DIRECTIONS FOR USE

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

Apply BARQUAT 42-10 with a cloth, mop or mechanical spray device. When applied with a mechanical spray device, surface must be sprayed until thoroughly wetted. Treated surfaces must remain wet for 10 minutes. Fresh solution should be prepared daily or when the use-solution becomes visibly dirty.

DISINFECTION IN HOSPITALS, NURSING HOMES AND OTHER HEALTH CARE INSTITUTIONS. For disinfecting floors, walls, countertops, bathing areas, lavatories, bedframes, tables, chairs, garbage pails and other hard non-porous surfaces.

Add 4.5 oz. BARQUAT 42-10 to 5 gallons water. Apply to previously cleaned hard surface with mop or cloth.

At this use-level, BARQUAT 42-10 is effective against Pseudomonas aeruginosa.

This product is not to be used as a terminal sterilant/high level disinfectant on any surface or instrument that (1) is introduced directly into the human body, either into or in contact with the bloodstream or normally sterile areas of the body, or (2) contacts intact mucous membranes but which does not ordinarily penetrate the blood barrier or otherwise enter normally sterile areas of the body. This product may be used to preclean or decontaminate critical or semi-critical medical devices prior to sterilization or high level disinfection.

DISINFECTANT IN INSTITUTIONS, INDUSTRY AND SCHOOLS. For disinfecting floors, walls, bedframes, countertops, tables, chairs, garbage pails, bathroom fixtures and other hard non-porous surfaces.

Add 3 oz. of BARQUAT 42-10 to 5.5 gallons of water. Apply to previously cleaned hard surface with mop or cloth.

At 3 oz./5.5 gallon use-level, BARQUAT 42-10 is effective against Staphylococcus aureus and Salmonella choleraesuis.

FUNGICIDAL ACTIVITY - At 7.5 oz./5 gallons use level BARQUAT 42-10 is effective against Trichophyton interdigitale (athlete's foot fungus) on inanimate hard surfaces.

DISINFECTION OF BARBER TOOLS - Pre-cleaned barber tools (such as combs, brushes, razors, and scissors) can be disinfected by immersing in a 5 gallon solution of BARQUAT 42-10.

DISINFECTION OF POULTRY EQUIPMENT, ANIMAL QUARTERS AND KENNELS. Poultry brooders, watering founts, feeding equipment and other animal quarters (such as stalls and kennel areas) can be disinfected after thorough cleaning by applying a solution of 3 oz. BARQUAT 42-10 to 5.5 gallons of water with a mop, cloth or brush. Small utensils should be immersed in this solution.

Prior to disinfection, all poultry, other animals and their feeds must be removed from the premises. This includes emptying all troughs, racks and other feeding and watering appliances. Remove all litter and droppings from floors, walls and other surfaces occupied or traversed by poultry or other animals.

After disinfection, ventilate building, coops and other closed spaces. Do not house poultry, or other animals, or employ equipment until treatment has been absorbed, set or dried.

All treated equipment that will contact feed or drinking water must be rinsed with potable water before reuse.

Sanitizing of Food Processing Equipment and Other Hard Surfaces in Food Contact Locations.

For sanitizing food processing equipment, dairy equipment, food utensils, dishes, silverware, glasses, sink tops, countertops, refrigerated storage and display equipment and other hard non-porous surfaces.

Wash and rinse all articles thoroughly, then apply a solution of 1 oz. BARQUAT 42-10 in 4 gallons of water (200 ppm active). Surfaces should remain wet for at least one minute followed by adequate draining and air drying. Fresh solution should be prepared daily or when use solution becomes visibly dirty. For mechanical application, use solution may not be reused for sanitizing applications.

Apply to sink tops, countertops, refrigerated storage and display equipment and other stationary hard surfaces by cloth or brush.

Dishes, silverware, glasses, cooking utensils and other similar size food processing equipment can be sanitized by immersion in a 1 oz./4 gallon dilution of BARQUAT 42-10. **No Potable water rinse is required.**

At 1 oz./4 gallons, BARQUAT 42-10 fulfills the criteria of Appendix F of the Grade "A" Pasteurized Milk Ordinances 1978 Recommendations of the U.S. Public Health Services in waters up to 850 ppm of hardness calculated as $CaCO_3$ when evaluated by the AOAC Germicidal and Detergent Sanitizer Method against Eschenchia coli and Staphylococcus aureus.

