

<p style="text-align: center;">US ENVIRONMENTAL PROTECTION AGENCY OFFICE OF PESTICIDES PROGRAMS REGISTRATION DIVISION (TS-767) WASHINGTON, DC 20460</p> <p><b>NOTICE OF PESTICIDE:</b> <input checked="" type="checkbox"/> REGISTRATION <input checked="" type="checkbox"/> REREISTRATION (Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended)</p>	<p>EPA REGISTRATION NO. <b>1677-52</b></p> <p>DATE OF ISSUANCE <b>19 OCT 1987</b></p> <p>TERM OF ISSUANCE</p> <p>NAME OF PESTICIDE PRODUCT <b>XY-12</b></p>
<p>NAME AND ADDRESS OF REGISTRANT (Include ZIP code)</p> <div style="border: 1px solid black; padding: 10px; margin: 10px auto; width: 80%;"> <p style="text-align: center;">Klenzade Division Econometrics Laboratory, Inc. Osborn Building St. Paul, MN 55102</p> </div>	
<p><b>NOTE:</b> 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.</p>	
<p>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.</p> <p>A copy of the labeling accepted in connection with this Registration/Reregistration is returned herewith.</p> <p>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.</p> <p>Based on your response to the General Registration Standard - "Guidance for the Registration and Reregistration of Pesticide Products Containing Sodium or Calcium Hypochlorite as the Sole Active Ingredient"--issued February 1986 and revised April 1986, EPA has reregistered the product listed above in accordance with FIFRA section 3(g). EPA has also reviewed your response to the Sanitizer Label Improvement Program issued July 15, 1986 and has determined that your product is in compliance with the program.</p> <p>Your amended label has been stamped approved and a copy is enclosed. You must incorporate any comments noted on your label. This label must be on products released for shipment within 1 year or by the next label printing, whichever occurs first. This label must also appear on all supplemental registrations within 1 year of this Notice of Reregistration or at the next label printing, whichever occurs first.</p> <p>Your product meets the criteria for reregistration under this Standard. Failure to comply with this Standard may result in the Agency's issuance of a Notice of Intent to Cancel the registration under FIFRA section 6(3)(1).</p> <div style="text-align: right; margin-top: 20px;">         Jeff Kempter        Product Manager (32)        Disinfectants Branch        Registration Division (TS-767C)     </div>	
<div style="border: 2px solid black; padding: 5px; width: fit-content;"> <b>BEST AVAILABLE COPY</b> </div> <p>Enclosure</p> <p><input type="checkbox"/> ATTACHMENT IS APPLICABLE</p>	
<p>SIGNATURE OF APPROVING OFFICIAL</p>	<p>DATE</p>

*Pringle 10/15*

# XY-12.

## PRODUCT DESCRIPTION

XY-12 is a liquid sodium hypochlorite sanitizer.

## BENEFITS

- Convenient to use—easily proportioned through sprayers, feeders or chlorinators
- Rinse clear—leaves no sediment, deposits or films
- Combats broad spectrum of organisms

## ADVANTAGES

- Versatile, multi-use sanitizer
- Minimal excess alkalinity helps assure fast release of active ingredient

## FEATURES

- 2. • Highly concentrated—1 ounce per 6 gallons provides 200 ppm active chlorine
- Low alkalinity
- Available in 4/1 gallon case, 5 gallon deltangular, 55 gallon drum and bulk delivery

ACCEPTED  
with COMMENTS  
in EPA Letter Dated:

OCT 19 1987

Under the Federal Insecticide,  
Fungicide, and Rodenticide Act  
as amended, for the pesticide  
registered under EPA Reg. No.  
1697-52

# XY-12

Active Ingredients: Sodium hypochlorite ..... 8.4%  
Inert Ingredients ..... 91.6%

## PROPERTIES:

Form ..... liquid, clear  
Color ..... greenish yellow  
Odor ..... chlorine  
Foam ..... none  
Specific gravity @ 75°F ..... 1.16  
Pounds per gallon ..... 9.7  
EPA Reg. No. 1677-20001

pH 1.00% solution—10.5  
pH .25% solution—8.3  
Excess alkalinity—0.7%  
as sodium hydroxide  
Available chlorine—8.0% by weight

**KLENZADE XY-12 TABLE OF PROPORTIONS AVAILABLE CHLORINE:**  
1000 ppm—5 oz. in 3 gal. water  
200 ppm—1 oz. in 3 gal. water  
600 ppm—4 oz. in 3 gal. water  
100 ppm—1 oz. in 6 gal. water  
600 ppm—3 oz. in 3 gal. water  
0.5ppm—1 oz. in 1200 gal. water

## 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.

### FOR FOOD PROCESSING AND MILK EQUIPMENT

Clean all surfaces thoroughly with proper detergent and rinse with water. Just prior to use, sanitize by rinsing with 200 ppm available chlorine for all non-porous surfaces; for porous surfaces use 600 ppm available chlorine. Use immersion, flooding or spraying techniques as appropriate to the equipment. Wet surfaces thoroughly. All surfaces should be exposed to the sanitizing solution for a period of not less than 2 minutes. Do not rinse equipment with water after treatment. Do not soak overnight.

