

875-190

7/7/2011

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

July 7, 2011

Rebecca L. Mannion
Registration Specialist
Diversey, Inc.
8310 16th Street, P.O. Box 902
Sturtevant, WI 53177-1964

Subject: PRIA (D-445183)
Liqu-A-Klor
EPA Registration No. 875-190
Application Dated: February 11, 2011
Receipt Dated: March 3, 2011

Dear Ms. Mannion:

This acknowledges the receipt of your Amendment application dated February 11, 2011 in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, is acceptable with conditions and comments listed below.

Submission and Proposed Changes

Amend to add additional suppliers of non-registered active ingredients. The original CSFs for the Basic and the Alternate Formulation #1 dated December 15, 2010 (signed by Kresti Lyddon) were revised and updated on May 20, 2011 (signed by Rebecca Mannion). Submission of efficacy data (MRID#483867-02 and #483867-03) in support for non-food contact and food contact surfaces for sanitizing label claim are acceptable.

Comments and Conditions:

Based on the submitted materials noted above, are acceptable and the following conditions and comments apply:

- a. The amendments in the CSFs dated May 20, 2011 for the Basic and Alternation Formulation #1 are acceptable and these supercede previously submitted CSFs.

b. P.2 and P.8 – Under **(FEATURES, CLAIMS & USES:)** and **(REFERENCE SHEET)**
Revise [**Sanitizer**] – with a 7-second to 60-second contact time claim to read:

[**Sanitizer with 60-second Contact Time**]- When used as directed as a food-contact sanitizer at a 1:512 dilution (1 oz. of Liqu-A-Klor per 4 gallons of water)(100 ppm available chlorine), using an approved AOAC test methods (under the Good Laboratory Practices, [GLP's], in the presence of 500 ppm hard water, and a 60-second contact time, this sanitizer use product kills 99.999% of the following bacteria on pre-cleaned, hard, non-porous, in-animate food contact surfaces.”
Escherichia coli and *Staphylococcus aureus* wherever it appears on the label or reference sheets.

c. P.2 and P.8 – Under **(FEATURES, CLAIMS & USES:)** and **(REFERENCE SHEET)**
Revise [**Sanitizer**] – with a 1-minute contact time claim to read:

[**Sanitizer with 1-minute Contact Time**]- When used as directed as a food-contact sanitizer at a 1:512 dilution (1 oz. of Liqu-A-Klor per 4 gallons of water) (100 ppm available chlorine), using an approved AOAC test methods (under the Good Laboratory Practices, [GLP's], in the presence of 500 ppm hard water, and a 1-minute contact time, this sanitizer use product kills 99.999% of the following bacterium on pre-cleaned, hard, non-porous, in-animate food contact surfaces:”
Salmonella typhi wherever it appears on the label or reference sheets.

d. P.2 – Under **“Directions For Use – To Prepare Food Contact Sanitizing Use Solution:”**
Change **“2 oz”** to **“0.25 oz”** and revise the first sentence, to read:

“Add 0.25 oz of Liqu-A-Klor per gallon ((or) 1 oz of Liqu-A-Klor per 4 gallons) of water (100 ppm available Chlorine).” ...

e. P.5 and P.11 – Under **“FRUIT AND VEGETABLE WASHING”**.

Revise the directions to read as follows: "To prepare a sanitation solution, dilute 2/3 oz of Liqu-A-Klor in 10 gallons of water to reach 25 ppm available chlorine. Use test kit to check available chlorine content. Thoroughly clean all fruit and vegetables by immersion in this sanitizing solution in a sink or spray washer. Drain and rinse fruit and vegetable with potable water. Then immerse or spray in a separate sink with sanitizer solution for 2 minutes. Spray to rinse fruit and vegetables with additional sanitizing solution prior to packaging. Rinse fruits and vegetables with potable water prior to use."

f. In order to make it clear for the reader to follow the instructions for preparing the various "sanitation use solutions" it is advisable to use the product name **"Liqu-A-Klor"** instead of just **"this product"** or **"product"** on the label, labeling and Reference Sheet.. See notations on the proposed product labeling.

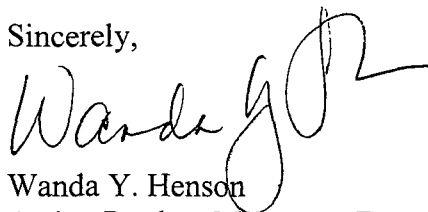
General Comments:

A stamped copy of the label with comments is enclosed. Submit one copy of your final printed labeling before distributing or selling the product bearing the revised labeling.

30415

If you have any questions or comments concerning this letter, please contact liem.david@epa.gov or call (703) 305-1285.

Sincerely,

A handwritten signature in black ink that reads "Wanda Y. Henson". The signature is written in a cursive style with a large, stylized "W" and "H".

