

US ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF PESTICIDES PROGRAMS
REGISTRATION DIVISION (TS-767)
WASHINGTON, DC 20460

EPA REGISTRATION NO.

1677-52

DATE OF ISSUANCE
SEP 24 1993

TERM OF ISSUANCE

NOTICE OF PESTICIDE: ☐ REGISTRATION
☐ REREGISTRATION

(Under the Federal Insecticide, Fungicide,
and Rodenticide Act, as amended)

NAME OF PESTICIDE PRODUCT

XY-12 Liquid Sanitizer

NAME AND ADDRESS OF REGISTRANT (Include ZIP code)

Ecolab Corporation
Ecolab Center
St. Paul, MN 55102

NOTE: Changes in labeling formula differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above U.S. EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby Registered/Reregistered under the Federal Insecticide, Fungicide, and Rodenticide Act.

A copy of the labeling accepted in connection with this Registration/Reregistration is returned herewith.

Registration is in no way to be construed as an indorsement or approval of this product by this Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

Based on your response to the Reregistration Eligibility Document, EPA has reregistered the above named product subject to the comments recorded in the succeeding paragraph. This action is taken under the authority of section 4(g)(2)(C) of the Federal Insecticide, Fungicide, and Rodenticide Act, as amended. Reregistration under this section does not eliminate the need for continual reassessment of pesticides. EPA may require submission of data at any time to maintain the registration of your product.

Make the following labeling changes before you release the product for shipment:

1. On your label, some of the use-directions are not headed by the "Directions for Use" heading. Place this heading and the statment "It is a violation of Federal law...", before all the use-directions.
2. In the directions for "Water Chlorination", the lower limit for the available chlorine should be 0.2 ppm, not 0.1 ppm. (You may raise the upper limit to 0.6 ppm to compensate if you wish). Indicate that the desired range in available chlorine must be maintained

☐ ATTACHMENT IS APPLICABLE

SIGNATURE OF APPROVING OFFICIAL

DATE

throughout the distribution system. Also, for municipal water chlorination, indicate that bacteriological sampling must be conducted as required in the National Primary Drinking Water Regulations.

3. In the label directions for fogging, add an instruction to clean all surfaces prior to fogging.

A stamped copy of the product label is enclosed for your records.

Submit one copy of the final printed labeling before releasing the product in channels of trade with the revised labeling.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product constitutes acceptance of these conditions.



Ruth G. Douglas
Product Manager 32
Antimicrobial Program Branch
Registration Division (H-7504C)

Enclosure

3 25 /

Mfg. by Ecolab Inc., Ecolab Center, St. Paul, MN 55102

KLENZADE

XY-12[®]

LIQUID SANITIZER

EPA REG NO 1677-52
EPA EST. 1677-IL-2
ACTIVE INGREDIENT
SODIUM HYPOCHLORITE 8.4%
INERT INGREDIENTS 91.6%
FOR INDUSTRIAL USE ONLY

**KEEP OUT OF REACH
OF CHILDREN
DANGER**

See side panel for additional
Precautionary Statements.

NET CONTENTS
1 U.S. GALLON (3.78 l)

STATEMENT OF PRACTICAL TREATMENT:

IF IN EYES: Flush immediately with cool water.
Remove contact lenses. Continue flushing for 15
minutes, holding eyelids apart. Get prompt medical
attention.

IF ON SKIN: Wash with plenty of soap and water.

IF SWALLOWED, drink large amounts of water. **DO
NOT** induce vomiting. Call a physician or poison
control center immediately.

**FOR EMERGENCY MEDICAL INFORMATION,
CALL TOLL-FREE 1-800-328-0026.**

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER: Corrosive, may cause severe skin
or chemical burns to broken skin. Cause
irritation. Wear gloves, chemical goggles and protect
handling. Avoid breathing vapors. Vacuum
as soon as possible. Do not return to service
until vapors are dissipated.

PHYSICAL OR CHEMICAL HAZARDS

STRONG OXIDIZING AGENT: Mix only as directed on
label directions. Mixing this product with
ammonia, acids, detergents, etc.) or organic
materials (e.g., feces, etc.) will release chlorine gas
from lungs and mucous membranes.

