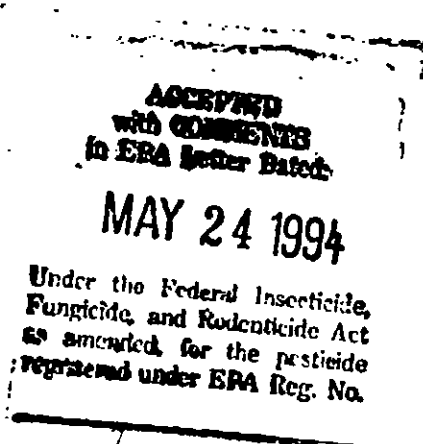
Specific Gravity	1.05	Solubility in Water @ 20°C	Complete
Pounds per Gallon	8.75	Flash Point	114°C
Vapor Pressure	40 mm Hg	Freezing Point	-48°F
pH	3.5-4.5		

CHEMICAL EMERGENCY CALL CHAMPION TECHNOLOGIES, INC. AT 713-431-2561 OR CHEMTREC AT 1-800-424-9300
BEFORE USING CONSULT MATERIAL SAFETY DATA SHEET

To request a Material Safety Data Sheet, please call (713) 431-2561, or write Champion Technologies, Inc.,
P.O. Box 450499, Houston TX. 77245-0499.

Champion Technologies, Inc. assumes no responsibility when this product is not used in accordance with the instructions contained on this label.

HEALTH	3
FIRE	2
REACTIVITY	1
PERSONAL PROTECTION	—

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