Wanda Y. Henson
Acting Product Manager - Team 32
Regulatory Management Branch II
Antimicrobial Division (7510P)

40815

(Note to agency: Text appearing in parenthesis is done to show optional text)



Liqu-A-Klor

(Liquid Bactericide) • (Disinfectant) • (Disinfects) • (Sanitizer) • (Sanitizes) • (Block Whitener)
• (Deodorizer) • (Deodorizes) • (Destainer) • (Stain Remover)

For (Industrial) & (Institutional) Use
((Suitable) For Use in Meat and Poultry Plants)

ACTIVE INGREDIENT:	
Sodium hypochlorite	5.25%
OTHER INGREDIENTS:	94.75%
TOTAL:	100.00%

5% available Chlorine

KEEP OUT OF REACH OF CHILDREN DANGER

FIRST AID

IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.

IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes.

IF SWALLOWED: Call poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

IF INHALED: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.

IN CASE OF EMERGENCY, CALL A POISON CONTROL CENTER OR DOCTOR FOR TREATMENT ADVICE.
1-XXX-XXX-XXXX
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

See additional precautionary statements on back (side) (left) (right) (panel) (of) (label) (below).

(See reference sheet (enclosed in each case) for (a complete list of pathogenic organisms) (additional features, claims, direction for use) (claimed for this product) (eliminated by this product).)

Net Contents:

ACCEPTED
with COMMENTS
EPA Letter Dated:
JUL -7 2011

(Product of XXXXXXXXXXX)

Under the Federal Insecticide,
Fungicide, and Rodenticide Act as
amended for the pesticide,
registered under EPA Reg. No. 875-190

(Note to agency: Text appearing in parenthesis is done to show optional text)

(FEATURES, CLAIMS & USES:)
(Food Service) Lign-A-Klor

Use this product to sanitize previously cleaned, hard, non-porous food contact surfaces in: restaurants, bars, food service establishments, commercial kitchens, cafeterias, fast food operations, supermarkets, convenience stores, retail and wholesale establishments, coffee shops, donut shops, bagel stores, pizza stores, liquor stores, delis, butchers, bakeries, food preparation areas, food storage areas, and recycling centers.

It is designed for use (Use daily) to sanitize of previously cleaned, hard, non-porous food contact surfaces/items: dishes; glassware; utensils; silverware; cutlery; cooking utensils; (restaurant) tables; plastic tables; picnic tables (non-wooden) and outdoor furniture (except cushions and wood frames); countertops; food preparation surfaces; non-porous cutting boards; non-porous chopping blocks; trays; serving trays; appliances; refrigerators; microwave ovens; stoves; grills; rotisserie ovens and equipment; kitchen equipment; food processors; blenders; sinks; tub surfaces; coolers; ice chests; ice machines; (soft serve) ice cream machines, refrigerated storage and display equipment; food storage containers; refrigerator bins used for meat, vegetables, fruit and eggs. A potable water rinse is not allowed when used as a sanitizer on food contact surfaces. This product meets AOAC Germicidal and Detergent Test Standards for food contact surfaces.

sanitizer solution

(Sanitizer) - When used as directed as a food-contact sanitizer at a 1:512 dilution (1 oz. of product per 4 gallons of water) (100 ppm available chlorine), using approved AOAC test methods (under Good Laboratory Practices, [GLP's]), in the presence of 500 ppm hard water, and a 7-second contact time, this product kills 99.999% of the following on hard non-porous inanimate surfaces:

- Escherichia coli* (ATCC 11229)
- Staphylococcus aureus* (ATCC 6538)

(Sanitizer) - When used as directed as a food-contact sanitizer at a 1:512 dilution (1 oz. of product per 4 gallons of water) (100 ppm available chlorine), using approved AOAC test methods (under Good Laboratory Practices, [GLP's]), in the presence of 500 ppm hard water, and a 1-minute contact time, this product kills 99.999% of the following on hard non-porous inanimate surfaces:

- Salmonella typhi* (ATCC 6539)

DIRECTIONS FOR USE:

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

To Prepare Food Contact Sanitizing Use Solution: Add the product at 0.25 oz of Lign-A-Klor per gallon (or) 1 oz. of product per 4 gallons) of water (100 ppm available Chlorine)). If no test kit is available, prepare a sanitizing solution by thoroughly mixing 2 oz. of this product with 4 gallons of water to provide approximately 200 ppm available chlorine by weight.

Note: This product degrades with age. Use a chlorine test kit and increase dosage, as necessary, to obtain the required level of available chlorine.

To Sanitize Hard, Non-Porous Food Contact Surfaces and Equipment:

1. Prior to sanitization, remove gross particulate matter with a warm water flush, then wash equipment with detergent or cleaning solution and follow with a potable water rinse.
2. Prepare the sanitizing use solution by adding 0.5 oz. of Lign-A-Klor per gallon of water (200 ppm available chlorine) (or equivalent dilution).
3. Apply sanitizing solution by immersion, coarse spray, mop, wipe, flood techniques or circulation techniques as appropriate to the equipment or surface to be treated. Allow a contact time of at least one (1) minute.
4. Allow surfaces to drain thoroughly and air dry before resuming operation. Do not rinse.

Note: This product degrades with age. Use a chlorine test kit and increase dosage, as necessary, to obtain the required level of available chlorine.