### BACTERIOPHAGE CONTROL

XY-12 will significantly reduce the incidence of Streptococcus cremoris and S. diacetilactis bacteriophage in cheese manufacturing establishments by fogging at concentrations 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 100 cu. ft. of room area with an XY-12 solution containing 600 ppm of 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 potable water or an XY-12 solution at 200 ppm of available chlorine. Allow surfaces to drain thoroughly before operations are resumed.

**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.

**FOOD EGG SANITIZATION**—Thoroughly clean all eggs. Thoroughly mix 2 oz. of XY-12 with 10 gallons of warm water to produce a 200 ppm available chlorine solution. The sanitizer temperature should not exceed 130°F. Spray the warm sanitizer so that the eggs are thoroughly wetted. Allow the eggs to thoroughly dry before casing or breaking. Do not apply a potable water rinse. The solution should not be re-used to sanitize eggs.

**HAND SANITIZING**—After hands have been washed and rinsed, dip into a ½ oz. per 6 gals. solution of XY-12 (50 ppm chlorine).

**LAUNDRY BLEACH**—Add 2 oz. of XY-12 per 10 gals. of wash water (125 ppm chlorine).

**FRUIT & VEGETABLE WASHING**—Thoroughly clean all fruits and vegetables in a wash tank. Thoroughly mix 5 oz. of XY-12 in 200 gallons of water to make a sanitizing solution of 25 ppm available chlorine. After draining the tank, submerge fruit or vegetables for 2 minutes in a second wash tank containing the recirculating sanitizing solution. Spray rinse vegetables with the sanitizing solution prior to packaging. Rinse fruit with potable water only prior to packaging.

### WATER CHLORINATION

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

### LOCAL, STATE REGULATIONS

Where regulations are in effect, consult authorities for additional information.

## 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 areas with large quantities of water. Product or rinsates that cannot be used should be diluted with water before disposal in a sanitary sewer. Do not reuse container but place in trash collection. Do not contaminate food or feed by storage, disposal or cleaning of equipment.

**DO NOT MIX WITH ANYTHING BUT WATER**

## KEEP OUT OF REACH OF CHILDREN DANGER

### PRECAUTIONARY STATEMENTS

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**DANGER:** Corrosive, may cause severe skin and eye irritation or chemical burns to broken skin. Causes eye damage. Wear safety glasses or goggles and rubber gloves when handling this product. Wash after handling. Avoid breathing vapors. Vacate poorly ventilated areas as soon as possible. Do not return until strong odors have dissipated.

**ENVIRONMENTAL HAZARDS:** This product is toxic to fish. Do not discharge into lakes, streams, ponds or public waterways unless in accordance with a NPDES permit. For guidance, contact the regional office of the U.S. Environmental Protection Agency.

#### PHYSICAL OR CHEMICAL HAZARDS:

**STRONG OXIDIZING AGENT:** Mix only with water according to label directions. Mixing this product with chemicals (e.g. ammonia, acids, detergents, etc.) or organic matter (e.g. urine, feces, etc.) will release chlorine gas which is irritating to eyes, lungs and mucous membranes.

## FIRST AID:

**IF CONTACT WITH EYES OCCURS,** flush with water for at least 15 minutes. Get prompt medical attention.

**IF CONTACT WITH SKIN OCCURS,** wash with plenty of soap and water.

**IF SWALLOWED,** drink large quantities of milk or gelatin solution, if these are not available, drink large quantities of water. **DO NOT** give vinegar or other acids. **DO NOT** induce vomiting. Get prompt medical attention.

For emergency medical information, call toll-free 1-800-328-0026.

## AUTHORIZATION:

XY-12 is authorized by USDA for use in federally inspected meat and poultry plants as a sanitizing solution for all surfaces and does not require a potable water rinse provided that the concentration does not exceed 200 ppm available chlorine. XY-12 is also authorized as a shell-egg sanitizing compound (no potable water rinse required). In addition, XY-12 is authorized for use as a potable water treatment compound. Also authorized for use as a hand sanitizer and as a laundry bleach.

# KLENZADE®

## XY-12. LIQUID SANITIZER

EPA REG. NO. 1677-52

EPA EST. XXX

ACTIVE INGREDIENTS:  
SODIUM HYPOCHLORITE 8.4%  
INERT INGREDIENTS ..... 91.6%

KEEP OUT OF REACH  
OF CHILDREN

**DANGER**

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

### FIRST AID:

IF CONTACT WITH EYES OCCURS, flush with water for at least 15 minutes. Get prompt medical attention.

