

JUN 17 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 June 6, 1994

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, section 3(c)(7)(A) for use in hatcheries as a fumigant for hatching eggs, disinfecting and fumigating rooms, railroad cars, poultry houses, is acceptable, provided that you:

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

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

a. Delete the claim "For use in "citrus packing houses".

b. Delete the claim "For use in mushroom houses, equipment and tools".

3. Please note that the proposed uses in item #2 are considered a food use in the absence of data. No tolerances have been established under section 3 of FIFRA for residues of this product in raw agricultural commodities.

4. Submit five (5) copies of your final printed labeling before you release the product for shipment.

CONCURRENCES							
SYMBOL							
SURNAME							
DATE							

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(a). 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

3048

BACTRON K-55W

MICROBIOCIDES

FOR USE IN CONTROLLING SULFATE-REDUCING BACTERIA IN OIL WELL DRILLING, OIL FIELD PROCESSING, AND WATER FLOOD APPLICATIONS. FOR USE IN HATCHERIES AS A FUMIGANT. FOR USE IN POULTRY HOUSES. FOR USE IN DISINFECTING AND FUMIGATING ROOMS AND RAILROAD CARS. FOR USE IN CITRUS PACKING HOUSES. FOR USE IN DISINFECTING MUSHROOM HOUSES, TOOLS, AND EQUIPMENT.

ACCEPTED
with COMMENTS
in EPA Letter Dated:

JUN 17 1994

Active Ingredients:
Formaldehyde37.0%
Inert Ingredients.....63.0%
100.0%

(Contains Methanol)

KEEP OUT OF REACH OF CHILDREN

Under the Federal Insecticide,
Fungicide, and Rodenticide Act
as amended, for the pesticide
registered under EPA Reg. No.
8133-28
skull & x-bones
Poison in RED

DANGER

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 OF PANEL FOR ADDITIONAL PRECAUTIONARY STATEMENTS

MANUFACTURED FOR:

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

EPA Establishment No. 08785-AL-001
EPA Registration No. 8133-28

New Weight (lbs) 495
Net Contents (U.S. gals.) 55

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4078

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.

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Under the Federal Insecticide,
Fungicide, and Rodenticide Act
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registered under EPA Reg. No.
8133-28

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 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 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 Drager Multi Gas Detector and a 0.5 - 10 PPM formaldehyde tube (or equivalent system) in accordance with the manufacturer's instructions.

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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.

Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended for the pesticide registered under EPA Reg. No. 8133-28

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 oilfield 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.

AGRICULTURE USES: Prior to all housing applications, warning signs must be posted on confinement buildings as specified in State, Local and Federal Regulations. Where required, two trained personnel must be present during introduction of **BACTRON K-55W**.

~~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 - Tools and Equipment: Wash thoroughly with water to remove debris, then dip with 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.

APPLICATION - Non-producing Areas, Corridors, Packing Sheds, Empty Growing Sheds, etc. - Procedure - WEAR FULL PROTECTIVE CLOTHING AND FULL FACE RESPIRATOR WHEN USING FORMALDEHYDE. (1) Empty mushroom house of all growing media. Sweep out thoroughly. (2) Wet out growing boards. (3) Close up house, sealing as appropriate, to avoid formaldehyde fume seepage. (4) Inject steam into house until interior temperature reads 140° to 150°F (about 12 hours of steam injection required). (5) Inject **BACTRON K-55W** into steam (4 gallons in small houses or up to 37' x 48' x 15' high; 5 gallons in regular dimension houses or 37' x 60' x 15' high; 8 gallons in large houses 37' x 80' x 15' high). (6) Continue steaming for 12 hours. (7) Turn on exhaust fans for 4 hours and then open doors for 24 hours before permitting re-entry into the house. Prior to re-entry, check house for formaldehyde fumes at outside of exhaust fans and at entrances. Houses may be re-entered when the level of formaldehyde is below 0.75 ppm as determined by Wagner Meters Gas Detector and a 0.5-10 ppm formaldehyde tube (or equivalent system) in accordance with the manufacturer's instructions.

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DIRECTIONS FOR USE (cont'd)

FOR DISINFECTING AND FUMIGATING ROOMS, RAILWAY CARS

For each 1,000 cu.ft. of space to be fumigated, use 16 1/2 oz. Potassium Permanganate and 20 oz. **BACTRON K-55W**. Place on floor a large dish 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 five hours, then ventilate. Room may be re-entered 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.

Under the Federal Insecticide, Fungicide, and Rodenticide Act
EPA amended for the pesticide
EPA Reg. No. 8133-28

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 manufacturer's 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 liberate formaldehyde gas. 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 aircirculation. 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 and 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 ozs. of **BACTRON K-55W** per 1000 cu.ft. of space. Applications may be made only 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 with clean water following the application solution and left in the confinement house until re-entry 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 50° (21 C) or higher. Houses are to be treated no more than 4 times per year.

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DIRECTIONS FOR USE (cont'd)

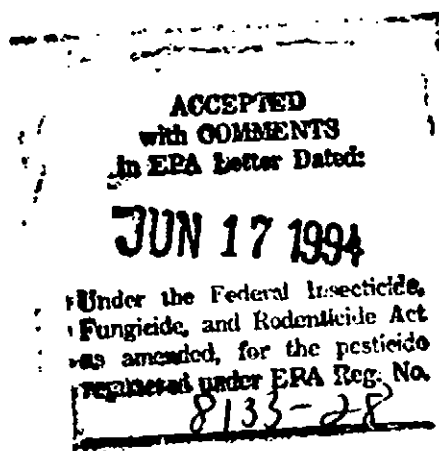
FOR USE IN CITRUS PACKING HOUSES

For use in citrus packing houses, including storage, degreening, and pre-cooling rooms to inhibit mold, green mold, and sour rot, the dosage should be 1 lb. of final solution (1 part **BACTRON K-55W** plus 99 parts water) per thousand cu.ft. of space to be treated. Application is 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 100% recirculation with no outside air intake. All persons should leave room(s) and all doors and openings shut tightly. Compressed air to the spray manifold should be turned on from a position outside the area (room) to be treated. Turn off fans two (2) hours after fogging is completed. Room should remain closed for a minimum of 24 hours. Room may then be opened to outside fresh air for thorough venting for a minimum of 24 hours or longer until testing has shown the formaldehyde has dissipated to 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 cu.ft. 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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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	1.08	Solubility in Water @ 20°C	Complete
Pounds per Gallon	9.00	Flash Point	>130°F
Vapor Pressure	40mm Hg	pH	3.5-4.5

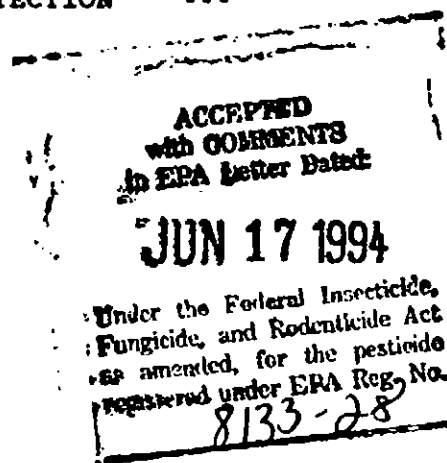
CHEMICAL EMERGENCY - CALL: CHAMPION TECHNOLOGIES, INC. - 713-431-2561
or CHEMTREC - 1-800-424-9300

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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