(Note to agency: Text appearing in parenthesis is done to show optional text)

To Sanitize Hard, Non-Porous Food Contact Surfaces and Equipment in Restaurants, Bars, Institutions, and Other Food Serving Establishments (Immersion Method):

1. Scrape and pre-wash utensils, dishes and glasses to remove gross soil.
2. Wash with detergent.
3. Rinse with clean (potable) water.
4. Sanitize in a solution containing 0.5 oz. ^{of Ligu-A-Klor} per gallon of water (200 ppm available chlorine). Immerse all utensils for at least 1 minute or contact time specified by governing sanitary code.
5. Place sanitized utensils on a rack or drain board to air dry.

Note: This product degrades with age. Use a chlorine test kit and increase dosage, as necessary, to obtain the required level of available chlorine.

**WISCONSIN STATE DIVISION OF HEALTH
DIRECTIONS FOR EATING ESTABLISHMENTS**

1. Scrape and pre-wash utensils and glasses whenever possible.
2. Wash with a good detergent or compatible cleaner.
3. Rinse with potable water.
4. Sanitize in a solution of 0.5 oz. ^{of Ligu-A-Klor} per gallon of water (200 ppm available chlorine) (or equivalent use dilution). Immerse all utensils for at least two minutes or for contact time specified by governing sanitary code.
5. Place sanitized utensils on a rack or drain board to air dry.
6. Prepare fresh sanitizing solution at least daily or more often when visibly soiled or diluted.

NOTE: A clean potable water rinse following sanitization is not permitted under Section HSS 196, Appendix 7-204.11 of the Wisconsin Administrative Code.

SANITIZING USING MECHANICAL WAREWASHING EQUIPMENT (7 SECONDS, NO RINSE):

1. Pre-flush, scrape or pre-soak articles to be washed.
2. Load articles into racks.
3. Load rack into dish machine, close door and start wash cycle.
4. Upon completion of wash cycle, apply a sanitizing rinse containing at least 100 ppm available chlorine by adjusting feeding device to meter 1 oz. of ~~product~~ ^{Ligu-A-Klor} per 4 gallons of water. Test sanitizer frequently during operation with a chlorine test kit to ensure that solution does not drop below 50 ppm available chlorine. Sanitizing Rinse must remain in contact with items for (at least) 7 seconds.
5. After sanitization cycle completes, open door, remove rack, tilt rack to aid in draining of sanitizer solution. Sanitizer used in automatic systems may be used in the general cleaning process but may NOT be reused for sanitizing purposes.
6. Allow articles to air-dry before removing from rack.

If no test kit is available or if available chlorine has dropped below 50 ppm during sanitizing, either discard the sanitizer solution or add sufficient product to reestablish a 200 ppm available chlorine sanitizer strength. Resanitize equipment. Do not rinse equipment with water after sanitizing and do not soak equipment overnight in sanitizer solution.

SANITIZING USING MECHANICAL WAREWASHING EQUIPMENT (7 SECONDS, POTABLE WATER RINSE):

1. Pre-flush, scrape or pre-soak articles to be washed.
2. Load articles into racks.
3. Load rack into dish machine, close door and start wash cycle.
4. Upon completion of wash cycle, apply a sanitizing rinse containing at least 100 ppm available chlorine by adjusting feeding device to meter 1 oz. of ~~product~~ ^{Ligu-A-Klor} per 4 gallons of water. Test sanitizer frequently during operation with a chlorine test kit to ensure that solution does not drop below 50 ppm available chlorine. Sanitizing Rinse must remain in contact with items for (at least) 7 seconds.
5. Rinse items with potable water after sanitizing.
6. After cycle completes, open door, remove rack, tilt rack to aid in draining.
7. Allow articles to air-dry before removing from rack.

If no test kit is available or if available chlorine has dropped below 50 ppm during sanitizing, either discard the sanitizer solution or add sufficient product to reestablish a 100 ppm available chlorine sanitizer strength. Resanitize equipment. Do not rinse equipment with water after sanitizing and do not soak equipment overnight in sanitizer solution.

(Note to agency: Text appearing in parenthesis is done to show optional text)

SANITIZING USING MECHANICAL WAREWASHING EQUIPMENT (1 MINUTE, NO RINSE):

1. Pre-flush, scrape or pre-soak articles to be washed.
2. Load articles into racks.
3. Load rack into dish machine, close door and start wash cycle.
4. Upon completion of wash cycle, apply a sanitizing rinse containing at least 100-200 ppm available chlorine by adjusting feeding device to meter 1-2 oz. of ~~product~~ *Liqu-A-Klor* per 4 gallons of water. Test sanitizer frequently during operation with a chlorine test kit to ensure that solution does not drop below 50 ppm available chlorine. Sanitizing Rinse must remain in contact with items for 1 minute.
5. After sanitization cycle completes, open door, remove rack, tilt rack to aid in draining of sanitizer solution. Sanitizer used in automatic systems may be used in the general cleaning process but may NOT be reused for sanitizing purposes.
6. Allow articles to air-dry before removing from rack.

If no test kit is available or if available chlorine has dropped below 50 ppm during sanitizing, either discard the sanitizer solution or add sufficient product to reestablish a 100-200 ppm available chlorine sanitizer strength. Resanitize equipment. Do not rinse equipment with water after sanitizing and do not soak equipment overnight in sanitizer solution.

