

GLASSES, HAND WASHING If you have a two-compartment sink, wash glasses in first compartment and then immerse for two minutes in second compartment containing dilution 200, having a temperature of 100° to 120° F. If you have a three-compartment sink, wash glasses in first compartment, then rinse in second compartment in warm water, and then immerse for two minutes in third compartment containing dilution 100, having a temperature of 100° to 120° F. When in use, this solution should never be allowed to test less than 50 parts available chlorine to a million parts of water. Remove glasses from sanitizing solution, drain and dry. Do not wipe. If desired, glasses, after removing from sanitizing solution, may be rinsed with cold safe water. Keep sanitizing solution clean at all times. Mix fresh before each meal.

Uses of B-K in SCHOOLS

ATHLETE'S FOOT To help prevent spread: Disinfect benches, floors, swimming pool equipment such as diving boards, out-of-water portions of ladders, rubber mats, and shower room floors by spraying daily with dilution 1000. Place foot bath containing dilution 5000 at exit of showers. Change solution daily.

FIRST AID Apply B-K undiluted on cuts, scratches, surface wounds. Cover loosely with gauze kept wet with 1 part B-K to 9 parts of water.

TOILETS, WASHROOMS, URINALS To disinfect and deodorize: Scrub, then apply B-K dilution 1000.

NOTE: If a sprayer is used in applying B-K, be sure to empty out any remaining dilution, rinse sprayer with clear water, and drain after each use. Keep plunger oiled.

Submitted on 10/17/53 by connection with registration issued on 3/18/53 under the Federal Insecticide, Fungicide, and Rodenticide Act. Registered as supplemental to Registration No. 335-189153 by U. S. Dep't of Agriculture on 10/19/53.

B-K PRODUCTS
FOR SANITATION

Pennsalt
Chemicals

PENNSYLVANIA SALT MANUFACTURING CO.
PHILADELPHIA 7, PENNSYLVANIA

Printed in U.S.A.

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DIRECTIONS FOR USE

Pennsalt

NEW

B-K
LIQUID

CHLORINE BACTERICIDE

DISINFECTANT
DEODORANT

OCT 7 1953

WITH APPLICATION

10/19/1953

7/1

335-18

DILUTION TABLE

DILUTION STRENGTH	AMOUNT LIQUID B-K	AMOUNT WATER
5 ppm*	1/2 ounce	40 gallons
50 ppm*	1/2 ounce	4 gallons
100 ppm*	1/2 ounce	2 gallons
	1/2 pint	32 gallons
200 ppm*	1 ounce	2 gallons
400 ppm*	2 ounces	2 gallons
1000 ppm*	2 1/2 ounces	1 gallon
2000 ppm*	5 ounces	1 gallon
5000 ppm*	1 part	9 parts

*ppm represents "parts per million" which means parts available chlorine per million parts of water.

NOTE: B-K Liquid solutions come in two strengths —

New Liquid B-K (5.1% available chlorine) is packaged in one and five gallon bottles only. **B-K Liquid** (3.3% available chlorine) is packaged in 10 oz. and quart bottles. The available chlorine content of B-K Liquid remains unchanged at 3.3% — the same as it has for over 40 years.

Uses of B-K in FARM DAIRIES, CREAMERIES, MILK PLANTS, CONDENSERIES, ICE CREAM FACTORIES, CHEESE FACTORIES, CANNERIES

Use B-K only in clean water after washing. Before using B-K solution, all utensils must be thoroughly washed. After using B-K in a sprayer, empty sprayer and rinse with clear water and drain. Keep plunger oiled.

BOTTLES To treat to kill bacteria — Hand washed: Wash using hand or motor driven brush, rinse, and then immerse in dilution 200. Remove, invert in cases to drain and dry. Machine washed: Use B-K for chlorinating the last rinse water. Place B-K in the chlorinating device and adjust dispensing mechanism so that the rinse water contains 50 ppm (parts of available chlorine per million). Test rinse water frequently to determine if this strength is maintained.