IF CONTACT WITH SKIN OCCURS, wash with plenty of soap and water.

IF SWALLOWED, drink large quantities of milk or gelatin solution, if these are not available, drink large quantities of water. DO NOT give vinegar or other acids. DO NOT induce vomiting. Get prompt medical attention. For emergency medical information, call toll-free 1-800-328-0026.

### TABLEWARE SANITIZER AND DE-STAINER FOR MECHANICAL SPRAY WAREWASHING MACHINES

AVAILABLE CHLORINE  
TABLE OF PROPORTIONS  
50 ppm—1 oz. per 12 gals. water  
100 ppm—2 oz. per 12 gals. water  
200 ppm—4 oz. per 12 gals. water

FORMULATED FOR USE WITH THE ECONOMICS LABORATORY AUTOMATIC DISPENSING SYSTEMS.

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.

**DO NOT USE ON SILVER AND SILVER PLATE.**

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 Economics Laboratory Specialist for technical assistance and further information on sanitizing tableware in warewashing machines.

**DO NOT MIX WITH ANYTHING BUT WATER**

**WATER CHLORINATION**  
For farm, private or small municipal water chlorination, use 0.1 to 0.5 ppm of available

determination of proper concentrations and amount of residual chlorine.

**LOCAL, STATE REGULATIONS**  
Where regulations are in effect, consult authorities for additional information.

**KLENZADE XY-12 TABLE OF PROPORTIONS**  
**AVAILABLE CHLORINE:**  
1000 ppm—5 oz. in 3 gal. water  
800 ppm—4 oz. in 3 gal. water  
600 ppm—3 oz. in 3 gal. water  
200 ppm—1 oz. in 3 gal. water  
100 ppm—1 oz. in 6 gal. water  
0.5 ppm—1 oz. in 1200 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 areas with large quantities of water. Product or rinsates that cannot be used should be diluted with water before disposal in a sanitary sewer. Do not reuse container but place in trash collection. Do not contaminate food or feed by storage, disposal or cleaning of equipment.

### PRECAUTIONARY STATEMENTS

**HAZARD TO HUMANS AND DOMESTIC ANIMALS**

**DANGER:** Corrosive, may cause severe irritation or chemical burns to broken skin. Caution: Wear safety glasses or goggles and rubber gloves when handling this product. Wash after handling. Avoid breathing vapors. Vacate poorly ventilated areas as soon as possible. Do not return until strong odors have dissipated.

### ENVIRONMENTAL HAZARDS:

This product is toxic to fish. Do not discharge into streams, ponds or public waterways unless authorized with a NPDES permit. For guidance, contact your nearest office of the U.S. Environmental Protection Agency.

### PHYSICAL OR CHEMICAL HAZARDS:

**STRONG OXIDIZING AGENT:** Mix only with water. Do not mix with ammonia, acids, detergents, etc.) or organic materials (urine, feces, etc.) will release chlorine gas to eyes, lungs and mucous membranes. In EPA Letter Dated 10/17/83

OCT 19 1987

Under the Federal Insecticide, Fungicide, and Rodenticide Act

**DIRECTIONS FOR USE:** For use as directed, for the prevention and control of bacteria and fungi on food processing equipment. It is a violation of federal law to use this product in a manner inconsistent with these directions. NOTE: This product degrades with age. Use a chlorine test kit and follow to obtain the required level of available chlorine.

### FOR FOOD PROCESSING AND MILK EQUIPMENT

Clean all surfaces thoroughly with proper detergent and rinse with water. Sanitize by rinsing with 100 ppm available chlorine for all non-porous surfaces. Use 600 ppm available chlorine. Use immersion, flooding or spraying. Wet surfaces thoroughly. All surfaces should be in solution for a period of not less than 2 minutes. Do not rinse or treat. Do not soak overnight.

### BACTERIOPHAGE CONTROL

XY-12 will significantly reduce the incidence of Streptococcus and bacteriophage in cheese manufacturing establishments by fogging at 100 ppm available chlorine. Fogging should be used as a supplement to acceptable sanitizing of room surfaces as described above.

### Directions for fogging:

Prior to fogging, food products and packaging materials must be carefully protected. Fog desired areas using one quart per 100 cu ft of XY-12 solution containing 600 ppm of available chlorine. Vacate the area a minimum of 2 hours after fogging. All food contact surfaces must be washed with potable water or an XY-12 solution at 200 ppm of available chlorine thoroughly before operations are resumed.

**NOTE: FOR MECHANICAL OPERATIONS** prepared use solutions may be re-used for other purposes such as cleaning.

**FOR MANUAL OPERATIONS** fresh sanitizing solutions should be prepared and used for each use.

See technical bulletin for additional uses.