SANITIZING USING MECHANICAL WAREWASHING EQUIPMENT (1 MINUTE, POTABLE WATER RINSE):

1. Pre-flush, scrape or pre-soak articles to be washed.
2. Load articles into racks.
3. Load rack into dish machine, close door and start wash cycle.
4. Upon completion of wash cycle, apply a sanitizing rinse containing at least 100-200 ppm available chlorine by adjusting feeding device to meter 1-2 oz. of ~~product~~ *Liqu-A-Klor* per 4 gallons of water. Test sanitizer frequently during operation with a chlorine test kit to ensure that solution does not drop below 50 ppm available chlorine. Sanitizing Rinse must remain in contact with items for 1 minute.
5. Rinse items with potable water after sanitizing.
6. After cycle completes, open door, remove rack, tilt rack to aid in draining.
7. Allow articles to air-dry before removing from rack.

If no test kit is available or if available chlorine has dropped below 50 ppm during sanitizing, either discard the sanitizer solution or add sufficient ~~product~~ *Liqu-A-Klor* to reestablish a 100-200 ppm available chlorine sanitizer strength. Resanitize equipment. Do not rinse equipment with water after sanitizing and do not soak equipment overnight in sanitizer solution.

FOR SANITIZATION OF ICE MACHINES:

1. Turn off refrigeration.
2. Unit must be washed with a compatible detergent and rinsed with potable water before sanitizing.
3. Wash and rinse all surfaces thoroughly.
4. Apply a solution of 0.5 (1/2) oz. of ~~product~~ *Liqu-A-Klor* per gallon ((or) 2 oz. of ~~product~~ *Liqu-A-Klor* per 4 gallons) of water (200 ppm available Chlorine)) by direct pouring or by recirculating through the system. Surfaces must remain wet for at least one minute followed by complete draining and drying. Fresh solution must be prepared for each cleaning. No potable water rinse is allowed when product is used as directed.
5. Return machine to service.

FOR SANITIZATION OF BEVERAGE DISPENSING EQUIPMENT:

1. After cleaning thoroughly rinse equipment with a potable water rinse.
2. Fill equipment with a use solution of 0.5 (1/2) oz. of ~~product~~ *Liqu-A-Klor* per gallon ((or) 2 oz. of product per 4 gallons) of water (200 ppm available Chlorine)).
3. Allow solution to remain in equipment for at least one minute, or until operations resume, at which time the sanitizing solution must be drained from the system. To insure the removal of flavors, it is suggested that during changeover between products the system must be cleaned, rinsed and flushed with the sanitizing solution for at least 1 minute.
4. Drain thoroughly and allow surface to air dry before reuse. No potable water rinse is allowed.

(Note to agency: Text appearing in parenthesis is done to show optional text)

LAUNDRY SANITIZER

HOUSEHOLD LAUNDRY SANITIZER: IN SOAKING SUDS: Thoroughly mix 1 Tbs. of ~~this product~~ *Liqu-A-Klor* to 1 gallon of wash water to provide 200 ppm available chlorine. Wait 5 minutes, then add soap or detergent. Immerse laundry for at least 11 minutes prior to starting the wash/rinse cycle. *Liqu-A-Klor*

IN WASHING SUDS: Thoroughly mix 1 Tbs. of ~~this product~~ *Liqu-A-Klor* to 1 gallon of wash water containing clothes to provide 200 ppm available chlorine. Wait 5 minutes, then adding soap or detergent and start the wash/rinse cycle.

Liqu-A-Klor **COMMERCIAL LAUNDRY SANITIZER:** Wet fabrics or clothes should be spun dry prior to sanitization. Thoroughly mix 5 oz. of ~~this product~~ *Liqu-A-Klor* with 10 gallons of water to yield 200 ppm available chlorine. Promptly after mixing the sanitizer, add the solution into the prewash prior to washing fabrics/clothes in the regular wash cycle with a good detergent. Test the level of available chlorine, if solution has been allowed to stand. Add more of this product if the available chlorine level has dropped below 200 ppm.

SANITIZATION OF POROUS NON-FOOD CONTACT SURFACES

RINSE METHOD: Prepare a 600 ppm sanitizing solution by thoroughly mixing 6 oz. of ~~this product~~ *Liqu-A-Klor* with 4 gallons of water. Clean equipment surfaces in the normal manner. Prior to use, rinse all surfaces thoroughly with the sanitizing solution, maintaining contact with the sanitizer for at least 2 minutes. Do not rinse equipment with water after treatment and do not soak equipment overnight.

IMMERSION METHOD: Prepare a 600 ppm sanitizing solution by thoroughly mixing 6 oz. of ~~this product~~ *Liqu-A-Klor* with 4 gallons of water. Clean equipment in the normal manner. Prior to use, immerse equipment in the sanitizing solution for at least 2 minutes and allow the sanitizer to drain. Do not rinse equipment with water after treatment.

Liqu-A-Klor **SPRAY METHOD:** After cleaning, sanitize non-food contact surfaces with 600 ppm available chlorine by thoroughly mixing the ~~product~~ *Liqu-A-Klor* in a ratio of 6 oz. of this product with 4 gallons of water. Use spray equipment resistant to hypochlorite solutions. Always empty and rinse spray equipment with potable water after use. Prior to using equipment, thoroughly spray all surfaces until wet, allowing excess sanitizer to drain.