BEST AVAILABLE

ACCEPTED
with COMMENTS
In EPA Letter Dated:
SEP 24 1993
Under the Federal Insecticide,
Fungicide, and Rodenticide Act
as amended by the FIFRA
reauthorization act of 1990
1677-52

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SANITIZING EATING AND DRINKING UTENSILS—IMMERSION METHOD

1. Scrape and preflush utensils to remove excess soil.
2. Wash with good detergent or compatible cleaner (see your Ecolab representative for a recommendation.)
3. Rinse with clear water.
4. Sanitize in a solution of 100 ppm av. Cl if a chlorine test kit is available. Test and adjust solution periodically to insure that the av. Cl does not drop below 50 ppm. If no test kit is available, prepare sanitizing solution to provide 200 ppm av. Cl. Immerse all utensils for at least one minute. Use 2 minutes exposure time if required by governing sanitary code.
5. Drain and air dry.

NOTE: FOR MECHANICAL OPERATIONS prepared use solutions may not be re-used for sanitizing but may be re-used for other purposes such as cleaning.

FOR MANUAL OPERATIONS fresh sanitizing solutions should be prepared as soon as they become diluted or soiled.

TABLEWARE SANITIZER AND DESTAINER FOR MECHANICAL SPRAY WAREWASHING MACHINES

For sanitizing tableware in low-temperature warewashing machines, inject XY-12 into the final rinse water at a concentration of 100 ppm available chlorine. Do not exceed 200 ppm. Air dry.

To insure that available chlorine concentration does not fall below 50 ppm, periodically test the rinse solution with a suitable test kit and adjust the dispensing rate accordingly. Consult your local Ecolab Specialist for technical assistance and further information on sanitizing tableware in warewashing machines.

FORMULATED FOR USE WITH ECOLAB AUTOMATIC DISPENSING SYSTEMS

DO NOT USE ON SILVER AND SILVER PLATE For brand name products sold for dispensing through computerized systems the following directions for use will appear on the label. For use only with the (Brand Name) Allocation System.

For service or additional information, call 1-800-35-CLEAN (352-5326).

DO NOT MIX WITH ANYTHING BUT WATER

WATER CHLORINATION

For farm, private or small municipal water chlorination, use 0.1 to 0.5 ppm available chlorine. Use chlorine test kit for the determination of proper concentrations and amount of residual chlorine.

AVAILABLE CHLORINE TABLE OF PROPORTIONS

0.5 ppm—1 oz. in 1300 gal. water
50 ppm—1 oz. in 13 gal. water
100 ppm—2 oz. in 13 gal. water/1 oz. in 6.5 gal. water
200 ppm—4 oz. in 13 gal. water/2 oz. in 6.5 gal. water
600 ppm—12 oz. in 13 gal. water

STORAGE AND DISPOSAL:

Store this product in a cool, dry area, away from direct sunlight and heat to avoid deterioration. In case of spill, flood the area with large quantities of water.

PESTICIDE DISPOSAL: Product or rinsates that cannot be used should be diluted with water before disposal in a sanitary sewer. Do not contaminate water, food or feed by storage, disposal or cleaning of equipment.

CONTAINER DISPOSAL: Do not reuse empty containers. Wrap container and put in trash.

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.

SANITIZING NONPOROUS FOOD CONTACT EQUIPMENT RINSE METHOD

A solution of 100 ppm available chlorine may be used in the sanitizing solution if a chlorine test kit is available. Solutions containing an initial concentration of 100 ppm av. Cl must be tested and adjusted periodically to insure that the av. Cl does not drop below 50 ppm. Prepare a 100 ppm sanitizing solution by thoroughly mixing 2 oz. of XY-12 with 13 gal. of water. If no test kit is available, prepare a sanitizing solution by mixing 4 oz. of XY-12 with 13 gallons of water to provide approximately 200 ppm av. Cl by weight.

Clean all surfaces with proper detergent and rinse with water. Just prior to use, rinse all surfaces thoroughly with the sanitizing solution, maintaining contact with the sanitizer for at least 2 minutes. If solution contains less than 50 ppm av. Cl as determined by a suitable test kit, either discard the solution or add sufficient product to reestablish a 200 ppm residual. Allow equipment to drain thoroughly. Do not rinse and do not soak overnight.

SANITIZING POROUS FOOD CONTACT EQUIPMENT RINSE METHOD

Prepare a 600 ppm solution by thoroughly mixing 3 oz. of this product in 3 gal. water. Clean surfaces in the normal manner. Rinse all surfaces thoroughly with the 600 ppm solution, maintaining contact for at least 2 minutes. Prior to using equipment, rinse all surfaces with a 200 ppm av. Cl solution (4 oz./13 gal.). Do not rinse and do not soak overnight.