CANS, PAILS, STRAINERS To treat to kill bacteria: Rinse with cold water to remove milk solids. Brush with warm water and General Manual Kleanser or MC-3. Rinse with hot water and invert on rack to drain and dry. Just before using, thoroughly rinse inside surfaces, including can covers with dilution 200. See page 7 for use in wiping cows' udders and teats.

CHEESE FACTORY UTENSILS AND EQUIPMENT At the end of the day's work, rinse equipment with cold water, then wash thoroughly with warm water and General Manual Kleanser or MC-3. Next put all small utensils into cheese vat, and, in the morning, just before use, treat to kill bacteria. Make up from 10 to 50 gallons of dilution 100 in receiving vat,

rinse the surfaces of this vat, flow the solution through the pipe lines, strainer and filter into the cheese vat. Rinse all the utensils and surface of vat with this solution. Drain the solution from the vat into a stoneware jar. When in use, this solution should never be allowed to test less than 50 parts available chlorine per million parts of water. To this solution contained in the stoneware jar, add 1/2 ounce of B-K to each 4 gallons. Use this solution for rinsing press, whey tank, and separator. Pour remaining solution on floor. Dilution 100 is suitable only where cheese factories are inspected or provided with chlorine test sets. If test sets are not in use, or if there is no inspection, dilution 200 should be used. Wash the tables, then spray with dilution 1000.

CHURNS To help kill bacteria, molds, bad odors and off-flavors use B-K. After churning, use 50 gallons of warm water (110°-120° F.) as first rinse. Run churn five minutes, then drain. Follow with a second rinse of 75 gallons of hot water (180°-200° F.) and run churn three to five minutes. Drain thoroughly, then turn so door openings are up. Allow to dry. Just before churning, run in 50 gallons of tap water (49°-51° F.) and add 12 1/2 ounces B-K. Run five minutes and drain. When in use, this solution should never test less than 50 parts available chlorine per million parts of water.

This is dilution 100 and is suitable only where creameries are inspected or provided with chlorine test sets. If test sets are not in use, or if there is no inspection, use dilution 200. Do not rinse with water after treatment as the churn may become recontaminated.

ICE CREAM FREEZERS To treat to kill bacteria: Take freezer apart, wash, and brush with warm water and General Manual Kleanser or MC-3. Then rinse all parts with dilution 200. This method is preferable to steaming which causes expansion and contraction, often resulting in leaks.

MILK PLANT EQUIPMENT To treat to kill bacteria: After the day's run, disconnect pipe lines and clean thoroughly the entire equipment by first rinsing with cold water and then scrubbing with warm water and General Manual Kleanser or MC-3. In the morning

bottler 50 ppm available chlorine.

Do not rinse equipment with water after treating to kill bacteria as it may become recontaminated.

MILKING MACHINES After milking, rinse cups and tubes free of milk. While the power is on, before the milk dries, draw cold water through the parts until it comes clean, dousing them up and down thoroughly. Next, draw through a warm solution of General Manual Kleanser or MC-3. Then treat to kill bacteria, using the following method:

Rack Method for Lewis or Lewis Eagle Lye*: First prepare lye stock solution by dissolving 1 can in 1 gallon of water contained in an earthenware crock. Use cold water and stir slowly with a wooden paddle. After it has dissolved, pour solution into a gallon bottle, stopper, place lye label on bottle, and place on shelf away from children. Place teat cups and milk line on rack and fill with a lye solution made by adding 6 ounces of the lye stock solution to 1 gallon of water. Allow to stand until next milking, then drain off solution and discard. Assemble machine and draw through these units two gallons of dilution 200 prepared from B-K. The lye solution used in the teat cups and milk lines can also be prepared by adding 1/2 ounce (4 level teaspoonfuls) of Lewis or Lewis Eagle Lye to 1 gallon of water. A suitable rack can be made

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*Reg. U.S. Pat. Off.

easily at home. We will gladly send you a drawing of one free. **Note: Lye must never be used on aluminum parts. It damages the metal.**

PIPE LINE MILKING MACHINES Clean, and immediately before use sanitize teat cups and pipe lines by drawing through each teat cup assembly a large pailful of dilution 200. Same solution may be used for sanitizing pails, cans and strainers.