FRUIT AND VEGETABLE WASHING – Thoroughly clean all fruit and vegetables by immersion in recommended product solution in a sink or spray washer. Dilute ~~2/3 oz. of this product~~ *Liqu-A-Klor* in 10 gallons of water to make a sanitizing solution containing 25 ppm available chlorine. Drain and rinse product with potable water. Immerse or spray in a separate sink with dilute sanitizer for 2 minutes. Check available chlorine content with test kit. Spray rinse vegetables with additional sanitizer solution prior to packaging. Rinse fruits and vegetables with potable water prior to use.

DISINFECTION OF DRINKING WATER (EMERGENCY/PUBLIC/INDIVIDUAL SYSTEMS)

PUBLIC SYSTEMS: Mix a ratio of 1/4 oz. of ~~this product~~ *Liqu-A-Klor* to 100 gallons of water. Begin feeding this solution with a hypochlorinator until a free available chlorine residual of at least 0.2 ppm and no more than 0.6 ppm is attained throughout the distribution system. Check water frequently with a chlorine test kit. Bacteriological sampling must be conducted at a frequency no less than that prescribed by the National Primary Drinking Water Regulations. Contact your local Health Department for further details.

FOR USE AS A DEODORIZER:

Liqu-A-Klor Apply Use Solution (1.25 – 7.5 oz. of ~~this product~~ *Liqu-A-Klor* in 5 gallons of water equivalent to 100-600 ppm) to hard, non-porous surfaces. Wipe surfaces (and let air dry).

FOR USE AS A BLOCK WHITENER

This product is a fast acting, non-corrosive formula for cleaning and whitening food cutting/preparation surfaces.

1. Clean cutting board with degreaser. *Liqu-A-Klor*
2. Rinse and remove all food residues from surface with potable water.
3. Without diluting or agitating, apply ~~the product~~ *Liqu-A-Klor* with a clean nylon brush or scrub pad.
4. Allow ~~the product~~ *Liqu-A-Klor* to set for 15 minutes, and then scrub briefly.
5. Rinse surface thoroughly with potable water.
6. Sanitize the surface. *Liqu-A-Klor*

(Note to agency: Text appearing in parenthesis is done to show optional text)

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage, disposal or cleaning of equipment.

PESTICIDE STORAGE: Store this product in a cool dry area away from direct sunlight and heat to avoid deterioration. In case of spill, flood area with large quantities of water. Product or rinsate that cannot be used should be diluted with water before disposal in a sanitary sewer.

CONTAINER DISPOSAL:

NONREFILLABLE SEALED CONTAINERS: *Note to reviewer: Several of our packaging options are sealed containers or bottles designed to reduce worker exposure to the concentrate. None of these can be triple rinsed because they are closed sealed containers. The following text will be used on these sealed container types:*

Nonrefillable container. Do not reuse or refill this container. Wrap empty container and put in trash.

NONREFILLABLE NON-RIGID CONTAINERS: *Note to reviewer: Several of our packaging options are Bag-in-Box containers (a plastic bag liner supported inside a box) or are flexible bag-type containers. These flexible containers are exempt from the triple rinsing requirements. The following text will be used on these container types:*

Nonrefillable container. Do not reuse or refill this container. Wrap empty container and put in trash.

SMALL NONREFILLABLE CONTAINERS: *Note to reviewer: The following text will be used on rigid, nonrefillable containers small enough to shake (5 gallons or smaller):*

Nonrefillable container. Do not reuse or refill this container. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Offer for recycling, if available.

LARGE NONREFILLABLE CONTAINERS: *Note to reviewer: One of the following paragraphs will be used on labels for rigid, nonrefillable containers too large to shake (larger than 5 gallons):*

Nonrefillable container. Do not reuse or refill this container. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water and replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for at least 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Offer for reconditioning, if appropriate.

OR

Nonrefillable container. Do not reuse or refill this container. Clean container promptly after emptying. Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or a mix tank or collect rinsate for later use or disposal. Insert pressure-rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. Offer for reconditioning, if appropriate.

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(Note to agency: Text appearing in parenthesis is done to show optional text)

REFILLABLE CONTAINERS: Note to reviewer: One of the following paragraphs will be used on labels for refillable containers:

Liqu-A-Klor

Refillable container. Refill this container with (~~this brand or brand name pesticide~~) only. Do not reuse this container for any other purpose.

Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller.

OR

Pressure rinsing the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller.

To clean the container prior to final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

PRECAUTIONARY STATEMENTS

HAZARD TO HUMANS AND DOMESTIC ANIMALS

DANGER. Corrosive. May cause severe skin and eye irritation or chemical burns to broken skin. Causes eye damage. Do not get in eyes, on skin or on clothing. Wear goggles or face shield and rubber gloves when handling this product. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove contaminated clothing and wash clothing before reuse. Avoid breathing vapors. Vacate poorly ventilated areas as soon as possible. Do not return until odors have dissipated.

ENVIRONMENTAL HAZARDS: This pesticide is toxic to fish and aquatic organisms. (For containers of 5 gallons or greater) Do not discharge effluent containing this product 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 to 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

STRONG OXIDIZING AGENT: Mix only with water according to label directions. Mixing this product with gross filth such as feces, urine, etc., or with ammonia, acids, detergents or other chemicals may release hazardous gases, which are irritating to eyes, lungs and mucous membranes.