The udders, flanks and teats of dairy cows can be sanitized by washing with a solution of 1 oz. BARQUAT 42-10 in 4 gallons of warm water.

Use a fresh towel for each cow. Avoid contamination of sanitizing solution by dirt and soil. Do not dip used towel back into sanitizing solution. When solution becomes visibly dirty, discard and provide fresh solution.

2/91

ACCEPTED
with COMMENTS
In EPA Letter Dated:

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

6836-56

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

MAR 24 1995

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

Attn: Kyle H. Sibinovic, Ph.D.

Subject: Bactron K-55W Microbiocide
EPA Registration No. 8133-28
Amendments Dated August 3, 1994 and
March 15, 1995

The amendment referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, will be acceptable, provided that you make the labeling changes listed below before you release the product for shipment bearing the amended label.

1. Delete the statement pertaining to the alternate name for non-oil users wherever it appears on the label.

2. On page 6 of your label, delete the following two statements:

- Additional Uses: This product may also be used in formulations for which the user maintains properly registered uses with appropriate Agency.

- In accordance with OSHA regulations, the end user is to determine the required level of personnel protection.

3. You are reminded that this product is an end use product and not a manufacturing use product. Therefore, only end use product labels are permitted.

4. The toxicity report (formaldehyde calculations) submitted by Shaldra, Inc. on behalf of Champion Technologies dated August 3, 1994 specifically pertained to the amount of time required to purge formaldehyde from railroad cars, poultry houses, mushroom and citrus houses. None of the calculations refer to the expected residues in mushroom, poultry or citrus fruits. Since our toxiology branch has already concluded that data pertaining to residues in poultry

CONCURRENCES								
SYMBOL								
SURNAME	MQ							
DATE	3/29/94							

are adequate, and since formaldehyde resides are not expected to be found in poultry at sacrifice, we have no objection to the poultry house use for this registration. However, the Agency can not approve the registration use in citrus packing houses and mushroom houses until pertinent data or theoretical calculations of residues in raw agricultural commodities are submitted.

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

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

Sincerely,

Marion J. Johnson, Jr.
Product Manager (31)
Antimicrobial Program Branch
Registration Division (7505C)

Enclosure

BACTRON K-55W
MICROBIOCIDE

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 USE IN POULTRY HOUSES. FOR USE IN DISINFECTING AND FUMIGATING ROOMS AND RAILROAD CARS.

Active Ingredient:	
Formaldehyde	**37.0%**
Inert Ingredients	**63.0%**
TOTAL	**100.0%**

(Contains Methanol)

ACCEPTED
with COMMENTS
In EPA Letter Dated:

MAR 24 1995

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

KEEP OUT OF REACH OF CHILDREN

2 skull & x-bones located on either side of Danger

DANGER Danger & Poison in RED

POISON

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)	495
Net contents (U.S. gals)	55

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

EPA EST No 08785 WA 001 O8785 AL 001 EPA REG No 8133 28
08785 LA 001
08785 NC 001

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.

Formaldehyde is a primary skin sensitizing agent which may cause allergic contact dermatitis. Inhalation studies in test animals have produced an excess of tumors. Users should consider the possibility that overexposure to the active ingredient may pose a cancer risk. Formaldehyde is considered an occupational carcinogen by OSHA and users should be aware of the occupational exposure standard PEL (Permissible Exposure Limit) of 0.75 ppm.

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 CO_2 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

ACCEPTED
with COMMENTS
In EPA Letter Dated:

MAR 24 1995

Under FIFRA, as amended, for the pesticide
registered under EPA Reg. No.
8133-25

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 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.

AGRICULTURAL 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 the **BACTRON K-55W**

ACCEPTED
with COMMENTS
In EPA Letter Dated:

MAR 24 1995

Under FIFRA, as amended, for the pesticide
Registered under EPA Reg. No.
8133-25

DIRECTIONS FOR USE (continued)

FOR DISINFECTING AND FUMIGATING ROOMS, RAILWAY CARS: For each 1,000 cubic feet of space to be fumigated, use $16^2/_3$ 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 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 manufacturer's instructions.

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. Manufacturers information should be consulted for the area of a particular incubator. 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. Incubator/hatchers must be vented directly to outside air. Room housing the incubator/hatcher should also have adequate ventilation. Warning signs must be placed on incubator/hatcher and in 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.