BULK MILK HANDLING AND COOLING TANKS Immediately before using tank to hold milk, sanitize with dilution 200 (the tank should be previously rinsed with cold water and cleaned with warm solution of General Manual Kleanser or MC-3). Brush, spray or splash the solution over entire surface. Solution which collects in bottom of the tank should be withdrawn through the outlet valve.

SANITIZING C-I-P MILK LINES After proper cleaning and in morning before use, circulate dilution 200 for at least 10 minutes. Use enough solution to completely fill all pipe lines in the circuit.

MOLD Using General Manual Kleanser or MC-3 and warm water, thoroughly scrub shelves, floors, walls, ceilings, etc., of plant or storeroom. Then spray thoroughly with dilution 1000. Repeat often to prevent recontamination.

SEPARATORS AND CLARIFIERS After separating the milk, run cold water through the separators and clarifiers. Then take bowl apart and wash together with all tinware, using brush and warm solution of General Manual Kleanser or MC-3. Rinse with hot water and leave parts in inverted position until next use. Just before use, assemble and fill bowl with dilution 200, run solution through and then it is ready to receive the milk.

TANKS AND TANK CARS Thoroughly wash metal, and glass-lined tanks with warm water and General Manual Kleanser or MC-3. Rinse with clear water. Spray heavily interior surfaces of milk tank cars and trucks with dilution 200; other tanks such as whey tanks with dilution 400. If whey tank is underground, protect against surface drainage.

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Uses of B-K in

PURIFICATION OF WATER

BUTTER WASH WATER Before washing butter, treat all water by adding 1 ounce of B-K to each 50 gallons of water. Stir well. This can be done in a vat or tank. This gives a strength of approximately 8 parts of available chlorine per million parts of water.

COOLING AND STORAGE TANKS The dosage recommended above is also suitable for small cooling and storage tanks to help prevent the growth of so-called slime, algae or "moss."

CREAMERIES, DAIRIES, FARMS, HOMES, AND CAMPS Water supplies are frequently contaminated with harmful bacteria and algae or "moss." The use of B-K aids in preventing the development of bacteria and algae.

FARM AND HOME WATER SUPPLIES To disinfect water, whose source is from unprotected supplies, such as cisterns, wells, springs and lakes, add ¼ ounce of B-K to each 100 gallons of water or two drops to each gallon of water and let it stand for 15 to 30 minutes. This is a strength of about 1 part available chlorine per million parts of water. The water may be kept in the refrigerator for cooling at the same time if desired.

Uses of B-K in

POULTRY SANITATION

Cleanliness is essential to the health of your birds. Authorities agree that keeping birds and houses dry is important in the prevention of winter poultry ailments. Moisture in houses, whether from natural or other causes, is harmful. As an aid in controlling the spread of diseases by contaminated utensils, equipment and drinking water, we recommend the following:

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DRINKING WATER — BABY CHICKS For the first three days, disinfect each day's drinking water by adding 1 ounce of B-K to each 2 gallons. After the third day add to each day's drinking water ½ ounce of B-K to each 2 gallons. Be sure to prepare fresh drinking water each day.

DRINKING WATER — ADULT BIRDS For open vessels add to each day's drinking water 1 ounce of B-K to each 2 gallons. For fount, add to each day's drinking water ½ ounce of B-K to each 2 gallons. Prepare fresh drinking water daily. Be sure birds have sufficient drinking water at all times. Place founts and open vessels so that they will not be contaminated by droppings or litter. Clean drinking utensils daily.

PREMISES, DISINFECTION Remove all litter and droppings, and burn when disease is present. Scrub floors, walls, nest boxes, dropping boards and roosts with hot Lewis Lye solution made by dissolving 1 can of Lewis Lye in 10 gallons of water. Then spray with dilution 1000.