EPA Reg. No. 875-190

EPA Est. No.

(Lot Code letters indicate manufacturing location)

(MSDS Ref. No. XXXXXXX)

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(Note to agency: Text appearing in parenthesis is done to show optional text)



Liqu-A-Klor REFERENCE SHEET

(Sanitizer) - When used as directed as a food-contact sanitizer at a 1:512 dilution (1 oz. of product per 4 gallons of water) (100 ppm available chlorine), using approved AOAC test methods (under Good Laboratory Practices, [GLPs]), in the presence of 500 ppm hard water, and a 7-second contact time, this product kills 99.999% of the following on hard non-porous inanimate surfaces:

Escherichia coli (ATCC 11229)

Staphylococcus aureus (ATCC 6538)

(Sanitizer) - When used as directed as a food-contact sanitizer at a 1:512 dilution (1 oz. of product per 4 gallons of water) (100 ppm available chlorine), using approved AOAC test methods (under Good Laboratory Practices, [GLPs]), in the presence of 500 ppm hard water, and a 1 minute contact time, this product kills 99.999% of the following on hard non-porous inanimate surfaces:

Salmonella typhi (ATCC 6539)

DIRECTIONS FOR USE:

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

Note: This product degrades with age. Use a chlorine test kit and increase dosage, as necessary, to obtain the required level of available chlorine.

To Prepare Food Contact Sanitizing Use Solution: Add the product at 0.25 (1/4) oz. of product per gallon ((or) 1 oz. of product per 4 gallons) of water (100 ppm available Chlorine). If no test kit is available, prepare a sanitizing solution by thoroughly mixing 2 oz. of this product with 4 gallons of water to provide approximately 200 ppm available chlorine by weight.

To Sanitize Hard, Non-Porous Food Contact Surfaces and Equipment:

5. Prior to sanitization, remove gross particulate matter with a warm water flush, then wash equipment with detergent or cleaning solution and follow with a potable water rinse *of Liqu-A-Klor*
6. Prepare the sanitizing use solution by adding 0.25 oz. per gallon of water (100 ppm available chlorine) (or equivalent dilution).
7. Apply sanitizing solution by immersion, coarse spray, mop, wipe, flood techniques or circulation techniques as appropriate to the equipment or surface to be treated. Allow a contact time of at least one (1) minute.
8. Allow surfaces to drain thoroughly and air dry before resuming operation. Do not rinse.

To Sanitize Hard, Non-Porous Food Contact Surfaces and Equipment in Restaurants, Bars, Institutions, and Other Food Serving Establishments (Immersion Method):

6. Scrape and pre-wash utensils, dishes and glasses to remove gross soil.
7. Wash with detergent.
8. Rinse with clean (potable) water. *1 oz of Liqu-A-Klor*
9. Sanitize in a solution containing 0.25 per gallon of water (or equivalent dilution) (100 ppm available chlorine). Immerse all utensils for at least 1 minute or contact time specified by governing sanitary code.
10. Place sanitized utensils on a rack or drain board to air dry.

(Note to agency: Text appearing in parenthesis is done to show optional text)

**WISCONSIN STATE DIVISION OF HEALTH
DIRECTIONS FOR EATING ESTABLISHMENTS**

- 7. Scrape and pre-wash utensils and glasses whenever possible.
- 8. Wash with a good detergent or compatible cleaner.
- 9. Rinse with potable water.
- 10. Sanitize in a solution of 0.25 oz. ^{of Liqu-A-Klor} per gallon of water (100 ppm available chlorine) (or equivalent use dilution). Immerse all utensils for at least two minutes or for contact time specified by governing sanitary code.
- 11. Place sanitized utensils on a rack or drain board to air dry.
- 12. Prepare fresh sanitizing solution at least daily or more often when visibly soiled or diluted.

NOTE: A clean potable water rinse following sanitization is not permitted under Section HSS 196, Appendix 7-204.11 of the Wisconsin Administrative Code.

SANITIZING USING MECHANICAL WAREWASHING EQUIPMENT (7 SECONDS, NO RINSE):

- 7. Pre-flush, scrape or pre-soak articles to be washed.
- 8. Load articles into racks.
- 9. Load rack into dish machine, close door and start wash cycle.
- 10. Upon completion of wash cycle, apply a sanitizing rinse containing at least 50 ppm available chlorine by adjusting feeding device to meter 2 oz. of ^{Liqu-A-Klor} product per 4 gallons of water. Test sanitizer frequently during operation with a chlorine test kit to ensure that solution does not drop below 50 ppm available chlorine. Sanitizing Rinse must remain in contact with items for 7 seconds, at 120°F.
- 11. After sanitization cycle completes, open door, remove rack, tilt rack to aid in draining of sanitizer solution. Sanitizer used in automatic systems may be used in the general cleaning process but may NOT be reused for sanitizing purposes.
- 12. Allow articles to air-dry before removing from rack.

If no test kit is available or if available chlorine has dropped below 50 ppm during sanitizing, either discard the sanitizer solution or add sufficient ^{Liqu-A-Klor} product to reestablish a 200 ppm available chlorine sanitizer strength. Resanitize equipment. Do not rinse equipment with water after sanitizing and do not soak equipment overnight in sanitizer solution.