BACTERIOPHAGE CONTROL

XY-12 will significantly reduce the incidence of *Streptococcus cremoris* and *Streptococcus diacetylactis* bacteriophage in cheese manufacturing establishments by fogging at a concentration of 600 ppm available chlorine. Fogging should be used as a supplement to acceptable manual cleaning and sanitizing of room surfaces as described above.

Directions for fogging:

Prior to fogging, food products and packaging materials must be removed from the room or carefully protected. Fog desired areas using one quart per 1000 cu. ft. of room area with an XY-12 solution containing 600 ppm available chlorine. Vacate the area of all personnel for a minimum of 2 hours after fogging. All food contact surfaces must then be thoroughly rinsed with an XY-12 solution at 200 ppm of available chlorine. Allow surfaces to drain thoroughly before operations are resumed.

FOR CONTINUOUS TREATMENT OF MEAT AND POULTRY OR FRUIT AND VEGETABLE CONVEYORS—wash, rinse and sanitize conveyance equipment. During processing, apply XY-12 at a 200 ppm available chlorine level to conveyors with MIKRO MASTER or other suitable feeding equipment. Controlled volumes of sanitizer are applied to return portion of conveyor through nozzles so located as to permit maximum drainage of sanitizer from equipment and to prevent puddles on top of belt. During interruptions in operations, apply a coarse spray to equipment, preformers, collators, slicers and saws with MIKRO MASTER dispensed XY-12 solution of 200 ppm av. Cl. Conveyor equipment should be free of product when applying this coarse spray.

LAUNDRY SANITIZATION

HOUSEHOLD LAUNDRY SANITIZING

In Soaking Suds—Thoroughly mix 4 oz. chlorine. Wait 5 minutes, then add soap to starting the wash/rinse cycle.

In Washing Suds—Thoroughly mix 4 oz. available 200 ppm available chlorine. Wait 5 minutes.

COMMERCIAL LAUNDRY SANITIZING

Wet fabrics or clothes should be spun dry of water to yield 200 ppm available chlorine. Fabrics/clothes in the regular wash cycle solution has been allowed to stand. Add 200 ppm.

FOOD EGG SANITIZATION

Thoroughly clean all eggs before processing. Apply solution with a coarse spray (available chlorine). The solution must be F. Wet eggs thoroughly and allow to drain. May be broken for use in the manufacture must be thoroughly dry before casing.

LAUNDRY BLEACH

Add 2 oz. product per 10 gallons of water.

FRUIT AND VEGETABLE WASHING

Thoroughly clean all fruits and vegetables in water to make a sanitizing solution. Fruits or vegetables for 2 minutes in a coarse spray. Rinse vegetables with the water only prior to packaging.

BEST AVAILABLE COPY

FOR USE WITH ECOLAB
DISPENSING SYSTEMS
ON SILVER AND SILVER PLATE
me products sold for dispensing
plated systems the following direc-
till appear on the label. For use only
id Name) Allocation System

or additional information call
AN (352-5326)

WITH ANYTHING BUT WATER RINATION

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it for the determination of proper con-
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CHLORINE TABLE OF PROPORTIONS

oz in 1300 gal water
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oz in 13 gal water/1 oz in 6.5 gal water
oz in 13 gal water/2 oz in 6.5 gal water
oz in 13 gal water

SE AND DISPOSAL:

product in a cool, dry area, away from
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DISPOSAL Product or rinsates that
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or feed by storage, disposal or clean-
ment

DISPOSAL Do not reuse empty con-
pp container and put in trash

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

SANITIZING NONPOROUS FOOD CONTACT EQUIPMENT RINSE METHOD

A solution of 100 ppm available chlorine may be used in the sanitizing solution if a chlorine test kit is available.
Solutions containing an initial concentration of 100 ppm av. Cl must be tested and adjusted periodically to insure
that the av. Cl does not drop below 50 ppm. Prepare a 100 ppm sanitizing solution by thoroughly mixing 2 oz
of XY-12 with 13 gal of water. If no test kit is available, prepare a sanitizing solution by mixing 4 oz of XY-12 with
13 gallons of water to provide approximately 200 ppm av. Cl by weight.