Uses of B-K in

BOTTLING PLANTS

In food plants, use B-K for treating equipment and utensils to kill bacteria, molds, and yeasts. This helps to prevent contamination of the beverage by the equipment and aids in preventing spoiling. If sprayer is utilized in applying dilutions, after each use empty sprayer, rinse with clean water, and drain. Keep plunger oiled.

BOTTLES Machine Washed: Use B-K for chlorinating the last rinse water. Place B-K in the chlorinating device and adjust dispensing mechanism so that the rinse water contains 5 ppm. Test rinse water frequently to determine if this strength is maintained.

SYRUP SYSTEM Clean mixer, filter, storage jars, pumps, pipe lines, rubber hose, and bottler thoroughly with warm water. Just before use next morning, treat as follows:

(A) If the syrup jars are 10 gallons or less, fill entire system with dilution 200, prepared in the syrup mixer. Pump through syrup filter into storage jars, from there into pipe line to the bottler, and let drain onto floor.

(B) If syrup jars are larger than 10 gallons, apply dilution 200 as a spray on the interior surface of the jars. Prepare a small amount of same strength in one of the jars to use in the pipe lines by flowing it through them to bottler, and then let drain onto floor. After preparing equipment as instructed above, rinse with pure water to remove any remaining hypochlorite. If water of tested purity is not available, rinse with a dilution of ½ ounce of B-K to 100 gallons of water. Do not use common tap water for final rinse; it is likely to recontaminate equipment.

Uses of B-K in

LIVESTOCK SANITATION

A high degree of sanitation should be maintained on the farm. Use B-K as an aid in preventing contaminated equipment and drinking water from spreading disease.

COWS' UDDERS AND TEATS To aid in producing milk of low bacteria count, before milking, wipe udder and teats of each cow with clean cloth wet with dilution 200. To aid in preventing spread of mastitis, wash, then dip end of each teat in dilution 200 by holding a pan of this dilution beneath the udder so that the ends and sides of teats are covered with the solution.

CUTS, SORES, AND SUPERFICIAL WOUNDS Clip hair around parts and apply Liquid B-K. Wash daily with dilution 5000.

DOUCHE, VAGINAL After calving, the vagina of all animals should be douched daily, for at least one week, with 1 gallon of warm dilution 200.

PREMISES To disinfect: Clean premises thoroughly, burning all litter if disease is present. Scrub stanchions and floors with hot solution made by dissolving 1 can of Lewis Lye in 10 gallons of

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water. Then spray with dilution 1000. This process of disinfection will help prevent the transmission of infectious diseases of livestock by contaminated premises.

Uses of B-K in

RESTAURANTS, TAVERNS, SODA FOUNTAINS, SOFT DRINK STANDS

All dishes, glasses and silverware should be sanitized according to the regulations of your health department to help kill germs that may be transmitted from one person to another by these utensils. First wash all utensils in warm solution of General Manual Kleanser or MC-3, then sanitize with New Liquid B-K according to the following directions.

DISHES, HAND WASHING If you have a two-compartment sink, wash dishes in first compartment, and then immerse for two minutes in second compartment containing dilution 200, having a temperature of 100° to 120° F. If you have a three-compartment sink, wash dishes in first compartment, rinse in second compartment with warm water and then immerse for two minutes in third compartment containing dilution 100, having a temperature of 100° to 120° F. When in use this solution should never be allowed to test less than 50 parts available chlorine to a million parts of water. Remove dishes from sanitizing solution, allow to drain and dry. Do not wipe. If you have no separate rinse tank, use a large pan and operate under the two-compartment plan. Keep sanitizing solution clean at all times. Mix fresh before each meal.

TO REMOVE STAINS FROM DISHES To remove stains from dishes and discolorations in cracks, first wash, then immerse for two minutes in dilution 1000. If stains remain, rub with a cloth wet with this solution. Rinse dishes thoroughly.

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