SANITIZING USING MECHANICAL WAREWASHING EQUIPMENT (7 SECONDS, POTABLE WATER RINSE):

- 8. Pre-flush, scrape or pre-soak articles to be washed.
- 9. Load articles into racks.
- 10. Load rack into dish machine, close door and start wash cycle.
- 11. Upon completion of wash cycle, apply a sanitizing rinse containing at least 50 ppm available chlorine by adjusting feeding device to meter 2 oz. of ^{Liqu-A-Klor} product per 4 gallons of water. Test sanitizer frequently during operation with a chlorine test kit to ensure that solution does not drop below 50 ppm available chlorine. Sanitizing Rinse must remain in contact with items for 7 seconds, at 120°F.
- 12. Rinse items with potable water after sanitizing.
- 13. After cycle completes, open door, remove rack, tilt rack to aid in draining.
- 14. Allow articles to air-dry before removing from rack.

If no test kit is available or if available chlorine has dropped below 50 ppm during sanitizing, either discard the sanitizer solution or add sufficient ^{Liqu-A-Klor} product to reestablish a 200 ppm available chlorine sanitizer strength. Resanitize equipment. Do not rinse equipment with water after sanitizing and do not soak equipment overnight in sanitizer solution.

(Note to agency: Text appearing in parenthesis is done to show optional text)

SANITIZING USING MECHANICAL WAREWASHING EQUIPMENT (1 MINUTE, NO RINSE):

- 7. Pre-flush, scrape or pre-soak articles to be washed.
- 8. Load articles into racks.
- 9. Load rack into dish machine, close door and start wash cycle.
- 10. Upon completion of wash cycle, apply a sanitizing rinse containing at least 50 ppm available chlorine by adjusting feeding device to meter 2 oz. of product per 4 gallons of water. Test sanitizer frequently during operation with a chlorine test kit to ensure that solution does not drop below 50 ppm available chlorine. Sanitizing Rinse must remain in contact with items for 1 minute, at 120°F.
- 11. After sanitization cycle completes, open door, remove rack, tilt rack to aid in draining of sanitizer solution. Sanitizer used in automatic systems may be used in the general cleaning process but may NOT be reused for sanitizing purposes.
- 12. Allow articles to air-dry before removing from rack.

If no test kit is available or if available chlorine has dropped below 50 ppm during sanitizing, either discard the sanitizer solution or add sufficient product to reestablish a 200 ppm available chlorine sanitizer strength. Resanitize equipment. Do not rinse equipment with water after sanitizing and do not soak equipment overnight in sanitizer solution.

SANITIZING USING MECHANICAL WAREWASHING EQUIPMENT (1 MINUTE, POTABLE WATER RINSE):

- 8. Pre-flush, scrape or pre-soak articles to be washed.
- 9. Load articles into racks.
- 10. Load rack into dish machine, close door and start wash cycle.
- 11. Upon completion of wash cycle, apply a sanitizing rinse containing at least 50 ppm available chlorine by adjusting feeding device to meter 2 oz. of product per 4 gallons of water. Test sanitizer frequently during operation with a chlorine test kit to ensure that solution does not drop below 50 ppm available chlorine. Sanitizing Rinse must remain in contact with items for 1 minute, at 120°F.
- 12. Rinse items with potable water after sanitizing.
- 13. After cycle completes, open door, remove rack, tilt rack to aid in draining.
- 14. Allow articles to air-dry before removing from rack.

If no test kit is available or if available chlorine has dropped below 50 ppm during sanitizing, either discard the sanitizer solution or add sufficient product to reestablish a 200 ppm available chlorine sanitizer strength. Resanitize equipment. Do not rinse equipment with water after sanitizing and do not soak equipment overnight in sanitizer solution.

FOR SANITIZATION OF ICE MACHINES:

- 1. Turn off refrigeration.
- 2. Unit must be washed with a compatible detergent and rinsed with potable water before sanitizing.
- 3. Wash and rinse all surfaces thoroughly.
- 4. Apply a solution of 0.25 (1/4) oz. of product per gallon ((or) 1 oz. of product per 4 gallons) of water (100 ppm available Chlorine) by direct pouring or by recirculating through the system. Surfaces must remain wet for at least one minute followed by complete draining and drying. Fresh solution must be prepared for each cleaning. No potable water rinse is allowed when product is used as directed.
- 5. Return machine to service.

FOR SANITIZATION OF BEVERAGE DISPENSING EQUIPMENT:

- 5. After cleaning thoroughly rinse equipment with a potable water rinse.
- 6. Fill equipment with a use solution of 0.25 (1/4) oz. of product per gallon ((or) 1 oz. of product per 4 gallons) of water (100 ppm available Chlorine)
- 7. Allow solution to remain in equipment for at least one minute, or until operations resume, at which time the sanitizing solution must be drained from the system. To insure the removal of flavors, it is suggested that during changeover between products the system must be cleaned, rinsed and flushed with the sanitizing solution for at least 1 minute.
- 8. Drain thoroughly and allow surface to air dry before reuse. No potable water rinse is allowed.