Clean all surfaces with proper detergent and rinse with water. Just prior to use, rinse all surfaces thoroughly
with the sanitizing solution, maintaining contact with the sanitizer for at least 2 minutes. If solution contains
less than 50 ppm av. Cl as determined by a suitable test kit, either discard the solution or add sufficient product
to reestablish a 200 ppm residual. Allow equipment to drain thoroughly. Do not rinse and do not soak overnight.

SANITIZING POROUS FOOD CONTACT EQUIPMENT-RINSE METHOD

Prepare a 600 ppm solution by thoroughly mixing 3 oz of this product in 3 gal water. Clean surfaces in the normal
manner. Rinse all surfaces thoroughly with the 600 ppm solution, maintaining contact for at least 2 minutes.
Prior to using equipment, rinse all surfaces with a 200 ppm av. Cl solution (4 oz /13 gal). Do not rinse and do
not soak overnight.

BACTERIOPHAGE CONTROL

XY-12 will significantly reduce the incidence of Streptococcus cremoris and Streptococcus diacetylactis
bacteriophage in cheese manufacturing establishments by fogging at a concentration of 600 ppm available
chlorine. Fogging should be used as a supplement to acceptable manual cleaning and sanitizing of room sur-
faces as described above.

Directions for fogging:

Prior to fogging, food products and packaging materials must be removed from the room or carefully protected.
Fog desired areas using one quart per 1000 cu. ft. of room area with an XY-12 solution containing 600 ppm
available chlorine. Vacate the area of all personnel for a minimum of 2 hours after fogging. All food contact
surfaces must then be thoroughly rinsed with an XY-12 solution at 200 ppm of available chlorine. Allow sur-
faces to drain thoroughly before operations are resumed.

FOR CONTINUOUS TREATMENT OF MEAT AND POULTRY OR FRUIT AND VEGETABLE CONVEYORS—wash
rinse and sanitize conveyance equipment. During processing, apply XY-12 at a 200 ppm available chlorine level
to conveyors with MIKRO MASTER or other suitable feeding equipment. Controlled volumes of sanitizer are
applied to return portion of conveyor through nozzles so located as to permit maximum drainage of sanitizer
from equipment and to prevent puddles on top of belt. During interruptions in operations, apply a coarse spray
to equipment, peelers, collators, slicers and saws with MIKRO MASTER dispensed XY-12 solution of 200 ppm
av. Cl. Conveyor equipment should be free of product when applying this coarse spray.

LAUNDRY SANITIZATION

HOUSEHOLD LAUNDRY SANITIZING

In Soaking Suds — Thoroughly mix 4 oz. XY-12 to 13 gallons 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 4 oz. XY-12 to 13 gallons of wash water containing clothes. To pro-
vide 200 ppm available chlorine. Wait 5 minutes, then add soap or detergent and start the wash/rinse cycle.

COMMERCIAL LAUNDRY SANITIZING

Wet fabrics or clothes should be spun dry prior to sanitization. Thoroughly mix 4 oz. XY-12 to 13 gallons
of water to yield 200 ppm available chlorine. Promptly add the solution into the prewash prior to washing
laundry/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 XY-12 if the available chlorine level has dropped below
200 ppm.

FOOD EGG SANITIZATION

Thoroughly clean all eggs before proceeding to sanitize. Clean shell eggs intended for food or food prod-
ucts, apply solution with a coarse spray at 2 oz. of product in 6.5 gallons of water (providing 200 ppm
available chlorine). The solution must be equal to or warmer than the eggs, but not to exceed 130 deg
F. Wet eggs thoroughly and allow to drain. Eggs that have been sanitized with this chlorine compound
may be broken for use in the manufacture of egg products without a prior potable water rinse. Eggs
must be thoroughly dry before casing or breaking. The solution must not be reused for sanitizing eggs.

LAUNDRY BLEACH

Add 2-oz. product per 10 gallons of wash water (125 ppm av. Cl).

FRUIT AND VEGETABLE WASHING

Thoroughly clean all fruits and vegetables in a wash tank. Thoroughly mix 8 oz. of product to 20 gal. gallons
of water to make a sanitizing solution of 25 ppm available chlorine. After draining the tank, submerge
fruits or vegetables for 2 minutes in a second wash tank containing the recirculating sanitizing solution.
Coarse spray rinse vegetables with the sanitizing solution prior to packaging. Rinse fruit with potable
water only prior to packaging.