Fumigation procedure may be repeated at 24 hour intervals up to 19th day of incubation. If fumigation is to be continued after 19th day, amount of **BACTRON K-55W** normally used must be reduced by 50% (1/2 fl. oz. / 30 cu. ft.). Last application of formaldehyde solution should be added at least 12 hours before chicks are pulled to allow time for its complete evaporation. General access to the area may be allowed, and 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 manufacturer's instructions.

FOR USE IN FUMIGATION OF POULTRY CONFINEMENT BUILDINGS: **BACTRON K-55W** can only be applied to unoccupied poultry confinement buildings by either spray sled method or fixed sprinkler method. No workers are permitted in treated building during treatment. All application methods must be carried out from outside confinement building.

Remove all poultry and feed from 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.

Post warning signs on confinement buildings prior to start of fumigation. Post signs in plainly visible locations on or in immediate vicinity of all entrances. Do not remove signs until fumigation, ventilation and final testing has been completed, and building is safe for reentering. Warning signs shall be printed in red on white background and shall contain, in English and Spanish, the following statement in letters not less than two inches in height: **"DANGER - FUMIGATION"**. They shall also depict a skull and crossbones not less than one inch in height and shall state in letters not less than one-half inch in height **"FORMALDEHYDE"**, date and time fumigant was introduced, and name, address and telephone number of the applicator performing the fumigation.

Two trained personnel must be present during the introduction of formaldehyde and, after 24 - hour treatment period, if entry is necessary into treated confinement building for purposes of facilitating aeration

ACCEPTED
with COMMENTS
In EPA Letter Dated:

MAR 24 1995

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

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DIRECTIONS FOR USE (continued)

Mixing/Loading Instructions for sled and sprinkler application.
Calculate volume of building to be treated. Use 20 fluid ounces (590mL) **BACTRON K-55W**for each 1000 cubic feet of building volume. **[Dilution: See specific dilution recommendations under application methods below]**Transfer through a closed system appropriate amount of **BACTRON K-55W**to the mixing tank containing appropriate amount of water. This product should be diluted with sufficient water to thoroughly wet all surfaces during application.

Sprinkler Application Method: Install sprinkler system in poultry confinement building. Use plastic rain-bird impact sprinklers on six inch stands, spaced 20-30 feet apart using flexible 1/2 inch PVC irrigation hose. Some buildings may require two systems, one at each end covering one-half of building. Connect end of the sprinkler system to the truck or trailer mounted mix and pumping system or adapted agricultural spray rig. Close and secure door(s). 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). All application activities must be carried out from outside confinement building. Application sprinklers should be rinsed following application solution with clean water, disconnected from pumping system, and left in confinement house until reentry is acceptable. Treated buildings should be left closed, locked and secured 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 manufacturer's instructions.

Spray Sled Application Method: Apply using a portable spray sled (such as patent pending method developed Advance Pest Control, Lemoore, CA). Spray sled shall be of a design that allows it to spray formaldehyde solution in a rearward direction providing uniform coverage of sides, ceiling and floor as hose is recoiled and spray sled is pulled through poultry house. Dilution: Dilute **BACTRON K-55W**with sufficient water to provide uniform coverage (recommended dilution rate - 1 part formaldehyde to 4 parts water)

Position vehicle carrying application pump delivery system approximately 20 feet from access to poultry house. Position spray sled equipment and feeder hose in poultry confinement building at furthest distance from vehicle mounted pump delivery system. Spray formaldehyde solution in a rearward direction towards sides, ceiling and floor as hose is recoiled and spray sled is pulled through poultry house. Keep entrance door closed to width of sled or approximately 30 inches. Follow application solution with sufficient clean water to flush sled system. Pull sled out of poultry house. Close and secure entrance door. Follow treatment period and aeration procedure below.

Treatment and Aeration of Treated Poultry Confinement Buildings: Treated buildings must be left closed, locked and secured against authorized entry for a minimum of 24 hours.

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

Removal of gas phase formaldehyde is a function of the number of building volumes (air exchanges) of air exhausted. If mechanical ventilation equipment is used, ventilate for a minimum of 20 air exchanges and 12 hours. If no mechanical ventilation equipment is used, ventilate for a minimum of 24 hours.

Reentry After Aeration: Do not allow access into aerated treated areas by any person unless formaldehyde vapor level has been determined to be below 0.75 ppm. Warning signs may be removed only after vapor level drops below 0.75 ppm as determined by direct reading device, such as a Drager Detector Tube, or equivalent, in accordance with manufacturer's instructions.

ACCEPTED
with COMMENTS
In EPA Letter Dated:
MAR 24 1995

Reg. No. 61335-5