(Note to agency: Text appearing in parenthesis is done to show optional text)

LAUNDRY SANITIZER

HOUSEHOLD LAUNDRY SANITIZER: IN SOAKING SUDS: Thoroughly mix 1 Tbs. of ~~this product~~ to 1 gallon of wash water to provide 200 ppm available chlorine. Wait 5 minutes, then add soap or detergent. Immerse laundry for at least 11 minutes prior to starting the wash/rinse cycle.

IN WASHING SUDS: Thoroughly mix 1 Tbs. of ~~this product~~ to 1 gallon of wash water containing clothes to provide 200 ppm available chlorine. Wait 5 minutes, then adding soap or detergent and start the wash/rinse cycle.

COMMERCIAL LAUNDRY SANITIZER: Wet fabrics or clothes should be spun dry prior to sanitization. Thoroughly mix 5 oz. of ~~this product~~ with 10 gallons of water to yield 200 ppm available chlorine. Promptly after mixing the sanitizer, add the solution into the prewash prior to washing fabrics/clothes in the regular wash cycle with a good detergent. Test the level of available chlorine, if solution has been allowed to stand. Add more of this product if the available chlorine level has dropped below 200 ppm.

Liqu-A-Klor

Liqu-A-Klor

Liqu-A-Klor

SANITIZATION OF POROUS NON-FOOD CONTACT SURFACES

RINSE METHOD: Prepare a 600 ppm sanitizing solution by thoroughly mixing 6 oz. of ~~this product~~ with 4 gallons of water. Clean equipment surfaces in the normal manner. Prior to use, rinse all surfaces thoroughly with the sanitizing solution, maintaining contact with the sanitizer for at least 2 minutes. Do not rinse equipment with water after treatment and do not soak equipment overnight.

Liqu-A-Klor

IMMERSION METHOD: Prepare a 600 ppm sanitizing solution by thoroughly mixing 6 oz. of ~~this product~~ with 4 gallons of water. Clean equipment in the normal manner. Prior to use, immerse equipment in the sanitizing solution for at least 2 minutes and allow the sanitizer to drain. Do not rinse equipment with water after treatment.

Liqu-A-Klor

SPRAY METHOD: After cleaning, sanitize non-food contact surfaces with 600 ppm available chlorine by thoroughly mixing the product in a ratio of 6 oz. of ~~this product~~ with 4 gallons of water. Use spray equipment resistant to hypochlorite solutions. Always empty and rinse spray equipment with potable water after use. Prior to using equipment, thoroughly spray all surfaces until wet, allowing excess sanitizer to drain.

Liqu-A-Klor

FRUIT AND VEGETABLE WASHING - Thoroughly clean all fruit and vegetables by immersion in recommended product solution in a sink or spray washer. Dilute 2/3 oz. of ~~this product~~ in 10 gallons of water to make a sanitizing solution containing 25 ppm available chlorine. Drain and rinse product with potable water. Immerse or spray in a separate sink with dilute sanitizer for 2 minutes. Check available chlorine content with test kit. Spray rinse vegetables with additional sanitizer solution prior to packaging. Rinse fruits and vegetables with potable water prior to use.

DISINFECTANT

DISINFECTION OF DRINKING WATER (EMERGENCY/PUBLIC/INDIVIDUAL SYSTEMS)

PUBLIC SYSTEMS: Mix a ratio of 1/4 oz. of ~~this product~~ to 100 gallons of water. Begin feeding this solution with a hypochlorinator until a free available chlorine residual of at least 0.2 ppm and no more than 0.6 ppm is attained throughout the distribution system. Check water frequently with a chlorine test kit. Bacteriological sampling must be conducted at a frequency no less than that prescribed by the National Primary Drinking Water Regulations. Contact your local Health Department for further details.

Liqu-A-Klor

FOR USE AS A DEODORIZER:

Apply Use Solution (1.25 oz of ~~this product~~ in 5 gallons of water equivalent to 100 ppm) to hard, non-porous surfaces. Wipe surfaces (and let air dry).

Liqu-A-Klor

FOR USE AS A BLOCK WHITENER

This product is a fast acting, non-corrosive formula for cleaning and whitening food cutting/preparation surfaces.

- 7. Clean cutting board with degreaser.
- 8. Rinse and remove all food residues from surface with potable water.
- 9. Without diluting or agitating, apply the product with a clean nylon brush or scrub pad.
- 10. Allow the product to set for 15 minutes, and then scrub briefly.
- 11. Rinse surface thoroughly with potable water.
- 12. Sanitize the surface.

Liqu-A-Klor

Liqu-A-Klor

Liqu-A-Klor

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PRECAUTIONARY STATEMENTS

HAZARD TO HUMANS AND DOMESTIC ANIMALS

DANGER. Corrosive. May cause severe skin and eye irritation or chemical burns to broken skin. Causes eye damage. Do not get in eyes, on skin or on clothing. Wear goggles or face shield and rubber gloves when handling this product. Wash thoroughly with soap and water after handling before eating, drinking, chewing gum, using tobacco or using the toilet. Remove contaminated clothing and wash clothing before reuse. Avoid breathing vapors. Vacate poorly ventilated areas as soon as possible. Do not return until odors have dissipated.

See container label for First Aid, Precautionary Statements and complete Directions for Use.

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